

On the Correlation between Emotional Intelligence and Learning Styles: The Case of Iranian Academic EFL Learners

Parviz Alavinia

Urmia University, Iran

Email: pevinia2006@yahoo.com

Sara Ebrahimpour

Maragheh Islamic Azad University, Iran

Abstract—Known as the intelligent use of emotions, EQ has long been scrutinized from a multitude of varied perspectives. Likewise, literature on learning styles also enjoys a sufficient amount of depth and breadth. Yet, the ostensible bonds between these two constructs have rarely been addressed by the research community. Hence, the current study seeks to look into the viable relationship between emotional intelligence and learning styles of freshman Iranian EFL learners. To this end, two questionnaires, i.e. Bar-On's EQ-i (1997) as well as a user-friendly version of learning styles questionnaire developed by Chislett and Chapman (2005) were administered to 132 students (42 males and 90 females). The final analysis of data, implemented mainly through the use of Pearson product moment correlation and t-test, pointed to a positive meaningful relationship between emotional intelligence and learning styles ($r = 0.66$). Furthermore, in line with the findings, a significant difference was found to be at work with regard to the performance of different genders on Bar-On's EQ-i.

Index Terms—Bar-On's EQ-i, emotional intelligence, learning styles

I. OVERVIEW

Once viewed as a unidimensional and crystallized concept (Binet, 1905), intelligence is now being regarded as a multifaceted construct which is prone to enhancement. Actually, it was Howard Gardner who first refuted the basic foundations of the antediluvian conception of intelligence held for decades (Gardner, 1983), and hence devised the ostensibly outlandish neologism *intelligences* as an alternative for the single non-divisible conceptualization of intelligence. Consequent attempts on the part of several illustrious figures, mainly Salovey and Mayer (1990), Goleman (1995) and Bar-On (1997 a/b), contributed to a better establishment of the newly-founded notion of non-crystallized intelligence. The main contribution of the latter group of theoreticians has been the instigation and promulgation of a novel approach to intelligence known as emotional intelligence.

Statement of the Problem and Research Questions

Though literature might be said to be replete with manifold probes into diverse aspects of both EQ and learning styles, it still seems that meager heed has been paid to the viable go-togetherness between these two well-established constructs. Therefore, through a partially full-fledged analysis of the potential interrelatedness of emotional intelligence on the one hand and learning styles on the other, the present study strives to bridge the alleged gap in the literature pertaining to this rather neglected domain of investigation, and by way of doing so the researchers in the current study attempt to come up with a more lucid view of the would-be impacts and implications of learning styles and emotional intelligence in EFL settings. To be able to appropriately approach the above-mentioned problem, the following research questions were posed and investigated in this study:

Q1: Is there any significant relationship between Iranian EFL learners' emotional intelligence and their learning styles?

Q2: Is there any significant difference between males and females in terms of their emotional intelligence?

Toward a Cogent Delineation of EQ

As early as 1920, Thorndike hypothesized that true intelligence was composed of not only academic elements, but involved emotional and social elements. Thorndike (1950) defined social intelligence as the ability to act wisely in human relations. As a multifaceted construct, emotional intelligence has been approached from a variety of diverse perspectives by its illustrious precursors, and hence a number of varied delineations have been put forth by these forerunners of the field of emotional intelligence, in an attempt to further elucidate what features the so-called emotionally intelligent individuals are supposed to possess. The most original definition of emotional intelligence is the one set forth by Salovey and Mayer (1989/1990) who define it as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p.189).

Goleman (1995, p.34), as the other prominent pioneer in the domain of emotional intelligence maintains, EQ encompasses "abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulses and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to emphasize and to hope." Nonetheless, this definition might appear not to be utterly in tandem with Goleman's later reconceptualization of emotional intelligence as "the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships" (1998, p.317).

Though a multitude of other definitions have thus far been proposed for the notion of EQ, it would suffice to wrap up this section with Bar-On's (1997b, p.14) frequently cited elucidation of 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."

Measures of Emotional Intelligence

The history of theorizing on what the construct of emotional intelligence would look like has always proceeded hand in hand with another line of endeavor aiming at the provision of several operationalized measurement scales approaching the concept of emotional intelligence from a number of different angles. Though literature is replete with several attempts aimed at scrutinizing the construct of emotional intelligence, not all such rough and ready enterprises are worth giving in-depth deliberation in the current study.

