http://e-flt.nus.edu.sg/

# A Quantitative Analysis of the Relationship between Emotional Intelligence and Foreign Language Learning

## Reza Pishghadam

(pishghadam@um.ac.ir)
Ferdowsi University of Mashhad, Iran

**Abstract**

The major aim of this study was to examine the role of emotional intelligence in second language learning. At the end of the academic year, 508 second year students at four universities in Iran were asked to complete the Emotional Intelligence Inventory (EQ-i). EQ-i data were matched with the students' academic records, scores in reading, listening, speaking, and writing. Predicting second language learning success from emotional intelligence variables produced divergent results, depending on how the variables were operationalized. When EQ-i variables were compared in groups (successful vs. unsuccessful) who had achieved very different levels of academic success and scores in different skills, second language learning was strongly associated with several dimensions of emotional intelligence. Results are discussed in the context of the importance of emotional intelligence in second language learning.

## 1 Introduction

Learners vary enormously in how successful they are in learning a second language. All people acknowledge that some individuals learn a second language easily and some with more difficulty. Among so many factors contributing to second language learning success, including motivation, attitude or personality types, it seems that one important factor which accounts for success in language learning is the degree of intelligence that individuals possess.

Since 1990, when for the first time emotional intelligence was introduced, it has become a buzzword in psychology and has been used in so many fields including education, management studies, and artificial intelligence. Daniel Goleman (1995), the prominent spokesperson for emotional intelligence, held that roughly 80 percent of the variance among people in various forms of success that is unaccounted for by IQ tests and similar tests can be explained by other characteristics that constitute emotional intelligence. He has defined emotional intelligence as including "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). Later, Goleman reformulated his first definition of emotional intelligence and broke down emotional intelligence into twenty-five different emotional competencies, among them political awareness, service orientation, self-confidence, consciousness, and achievement drive (Goleman, 1998).

Research has demonstrated that EQ more than IQ accounts for success in life and education (Goleman, 1995; Salovey & Mayer, 1990). Much research findings suggest that emotional intelligence is important for work settings (Carmeli, 2003), and classrooms (Petrides, Frederickson, & Furnham, 2004), and enhances performance in interviewing (Fox & Spector, 2000), cognitive tasks (Shuttes, Schuetplez, & Malouff, 2001), and contextual performance (Carmeli, 2003).

The purpose of this study was to investigate the role of emotional intelligence in second language leaning in an English as a foreign language (EFL) situation. To be more exact, the role of emotional intelligence is examined in students' GPA, reading, listening, speaking, and writing at the university.

## 2   Review of literature

### 2.1   Intelligence defined

Intelligence, as a slippery term to define, has undergone different changes, from intelligence as a unidimensional concept (Binet, 1905) to intelligence as a multiple concept (Gardner, 1983), and finally to intelligence as an emotional notion (Salovey & Mayer, 1990).

From the 1900s, when Alfred Binet, 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) 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, Binet equated intelligence with the abilities of logic and language. In fact, in the first half of the $20^{th}$ century, IQ tests were considered adequate measures of intelligence. Society linked IQ scores to an individual's potential for success in life (Wechsler, 1958).

Current research has moved away from IQ scores as the only measure of intelligence. As early as 1920, Thorndike hypothesized that true intelligence was composed of not only an academic component, but also of emotional and social components. Social intelligence, wrote Thorndike, is "the ability to understand and manage men and women, boys and girls – to act wisely in human relations" (p. 228). It is an ability that "shows itself abundantly in the nursery, on the playground, in barracks and factories and salesrooms, but it eludes the formal standardized conditions of the testing laboratory" (p. 231). In 1967, Guilford presented a view of intelligence as a multifaceted construct composed of one hundred and twenty different types of intelligence. Shanley, Walker and Foley (1971) held that social intelligence was distinct from academic intelligence, but they found little evidence to support social intelligence as a separate construct.