Overall, in line with Mayer, Caruso, and Salovey (2000), three branches of emotional intelligence tests exist alternatively being referred to as ability, self-report, and observer or informant rating scales. The sample measures they then put forth as the major archetypes of each scale are: 1) their own renowned test (Mayer, Salovey, & Caruso, 1997/1999) widely known as MEIS (Multifactor Emotional Intelligence Scale) which is ubiquitously cited as the paramount epitome of ability scales, 2) Bar-On's (1997) EQ-i and Cooper's (1996/1997) EQ-Map which are stated as the principal types of self-report measures, and 3) Boyatzis, Goleman, and Hay/McBer's (1999) Emotional Competence Inventory (ECI) that is known as the best example of third group of scales drawing mainly on observer (informant) responses.

As the main EQ scale used in the present study is Bar-On's Emotional Quotient Inventory (widely known as EQ-i), in the ensuing section a laconic account will be provided of a number of elemental features of this typical self-report measure of emotional intelligence, and each of its components will be briefly defined and elucidated.

Bar-On's EQ-i

First designed as an experimental scale for measuring the so-called emotional and social competence in the early 1980s (Bar-On, 1985, 1988), Emotional Quotient Inventory (EQ-i) was ultimately disseminated as an invaluable and highly pervasive measure of emotional intelligence in 1997. Though a plethora of EI scales had been publicized and promulgated prior to the appearance of Bar-On's (1997a) seminal work, EQ-i can be considered *sui generis* in that it is referred to as the primary EI test which is published by a psychological center. Furthermore, the additional factor that differentiates between Bar-On's scale and its other counterparts is the distinct nature of EQ-i which is widely known as a self report measure (Bar-On, 2000).

The self-report test of emotional intelligence designed by Bar-On (1997b), is after submitting a firm measurement of "an array of noncognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures" (p.14). Its unabridged version is composed of 133 items normally being allotted something around forty minutes to fulfill and is said to be apposite to the age of seventeen and above. This scale is composed of five sections and fifteen separate subsections as follows:

1. Intrapersonal, consisting of five subcategories of emotional self awareness, assertiveness, self-regard, self-actualization, and independence
2. Interpersonal, encompassing the three sub-skills of empathy, interpersonal relationship, and social responsibility
3. Stress management, having as its subparts the two so-called categories of stress tolerance and impulse control
4. Adaptability, comprising the three divisions of problem solving, reality testing, and flexibility
5. General mood, entailing the two subscales of happiness and optimism.

Empirical Research on EQ

As literature on EQ abounds with various probes conducted into diverse facets of EQ gains, even a semi-comprehensive coverage of the studies performed in this regard, might appear to be far from possible. Thus, an attempt is going to be made, in this section, to familiarize the readers with only a few instances of empirical work on this multifaceted construct. Research has revealed that EQ more than IQ determine success in life and education (Goleman, 1995; Salovey & Mayer, 1990). Emotional intelligence has been reported to count as the overriding factor contributing to success in a number of varied arenas including work settings (Carmeli, 2003), classroom performance (Petrides, Frederickson, & Furnham, 2004), Cognitive tasks (Shutte, Schuetz, & Malouff, 2001), and Contextual performance (Carmeli, 2003). EI is also said to be a crucial factor in organization change (Ferre & Gonnell, 2004; Singh, 2003), leadership (Ashkanasy, 2002; Dearborn, 2002; Gardner & Stough, 2002; Weymes, 2002), management performance (Slaski & Gartwright, 2002), teachers' burnout level (Alavinia & Ahmadzadeh, 2012), and University professors' self-efficacy (Alavinia & Kurosh, 2012) and life satisfaction (Palmer, Donaldson & Stough, 2002).

In a hunt for the would-be interplay between gender and emotional intelligence, Kafetsios (2004) found that females' scores were higher than males in terms of receiving emotions. Elsewhere, Mayer, Caruso and Salovey (1999) suggested

that females have a slight advantage with regard to emotional intelligence. Also, in line with a number of other studies (e.g. Brackett, Mayer & Warner, 2004) females are said to be characterized by higher levels of EI compared to males. Additionally, as research indicates, more emotionally intelligent individuals are liable to be more successful at meeting the demands of stressful situations because they are better to perceive, appraise and regulate their emotions (Salovey, Bedell, Detweiller, & Mayer, 2000). Finally, in their probe into the relationship between EQ, IQ, verbal intelligence, and the academic achievement of EFL students, Fahim and Pishghadam (2007) found that academic achievement of the learners was strongly associated with several dimensions of emotional intelligence (intrapersonal, stress management, and general mood competencies). Moreover, their upshots revealed that academic achievement did not correlate much with IQ, but it was strongly connected with verbal intelligence which is a sub-section of IQ test.

Learning styles

Some confusion exists about the use of the terms 'learning style' and 'cognitive style' as they are often used interchangeably. There are, however, some differences between the two. While cognitive style theories are not new and quite widely researched, Learning style theories, are new, and are usually considered practical because they are classroom-specific. Ability to learn is one of the most important characteristics of human beings, which differentiates them from other living creatures and renders them social beings. Although learning is defined in several ways, most of the psychologists agree that learning happens as a result of the interaction with the environment and it creates long-term differences in the behaviors (Fidan & Erden, 1991). Each learner has his/her own preferred way of perceiving, organizing, and maintaining the incoming information, and these different manners in which data are processed are generally regarded to be rather distinctive and consistent (Chou & Wang, 2000). Researchers are now of the unanimous view that not all learners learn in the same way (Witkin, 1973; Gregorc, 1979).

Amongst the earliest attempts aimed at delineating the term learning styles, one might refer to the definition set forth by Garger and Guild (1984) where learning style is referred to as the "stable and pervasive characteristics of an individual, expressed through the interaction of one's behavior and personality as one approaches a learning task" (p.11). In a similar vein, Kalsbeek (1989) defines the term as "a person's preferred approach to information processing, idea formation, and decision making; the attitudes and interests that influence what is attended to in a learning situation; and a disposition to seek learning environments compatible with these personal profiles" (p. 32). Furthermore, according to Pham (2000), learning styles are the learners' fixed methods for responding to and working with the existing stimuli in learning circumstances. Carbo (1980) points out that determining the unique learning styles of students and making necessary arrangements to adjust our instruction to such learner differences might help boost the educational accomplishments of our learners.

Visual –Audio and Kinesthetic (VAK) Model

VAK (Visual, Auditory, and Kinesthetic) model is one of most popular models for gauging the learners' different learning styles. Based on this model, all learners draw on one of the three major modalities, i.e. Visual, Auditory, or Kinesthetic, to acquire and learn new information and experiences. The claim set forth by this model is that one or two of these styles might be dominant in a learner, which, in turn, signifies the best way through which a learner takes in the new information by filtering what is to be learned. Thus, Visual, Auditory and Kinesthetic (VAK) model says there are only three types of learning styles that all learner are said to possess. In the ensuing section a brief account is provided of each of these three learning styles.

Visual learner

These learners are distinguished by possessing two sub-channels: Linguistic and Spatial. Visual-linguistic learners like to learn by written language, such as reading and writing tasks. They recall what has been written down, even if they do not read it more than once. They write down directions and pay attention to lectures if they watch them. And visual-spatial learners have problem with written language and are better with charts, and demonstration, videos and visual materials. They easily visualize faces and places by applying imaginations and never get lost in new surroundings. This type of learner learns everything through seeing, and may think in pictures and enjoy diagrams, illustrated books, videos and handouts, and using pictures helps him/her memorize the facts. Such learners tend to describe everything they see in terms of appearances. They are good writers and perform quiet well on written assignments, and are not pleased with lectures. Other features by which these learners are characterized might include their inclination as to taking detailed notes as well as seeing the teacher's body language and facial expression to fully understand the content of a lesson.

Auditory learner

This type of learner learns easily through verbal lessons and anything that allows them to talk out what they are learning. They learn by reading texts aloud, and do better on oral presentations and reports. They interpret the underlying meaning of speech through listening to tone of voice, pitch, speed and other nuances. Further, they prefer directions given orally, and seldom take notes or write things down. They often repeat what has just been said, and, at times, talk to themselves. Finally, written information may have little meaning to them until it is heard.