While society has traditionally placed a great deal of weight on academic intelligence, Bar-On (1997) argued that emotional and social intelligences were better predictors of success in life. The more recent writings and research of Gardner (1983, 1993, 1999), have added support to the concept of multiple intelligences. Gardner has proposed a model of at least 8 types of intelligence including spatial, musical, intrapersonal, interpersonal, bodily-kinesthetic, naturalistic, linguistic and logical-mathematical. He proposed the theory of "multiple intelligences" (Gardner, 1983), arguing that intrapersonal intelligence and interpersonal intelligence should be considered as types of intelligence. He noted the following:

> The core capacity at work here is access to one's feeling life, one's range of affects or emotions: the capacity instantly to effect discriminations among these feelings and, eventually, to label them, to enmesh them in symbolic codes, to draw upon them as a means of understanding and guiding one's behavior. In its most primitive form, the intrapersonal intelligence amounts to little more than the capacity to distinguish a feeling of pleasure from one of pain and, on the basis of such a discrimination, to become more involved in or to withdraw from a situation. At its most advanced level, intrapersonal knowledge allows one to detect and to symbolize complex and highly differentiated sets of feeling (Gardner, 1983, p. 239).

Whereas intrapersonal intelligence involves the examination and knowledge of one's own feelings, interpersonal intelligence is the ability to read the moods, intentions, and desires of others and potentially to act on his knowledge.

The term *emotional quotient* (EQ) was first coined by Bar-On (1988) 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 daily life. Salovey and Mayer (1990) had something different and more restricted in mind when they introduced the term *emotional intelligence* several years later. For them, EI concerned the way in which an individual processes information about emotion and emotional responses. They identified emotional intelligence as the "ability to monitor one's own and other's feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action" (p. 189). Citing a need to distinguish emotional intelligence abilities from social traits or talents, Salovey and Mayer evolved a model with a cognitive emphasis. It focused on specific mental aptitudes for recognizing and marshalling emotions (for example, knowing what someone is feeling is a mental aptitude, whereas being outgoing and warm is a behavior). A comprehensive EI model, they argued, must include some measure of "thinking about feeling," an aptitude lacked by models that focus on simply perceiving and regulating feelings.

Finally, in 1995 the idea was introduced into the world at large with the publication of Daniel Goleman's best-seller book "Emotional Intelligence." Goleman (1995) saw emotional intelligence as an idea or theme that emerged from a large set of research findings on the role of the emotions in human life. These findings pointed to different ways in which competencies such as *empathy, learned optimism, and self-control* contributed to important outcomes in the family, the workplace and other life arenas. Bar-on (1997) characterizes emotional intelligence as "an array of noncognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures" (p. 14). His mode of emotional intelligence includes five broad areas of skills or competencies: intrapersonal EQ, interpersonal EQ, adaptability EQ, stress management EQ, and general mood EQ (Bar-On, 1997).

### 2.2   EQ in foreign language learning

Investigating the role of emotional factors in second language learning is not something novel. A number of methodologies exist which specifically address emotional and psychological issues in second language learning (e.g. Suggestopedia), some of which were motivated by Krashen's claims in the Monitor Model, specifically the part about the affective filter. However, to the best knowledge of the researcher, up to now, few studies have investigated the role of EQ in foreign language learning. The most important research known to the researcher with regard to the role of EQ in second language learning is the work of Fahim and Pishghadam (2007), in which they explored the relationship between EQ, IQ and verbal intelligence with 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 subsection of IQ test.

In another study, which was conducted experimentally, Pishghadam (2009) determined the impact of emotional and verbal intelligences on English language learning success in Iran. To fully understand the nature of learning, he calculated and analyzed both the product and the process data. The results of the product-based phase demonstrated that the emotional intelligence is instrumental in learning different skills, specifically productive ones. In the process-based phase, the analyses of oral and written modes of language exhibited the effects of emotional and verbal intelligences on turn-taking, amount of communication, the number of errors, and writing ability.

Due to paucity of research on EQ and foreign language learning, this study is seeking to shed light on the relation between emotional and verbal intelligences, and success in second language learning (GPA, reading, writing, speaking, and listening). In fact, the study purported to answer the following questions:

1. Does EQ play any role in the *academic achievement* of students majoring in English at the end of second year at the university?

2. Does EQ play any role in second language *reading* skill?
3. Does EQ play any role in second language *writing* skill?
4. Does EQ play any role in second language *speaking* skill?
5. Does EQ play any role in second language *listening* skill?

## 3 Method

### 3.1 Participants and setting

A community sample of 508 people participated in this study, comprising 134 males and females 374 aged between 19 and 29 (M= 21.3, SD=6.7). All of the participants were university students attending four universities in Iran (Mashhad & Tehran), majoring in English language and literature (271), translation (120), and teaching (115), and were in their second year. Having passed a national entrance examination successfully, these students were admitted to university to get a degree. Moreover, since English is considered a foreign language in Iran, these students did not have ample opportunities to use English out of class, and therefore they had to learn English mainly in class.

### 3.2 Measures and procedures

The participants were recruited from four universities; they were asked if they would volunteer to participate in a study on "intelligence and second language learning." In September (2006), at the start of the academic year, participants completed the Bar-On Emotional Quotient Inventory (EQ-i; Bar-On, 1997).

To measure the EQ of the subjects, Bar-On EQ-I (Bar-On, 1996), which was originally designed in 1980 by Bar-On, was used. It is a self-report scale with 133 items which measures five broad areas of skills or competencies and 15 factorial components. The first is intrapersonal EQ (40 items), which is divided into emotional self-awareness (8 items), assertiveness (7 items), self-regard (9 item), self-actualization (9 items), and independence (7 items). The second is interpersonal EQ (29 items), which is divided into empathy (8 items), interpersonal relationship (11 items), and social responsibility (10 items). The third is adaptability EQ (26 items), which is divided into problem solving (8 items), reality testing (10 items), and flexibility (8 items). The fourth is stress management EQ (18 items), which is divided into stress tolerance (9 items) and impulse control (9 items). The fifth is general mood EQ (17 items), which is divided into happiness (9 items) and optimism (8 items) (Bar-On, 1997, pp. 43–45). However, 15 of the questions are associated with scales intended to assess response validity. These scales are the Omission Rate, Inconsistency Index, Positive Impression, and Negative Impression scales. The inventory takes approximately forty minutes to complete. An example of an item from the EQ questionnaire is "It does not bother me to take advantage of people, especially if they deserve it." Subjects respond on a 5-point Likert type scale continuum from "Very seldom or Not true of me" to "Very often or True of me."

For the EQ-i (Bar-On, 1996), high and low scores are identified by how distant they are from the mean score of 100. Scores exceeding the mean or falling below the mean by one SD (15 points) are considered to be within the normal range. The average time to complete the test is 20–50 minutes.

The development of the EQ-i took place over many years, starting with the development of a conceptual framework and leading to the construction and refinement of scale items. Validity scales and correction indexes were added over time to improve measurement. A substantial body of research (e.g. Bar-On, 1988), summarized in the EQ-i manual, indicates that the scales have generally good internal consistency and test-retest reliability. Factor analyses also provide some support for the construct validity of the questionnaire. Finally, the convergent and discriminant validity of the EQ-i has been evaluated in a number of ways. Many studies examined correlations between the EQ-i and various self-report inventories, including the Sixteen Personality Factor

Questionnaire (Cattell, Eber, & Tatsouka, 1970), the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975) and the MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989). In general, EQ-i total scores are correlated positively with measures of emotional stability and negatively with measures of neuroticism and psychopathology.

In view of cultural differences and to avoid any misunderstanding regarding the content of the questionnaire for lower-level students, the translated version of this questionnaire was employed. With the translated version (From English into Persian), administered in Iran, the Cronbach's alpha coefficient was found to be .76, and the results of factor analyses provided some support for the inventory's hypothesized structure (Dehshiry, 2003). In this study the reliability of the translated version was found to be high (Cronbach's alpha: .86).

## 3.3   Data analysis

EQ questionnaires were first scored based on the guidelines provided by Bar-On (1998), then the total EQ scores, and the scores of EQ's five major subscales were computed. Since there was no need to transform the raw scores into standard ones, the raw scores were used in this study.

To determine the role of EQ in second language learning, students' scores at the university in Reading, Listening, Speaking, Writing, and their GPA were obtained from the registrar's offices of all universities. Then the averages for each skill, for example Reading 1, 2, 3, Listening & Speaking 1, 2, and Writing (Paragraph Writing, Letter Writing, and Advanced Writing) were computed, and Pearson product-moment correlation was applied to the data.