Kinesthetic learner

This group is mainly marked by two sub-channels: Kinesthetic (having to do with movement) and Tactile (pertaining to the sense of touch). Learners falling within this category are said to learn through moving, doing and touching. Thus, they need to touch, handle, and manipulate materials and objects, especially while they are listening or studying. They

are also good at drawing designs, count on figures, and talk using their hands. Such learners are usually good at sports, mechanics, using appliances and tools. They are often adventurous, like lots of movement and enjoy working with tangible objects, collages and flashcards. Other attributes of these learners are their crave for hands-on approaches and their propensity for moving when they are learning, as well as taking frequent breaks and listening to music while learning. It is additionally claimed that such learners may find it hard to sit still for long periods and may become distracted by their need for activity and exploration.

Empirical Research on Learning Styles

Interestingly enough a high proportion of the studies on learning styles seem to have been conducted in the domain of higher education (e.g. Biggs, 2001; Busato, Prines, Elshout, and Hamaker, 2000; Coffield, Moseley, Hall, & Ecclestone, 2004; Guild, 1994; Hartman, 1995). Although these studies classify different learning types and/or styles in different ways, their aims and approaches are, more or less, similar. Felder (1996) claims that since the instructional approaches around the cycle of learning models are similar, it is not important, which learning styles instrument has been chosen in each investigation. In a study seeking to examine the effect of gender on Japanese students' learning styles, Hatcher (2000) found that sex of learners had a significant effect on the learning style used. Likewise in a subsequent study performed to identify the overriding language learning styles used by fifth and sixth grade students in Taiwan, Hsun (2002) found that female students used learning styles more frequently than male students. Among the various learning style theories available, the delineation put forth by Kolb (1984, p. 41), characterizing the learning styles as "the process whereby knowledge is created through the transformation of experience [and in which] knowledge results from the combination of grasping and transforming experience", has been adopted in the current study.

II. METHOD

A. Participants

The participants of the current study were a total of 132 freshmen (40 males and 92 females) studying English as a foreign language at a range of different universities, i.e. Urmia state and Azad Universities, Azarabadegan non-profit university (in Urmia) and Naghadeh Azad University. In terms of age merely a slight amount of variation was witnessed, as most of the participants fell within the age range of 19 to 22 years. It is also worth noting that though all the participants were majoring in English language studies, their minors were not the same, and hence they came from one of the three major branches of English studies, that is TEFL, translation, and literature.

B. Instruments

Bar-On's EQ-i

One of the instruments utilized for data collection in the present research was Bar-On's (1997) EQ-i. Though the original version of the test included 133 questions, later revisions applied to the test by Bar-On himself (1997a, 1997b) reduced its size to a considerable degree, so that the modified version of the test comprised only 117 questions. Furthermore, through later amendments, the size of the domestically standardized instrument was reduced through eradicating the questions which had been rendered either irrelevant or inappropriate to Iranian context by Samouei (2003), who first introduced the test for domestic implementation.

Thus, what was utilized as the main source of data collection for the current research was this reduced form which encompassed 90 questions arranged in 15 separate sections, i.e. the so called subscales of Emotional Self-Awareness, Assertiveness, Self-Regard, Self-Actualization, Independence, Empathy, Social Responsibility, Interpersonal Relationship, Reality Testing, Flexibility, Problem Solving, Stress Tolerance, Impulse Control, Optimism, and Happiness. Finally, the test is said to be apt for implementation with only academics (the university students) aging 18 and over, in that the originally piloted population had included simply the undergraduates.

The answers to test questions were to be provided on a Likert Scale with 5 options from strongly agree to strongly disagree. While a greater number of the questions (48 out of 90) were scored in the direct mathematical order from 1 to 5 (with the full score being given to strongly agree and the minimum score being assigned to strongly disagree), the remaining 42 were graded in the reverse order. Owing to the fact that each of the test subscales was composed of six questions, the total score for each subscale equaled thirty. Furthermore, the maximum grade for the entire test was 450.