In order to compare the levels of emotional competency in successful and less successful second-year students, academic records from the registrar's offices of all universities were used to identify two groups of students: academically successful student (defined as those with a grade-point-average for the academic year of above 84%) and academically unsuccessful student (defined as those with a grade-point-average for the academic year of below 60%). These are not arbitrary criteria. For all the students who participated in this study, these values have important institutional implications: students in the successful group are considered to be top students and can take more courses for the next term to finish their studies sooner; students in the unsuccessful group are prone to "rustication" and will be asked to withdraw from the university if their GPA remains less than 59% for two more subsequent terms. Since somebody can be good at writing and may be weak in speaking, successful and unsuccessful reading, listening, speaking, and writing groups were selected based on the criteria mentioned for GPA (see Table 1).

|  | Successful | | | Unsuccessful | | |
|---|---|---|---|---|---|---|
|  | M | F | Total | M | F | Total |
| GPA | 20 | 57 | 77 | 8 | 59 | 67 |
| Reading | 38 | 70 | 108 | 30 | 55 | 85 |
| Listening | 83 | 183 | 266 | 12 | 41 | 53 |
| Speaking | 53 | 191 | 244 | 18 | 39 | 57 |
| Writing | 35 | 90 | 125 | 21 | 56 | 77 |

**Table 1: The number of participants in both successful and unsuccessful groups**

$t$-tests, discriminant function analyses, and several diagnostic proficiency statistics (sensitivity and specificity) were calculated to further analyze the data. Discriminant function analysis is used to classify subjects into two or more distinct groups, such as dropouts versus persisters, successful versus unsuccessful, and so on. The criterion in discriminant analysis is a person's group membership. Sensitivity refers to a test's ability to identify correctly individuals with problems. It is also called the true positive rate, identifying the percentage of unsuccessful learners. Specificity refers to a test's ability to identify correctly individual with no problems. It is also called the true negative rate, identifying the percentage of successful learners.

## 4   Results

### 4.1   Total sample

Table 2 presents correlations among EQ-i Bar-On variables (intrapersonal, interpersonal, stress management, adaptability, general mood, and total EQ), second-year university grade point average (GPA), reading, listening, speaking, writing, and grammar scores for the sample.

For the total sample, small but significant correlations were found between total EQ and GPA (r=.21), listening (r=.21) and speaking (r=.23), and total EQ was not found to be associated with reading (r=.06) and writing (r=.11).Significant correlations were found between intrapersonal abilities and GPA (r=.18), listening (r=.23), and speaking (r=.19), and no significant correlations were found with reading (r=.06) and writing (r=.07). Slightly lower correlations were found between interpersonal abilities and GPA (r=.17), listening (r=.10), and speaking (r=.11), and significant correlations were not found with reading (r=-.02) and writing (r=.01). Stress management was found to be significantly though moderately correlated with GPA (r=.22), reading (r=.12), listening (r=.12), speaking (r=.14) and writing (r=.12). Adaptability abilities were found to be weakly correlated with reading (r=.07), listening (r=.07), speaking (r=.06), and writing (r=.08), and they had a weak significant relationship with GPA (r=.12). General mood abilities were found to be significantly correlated with GPA (r=.15), reading (r=.09), listening (r=.10), speaking (r=.16), and they had no significant correlation with writing (r=.08).

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| *Total sample (N=508)* | | | | | | | | | | |
| 1. Intrapersonal | - | | | | | | | | | |
| 2. Interpersonal | .51* | - | | | | | | | | |
| 3. Stress management | .28* | .15* | - | | | | | | | |
| 4. Adaptability | .43* | .22* | .30* | - | | | | | | |
| 5. General Mood | .70* | .51* | .25* | .51* | - | | | | | |
| 6. Total EQ | .88* | .66* | .37* | .69* | .82* | - | | | | |
| 7. Reading | .06 | -.01 | .12* | .07 | .09 | .06 | - | | | |
| 8. Listening | .23* | .10* | .12* | .06 | .10* | .21* | .36* | - | | |
| 9. Speaking | .19* | .11* | .14* | .06 | .16* | .23* | .46* | .67* | - | |
| 10. Writing | .07 | .001 | .12* | .08 | .08 | .06 | .48* | .43* | .54* | - |
| 11. GPA | .18* | .17* | .22* | .12* | .15* | .21* | .68* | .44* | .54* | .61* |

* p< .05

**Table 2: Correlations among EQ-I variables, different skills and GPA**

### 4.2   Successful vs. unsuccessful students

To further examine the relationship between EQ and GPA, reading, listening, speaking, and writing multiple t-tests were conducted. Table 3 presents the results of t-tests for the EQ measures for GPA, reading, listening, speaking, and writing.

The results of t-tests demonstrated that students in the successful group had higher scores on intrapersonal (t=2.20, p<.05), stress management (t=2.02, p<.05), general mood (t=2.01, p<.05), and total EQ (t=2.34, p<.05) in GPA. With regard to reading skill, the successful group scored higher than unsuccessful group on stress management (t=3.67, p<.05), adaptability (t=2.49, p<.05), and general mood (t=2.29, p<.05). The successful group scored higher than unsuccessful group in listening on intrapersonal (t=2.81, p<.05), stress management (t=2.05, p<.05), and total EQ (t=2.7, p<.05). In speaking, the successful group outscored the unsuccessful group on intrapersonal (t=2.59, p<.05), interpersonal (t=1.93, p<.05), general mood (t=2.27, p<.05), and total EQ (t=2.41, p<.05). The successful group outscored the unsuccessful group in writing on stress management (t=2.47, p<.05), and adaptability (t=1.93, p<.05).

| Skills | Scales | Number Successful / Unsuccessful | t-value | p-level |
|---|---|---|---|---|
| GPA | Intrapersonal | 77/67 | 2.20 | .02 |
| | Interpersonal | 77/67 | 1.32 | .18 |
| | Stress management | 77/67 | 2.02 | .04 |
| | Adaptability | 77/67 | .73 | .46 |
| | General mood | 77/67 | 2.01 | .04 |
| | Total EQ | 77/67 | 2.34 | .02 |
| Reading | Intrapersonal | 108/85 | 1.80 | .73 |
| | Interpersonal | 108/85 | -.55 | .58 |
| | Stress management | 108/85 | 1.80 | .00 |
| | Adaptability | 108/85 | 2.49 | .01 |
| | General mood | 108/85 | 2.29 | .02 |
| | Total EQ | 108/85 | 1.42 | .15 |
| Listening | Intrapersonal | 266/53 | 2.81 | .00 |
| | Interpersonal | 266/53 | 1.69 | .09 |
| | Stress management | 266/53 | 2.05 | .04 |
| | Adaptability | 266/53 | 1.48 | .14 |
| | General mood | 266/53 | 1.44 | .15 |
| | Total EQ | 266/53 | 2.7 | .00 |
| Speaking | Intrapersonal | 244/57 | 2.59 | .01 |
| | Interpersonal | 244/57 | 1.93 | .04 |
| | Stress management | 244/57 | 1.48 | .13 |
| | Adaptability | 244/57 | .87 | .38 |
| | General mood | 244/57 | 2.27 | .02 |
| | Total EQ | 244/57 | 2.41 | .01 |
| Writing | Intrapersonal | 125/77 | 1.18 | .23 |
| | Interpersonal | 125/77 | -.76 | .44 |
| | Stress management | 125/77 | 2.47 | .01 |
| | Adaptability | 125/77 | 1.93 | .05 |
| | General mood | 125/77 | 1.51 | .13 |
| | Total EQ | 125/77 | 1.47 | .14 |

**Table 3: The results of t-tests on EQ variables in different skills for both groups**

To further explore the predictive validity of the EQ for all of the skills, stepwise discriminant function analyses were performed using emotional intelligence scores as predictors of membership in two groups (successful vs. unsuccessful). The results demonstrated that stress management in reading (r=.94, p<05), and writing (r=.94, p<.05), intrapersonal abilities in listening (r=.97, p<05), speaking (r=.98, p<05), and GPA (r=.95, p<05) were the best predictors to differentiate the successful from unsuccessful students.