VAK Learning Styles Scale

The Visual-Auditory-Kinesthetic learning styles model or 'inventory', usually abbreviated to VAK, provides a simple way to explain and understand an individual's learning style. The VAK learning styles model provides a very easy and quick reference inventory for assessing people's preferred learning styles, and the most importantly, for designing learning methods and experiences that match people's preferences. The VAK learning styles self-Assessment questionnaire (Chislett & Chapman, 2005) is a 30-item survey which permits the assignment of a respondent to one of three learning styles: visual, auditory, and kinesthetic learning style. In this survey, thirty different settings are posed and respondents select a solution which is tied to one of the three learning styles. For the thirty items, the learning style most often selected determines the learning style label assigned to that individual. It is possible for a respondent to mark responses tied to two or three learning styles with equal frequency and, hence not be considered to have a single learning style. The average time allotted for the completion of the test is 20–30 minutes. The reliability of the questionnaire estimated via Cronbach's alpha was found to be 0.81.

C. Data Collection and Analysis Procedure

As stated earlier, the present study was carried out in Urmia and Nagadeh Universities. At the outset of the study, the participants were administered both learning styles scale and emotional intelligence test. For the data to be more reliable, the researchers explained the purpose of completing the questionnaires and assured the participants that their data would be kept confidential; besides, the participants' questionnaires were coded numerically and confidentiality and anonymity considerations were observed. EQ questionnaires were first scored based on the guidelines provided by Bar-On (1997), and 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 relationship between EI and learning styles, students' scores on visual, auditory, and kinesthetic sections were obtained through the use of learning styles questionnaires. To analyze the data, students' responses were converted into numerical scale. To ensure the normality of distribution, descriptive statistics were run on the obtained data. Moreover, to be able to pinpoint the viable relationship between the learners' EI and learning styles, Pearson product moment correlation was also carried out. Finally, to come up with a lucid view as to the viable effect of gender on the learners' performance on Bar-On's EQ-i, use was made of t-test, as well.

III. RESULTS

Table 1 summarizes the descriptive results of the two instruments –EQ and learning style – used in this study, and Table 2 reports on the upshots gained through kolmogorov–smirnow normal distribution test, based on which it was revealed that scores on EQ and learning styles were normally distributed.

TABLE 1
DESCRIPTIVE STATISTICS FOR EQ AND LEARNING STYLES

N	EQ		Learning style	
	Valid			
	Missing	0		0
Mean		59.6742		62.1818
Median		59.0000		62.0000
Mode		58.00		65.00
Std. Deviation		7.19891		11.10039
Variance		51.824		123.219
Minimum		30.00		43.00
Maximum		117.00		64.00

TABLE 2
ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST

		EQ	Learning style
N		132	132
Normal Parameters ^a	Mean	59.6742	.1281
	Std. Deviation	7.19891	.01004
Kolmogorov-Smirnov Z		.907	1.101
Asymp. Sig. (2-tailed)		.383	.177

To investigate the relationship between students' EQ and their learning styles, Pearson product moment correlation was applied, according to which a significant correlation was found between EFL learners' EQ and their learning styles ($r = 0.66$, $p < 0.05$) (Table 3). To explore whether there was a statistically significant gender effect on the learners' performance on EI test, an independent samples t-test analysis was conducted, through which it was indicated that the mean scores of male and female learners varied significantly (Table 5). As Table 4 represents the mean score obtained by females was 89.37, while the one obtained by the males equaled 20.30, depicting that females tend to act better than males in terms of emotional intelligence.

TABLE 3
THE RESULTS OF CORRELATIONS BETWEEN EQ AND VAK

		EQ	VAK
EQ	Pearson Correlation	1	.657 [*]
	Sig. (2-tailed)		.015
	N	132	132
VAK	Pearson Correlation	.657 [*]	1
	Sig. (2-tailed)	.015	
	N	132	132

*. Correlation is significant at the 0.05 level (2-tailed).

TABLE 4
GROUP STATISTICS

EQ	N	Mean	Std. Deviation
Female	90	89.3778	8.40570
Male	42	20.3095	.77689 4

TABLE 5
INDEPENDENT SAMPLES TEST

EQ	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	T	Df	Sig. (2-tailed)
Equal variances assumed	.291	.590	-.691	130	.021

IV. DISCUSSION

As stated earlier, the present study intended to investigate the would-be relationship between EFL learners' EI and their learning styles in Urmia and Nagadeh universities. With regard to the first research question of the study, the results revealed that there is a significant positive relationship between EI and learning styles. The size of this correlation indicates that generally high levels of EI are related to high levels of students' learning styles, and if one of the variables increases, the other will increase, as well. This piece of finding conforms to the results of the previous body of research, particularly those conducted by Elias, Tobias, and Friedlander (1999), Goleman, (1995, 1998), Mayer & Salovey (1997), Saklofske, et al. (2003), Saklofske, et al. (2007), and Zins, Travis and Freppon (1997). Yet, it is found to be in sharp contrast with the upshots gained by Johnson (2008) that pointed toward the non-existence of significant relationship between learning styles and emotional intelligence.