Discriminant function scores were subsequently used to classify the students into successful and unsuccessful groups. Classification rates are presented in Table 4. Following the definitions and procedures outlined by Kessel and Zimmerman (1993), several diagnostic proficiency statistics were calculated from these classification results: For GPA, sensitivity was 56%, specificity 57%, and overall correct classification rate was 56%. For reading, sensitivity was 67%, specificity 60%, and overall correct classification rate was 63%; for listening, sensitivity was 60%, specificity 60%, and overall correct classification rate was 60%; for speaking, sensitivity was 63%, specificity 60%, and overall correct classification rate was 60%; and for writing, sensitivity was 51%, specificity 63%, and overall correct classification rate was 58%.

| Skills | Actual status | n | Predicted status | | % Correct |
|---|---|---|---|---|---|
| | | | Successful | Unsuccessful | |
| GPA | Unsuccessful | 67 | 38 | 29 | 56 (Sensitivity) |
| | Successful | 77 | 33 | 44 | 57 (Specificity) |
| | Total | 144 | 71 | 73 | 56 (overall rate) |
| Reading | Unsuccessful | 85 | 57 | 28 | 67 (Sensitivity) |
| | Successful | 108 | 43 | 65 | 60 (Specificity) |
| | Total | 193 | 100 | 93 | 63 (overall rate) |
| Listening | Unsuccessful | 53 | 32 | 21 | 60 (Sensitivity) |
| | Successful | 266 | 106 | 160 | 60 (Specificity) |
| | Total | 319 | 138 | 181 | 60 (overall rate) |
| Speaking | Unsuccessful | 57 | 36 | 21 | 63 (Sensitivity) |
| | Successful | 244 | 97 | 147 | 60 (Specificity) |
| | Total | 301 | 133 | 168 | 60 (overall rate) |
| Writing | Unsuccessful | 77 | 40 | 37 | 51 (Sensitivity) |
| | Successful | 125 | 46 | 79 | 63 (Specificity) |
| | Total | 202 | 86 | 116 | 58 (overall rate) |

**Table 4: Classification results from discriminant function analyses with EQ variables**

## 5   Discussion

### 5.1   Discussion of the results

Determining the role of emotional intelligence in second language learning produced divergent results depending on how the variables were operationalized. When the relationship between GPA and all skills and emotional intelligence was examined (n=508), total EQ and its subscales were found to be poor predictors of second language learning, although the present study found several subscales to be significant predictors of GPA (all subscales), reading (stress management, adaptability, general mood), listening (intrapersonal, interpersonal, stress management, general mood), speaking (intrapersonal, interpersonal, stress management, general mood), and writing (stress management).

Quite a different level of prediction was produced when EQ variables were compared in groups who had achieved a second-year university GPA, reading, listening, speaking, and writing scores of 85% or better versus relatively unsuccessful students who received a second-year university GPA, reading, listening, speaking, and writing scores of 59% or less. Important factors for success in second language learning were found to be: intrapersonal, stress management, and general mood (for GPA), stress management, adaptability, general mood (for reading), intrapersonal and stress management (for listening), intrapersonal, interpersonal, general mood (for speaking), and stress management and adaptability (for writing). These findings are compatible with those of Fahim and Pishghadam (2007) who found a close relationship between GPA and intrapersonal, stress management, and general mood competencies. Moreover, the results confirm Pishghadam's (2009) findings on the effects of EQ on reading and writing.

Second language skills and GPA were strongly associated with several dimensions of emotional intelligence questionnaire (intrapersonal and stress management abilities) completed at the end of the academic year. Collectively, these variables were found to be strong predictors in identifying both academically successful (nearly 60% of successful students were identified) and unsuccessful (nearly 60% of unsuccessful students were correctly identified) second-year students. The intrapersonal dimension involves emotional self-awareness (the ability to recognize and to understand one's feelings); assertiveness (the ability to express feelings, beliefs and thoughts, and to defend one's rights in non-destructive manner; self-regard (the ability to respect and accept oneself), self-actualization (the ability to realize one's potential capacities), and independence (the ability to be self-directed and self-controlled in one's thinking and actions and to be free of emotional dependency). Stress management dimension involves stress tolerance (the ability to with-

stand adverse events and stressful situations and conditions); and impulse control (the ability to resist or delay an impulse, drive or temptation to act) (Bar-On, 1997).

Results of t-tests indicate that the emotional competencies which affect reading include: stress management (stress tolerance and impulse control), adaptability (problem solving, reality testing, and flexibility), and general mood (happiness and optimism). To be a good reader, one must know how to cope with and manage stressful situations, how to define problems and generate potentially effective solutions, how to evaluate the correspondence between objective and subjective reality in a realistic and well-grounded fashion, and how to adjust emotions, thoughts, and behaviors to changing conditions. Being satisfied with life, enjoying being with others, and maintaining a positive attitude even in face of adversity is true requirements of successful reading. To be a successful listener, one must try hard to acquire a high level of EQ in general and stress management and intrapersonal abilities in particular. It seems that the nature of speaking skill is such that interpersonal competencies (empathy, interpersonal relationship, and social responsibility), intrapersonal competencies, and general mood can be contributory. Besides developing intrapersonal and general mood abilities, one must learn how to be aware and appreciative of the feelings of others, how to establish and maintain satisfying relationships characterized by emotional closeness and mutual affection, and how to be a cooperative and responsible member of one's social group. And to be a good writer requires one to acquire stress management and adaptability competencies well.

## 5.2   *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, trained and schooled (Elias et al., 1997), and 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), language policy makers are expected to include programs to raise the emotional competencies of their learners. Curricula should seek to educate learners about the value of emotional competencies. They should also seek to foster the development of specific skills in these areas (e.g. recognition of emotions in self and others, empathy, conflict resolution).

Moreover, English teachers are expected to be familiar with the concept, striving hard first 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, leading the learners to more self- and other-discovery. Some helpful techniques which can be used to increase emotional intelligence in the classroom include: discussion, listening to light music, watching emotional clips, self-disclosure, designing questionnaires and reading literature and psychological texts. For example, employing questionnaires or holding discussion groups on emotional competencies can strongly contribute to emotional literacy. Well-organized questionnaires can make the learners become more aware of their own emotional competencies. 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 dramatically.

## 5.3   *Suggestions for further research*

In the present research sex, age, and ethnic bias were not taken into account. A more detailed study is needed to explore the relationship between emotional intelligence and these variables in second language learning. Moreover, in the current study, the effect of emotional intelligence was on second language learning, further studies are needed to investigate the effect of emotional intelligence on second language teaching. Another study could to examine the role of emotional intelligence in language testing, specifically the relationship between emotional intelligence and different test forms. This study was conducted in an EFL situation. Further research with the same for-

mat and design can be conducted in other situations to compare the results and to find out whether EQ has different effects in different contexts.

## 6 Conclusions

The relation between second language learning and emotional competencies is not surprising, given the nature of English classes in EFL situations. Learning a second language seems to be difficult, demanding, and full of stress and pressure for learners (Krashen, 1981), especially for adults, because learners have to speak in another language which is not their mother tongue, make lots of mistakes and may face setbacks.

English is considered a foreign language to Iranians, because it is spoken only in class. In Iran, students, before getting into university, study General English for 8 years 8in schools and then pursue their English studies in ESP courses at the university. It is prestigious to learn English in Iran and to acquire a native-like accent, because people put more premium on learning English. Besides, many jobs in Iran require a good command of English. Due to the aforementioned reasons, English language teachers in Iran are perfectionists, demanding the correct use of the language, putting much pressure on students to apply English accurately and appropriately. English classes generally create a kind of threatening environment in Iran; students' errors are corrected immediately in a direct way. Students generally suffer from error phobia, meaning that they do not write or speak until they think they are perfect. Therefore, it seems to be natural that emotional factors, especially intrapersonal competencies and stress management abilities, can be of great importance in this context of learning.

## 7 Limitations of the study

One limitation of this study is that since this study does not take age, gender, and language proficiency into account, it is not acceptable to generalize the findings of this study across different ages, genders, or different levels of language proficiency. Another limitation of the present study is that it is based on the academic achievement of students at the university. Moreover, since this study is a correlational one, claiming causal relationship between EQ and language learning is not recommended.

## References

Bar-On, R. (1988). *The development of a concept of psychological well-being. Unpublished doctoral dissertation*. Rhodes University, South Africa.

Bar-On, R. (1996). *The Emotional Quotient Inventory: A measure of emotional intelligence*. Toronto, ON: Multi Health Systems.

Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory: User's manual*. Toronto: Multi-Health Systems.

Binet, A. (1905). A propos la mesure de l' intelligence. L' *Annee Psychol., 2*, 411–465.

Butcher, J.N., Dahlstrom, W.G., Graham, J.R., Tellengen, A., & Kaemmer, B. (1989). *In Minnesota Multiphasic Personality Inventory-2 (MMPI-2) manual for administration and scoring*. Minneapolis, MN: University of Minnesota Press.

Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes. *Journal of Managerial Psychology*, *18*, 788–813.

Cattell, R.B., Eber, H.W., & Tatsouka, M. (1970). *Handbook for the Sixteen Personality Factor Questionnaire (16PF)*. Champaign, IL: Institute for Personality and Ability Testing.

Dehshiry, R. (2003). *The reliability and validity of EQ-i. in Iran's context*. Unpublished Master's Thesis, AT University, Tehran, Iran.

Elias, M.J., Zins, J.E., Weissberg, R.P., Frey, K.S., Greenberg, M.T., Haynes, N.M., Kessler, R., Schwab-Stone, M.E., & Shriver, T.P. (1997). *Promoting social and emotional learning: Guidelines for educators*. Alexandria, VA: Association for Supervisionand Curriculum Development.

Eysenck, H.J., & Eysenck, S.B.G. (1975). *Manual for the Eysenck Personality Questionnaire*. San Diego, CA: Educational and Industry Testing Service.

Fahim, M., & Pishghadam, R. (2007). On the role of emotional, psychometric, and verbal intelligences in the academic achievement of university students majoring in English language. *Asian EFL Journal, 9*, 240–253.

Fox, S., & Spector, P.E.(2000). Relations of emotional intelligence, practical intelligence, general intelligence, and trait affectively with interview outcomes: Its not all just "g". *Journal of Organizational Behavior, 21*, 203–220.

Gardner, H. (1983). *Frames of mind*. New York: Basic Books.

Gardner, H. (1993). Intelligence and intelligences: Universal principles and individual differences. *Archives de Psychologie, 61*, 169–172.

Gardner, H. (1999). Are there additional intelligences? The case for naturalist, spiritual, and existential intelligences. In J. Kane (ed.), *Education, information, and transformation* (pp. 111–131). Upper Saddle River, NJ: Prentice Hall.

Goleman, D. (1995). *Emotional intelligence*. New York: Bantam.

Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam.

Guilford, J.P. (1967). *The nature of human intelligence*. New York: McGraw-Hill.

Kessel, J.B., & Zimmerman, M. (1993). Reporting errors in studies of the diagnostic performance of self-administered questionnaires: extent of the problem, recommendations for standardized presentation of results, and implications for the peer review process. *Psychological Assessment, 5*, 359–399.

Krashen, S. (1981). *Second language acquisition and second language learning*. Oxford: Pergamon Press.

Mayer, J.D., & Geher, G. (1996). Emotional intelligence and the identification of emotion. *Intelligence, 22*, 89–113.

Petrides, K.V., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences*, *36*, 277–293.

Pishghadam, R. (2009). Emotional and verbal intelligences in language learning. *Iranian Journal of language Studies, 3,* 43–64.

Salovey, P., & Mayer, J. (1990). Emotional intelligence. *Imagination, cognition, and personality, 9*, 185–211.

Shanley, L.A., Walker, R.E., & Foley, J.M. (1971). Social intelligence: A concept in search of data. *Psychological Reports, 29,* 1123–1132.

Shuttes, N.S., Schuetplez, E., & Malouff, J.M.( 2001). Emotional intelligence and task performanc*e*. Imagination, *Cognition and Personality*, *20*, 347–354.

Thorndike, R.L. (1920). Intelligence and its uses. *Harpers' Magazine, 140*, 227–235.

Wechsler, D. (1958). *The measurement and appraisal of adult intelligence* (4th ed.). Baltimore, MD: The Williams & Wilkins Company.