The second question of the current study investigated the relationship between EFL university learners' emotional intelligence and their gender. The results gained through the use of independent sample t-test revealed that the learners' scores on EQ scale were highly influenced by their gender, a piece of finding which was in conflict with those reported by Chan (2004), Hopkins and Bilimoria (2008), and Gencer and Cakiroglu (2007), yet, in line with the findings of Harrod and Scheer (2005), and Malterer, Glass, and Newman (2008) who indicated that there were significant differences between emotional intelligence of females and males. There are also a number of other studies which have almost conclusively indicated that individuals' emotional intelligence changes with the gender differences. For instance, Perry, Ball and Stacey (2004) and Day and Carrol (2004) pointed out that females enjoyed a higher level of EI than males. Likewise, Van Rooy, Alonso and Viswesvaran (2005) found that females have significantly higher reported emotional intelligence than males. Perry, et al.'s (2004) investigation on pre-service (student) teachers using the RTS can feature as another case in point, in which the researcher claims that females possess significantly higher emotional intelligence than males. Yet, as many researchers contend (Barchard & Hakstian, 2004; Perry, et al., 2004; Schaie, 2001; Van Rooy et al., 2005), further research is called for to explore the veritable relationship between gender and emotional intelligence.

V. CONCLUSION AND IMPLICATIONS

The current study was, in the first place, targeted toward pinpointing the would-be relationship between emotional intelligence and learning styles among freshman academic EFL learners. As the findings of the study helped reveal, the emotional intelligence of learners was found to be positively correlated with their learning styles, showing that emotional intelligence is liable to play an important role in learners' learning styles. Better put, the conclusion can be that enhancement and development of each of these constructs can lead to the enhancement and development of the other. The second objective of the study was to identify the differences among the emotional intelligence of learners in terms of their gender. As the findings depicted, gender does have a role in determining the individuals' emotional intelligence level (in the present study females turned out to outperform males apropos emotional intelligence).

After all, findings of this study might help researchers, teachers, and policy makers focus more on enhancing EFL learners' learning styles and emotional intelligence. If we assume that it is 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) and if we hold on to the view that there is a viability for emotional enhancement (e.g. Alavinia, 2011a/b), efficient programs and policies contributing to the betterment of the emotional competencies of our learners are liable to be incorporated into our educational system. Moreover, English instructors are expected to be well familiar with the concept of emotional intelligence, and try to raise their own emotional intelligence as well as that of their learners. Furthermore, being informed about the fact that our learners make use of different learning styles in the process of learning might help sensitize us, as language educators, toward this learner diversity and preference for a particular mode of learning. This awareness is of great importance, because as Riazi and Riasati (2007) note, most teachers are not aware of their students' unique learning styles. This awareness is, in turn, expected to motivate the teachers to change their teaching style to meet each single student's learning style and preferences. The findings can also be helpful to students in that they provide them with critical awareness of their learning styles. Finally, the upshots gained through the present probe can help material and syllabus designers see which activities and approaches are most appropriate for students with different learning styles.

REFERENCES

- [1] Alavinia, P. (2011a). Emotional Engineering through the Application of Fuzzy Logic: Enhancing Emotional Intelligence by Raising Awareness of Emotions. Germany: VDM Verlag.
- [2] Alavinia, P. (2011b). Toward the Refutation of Herrnstein and Murray's Maxims: Is (Emotional) Intelligence Acquirable and Modifiable through Scooling? Germany: Lambert Academic Publishing.
- [3] Alavinia, P., & Ahmadzadeh T. (2012). Toward a Reappraisal of the Bonds between Emotional Intelligence and Burnout. *English Language Teaching*, 5(4), 37-50.
- [4] Alavinia, P., & Kurosh, S. (2012). On the Would-be Bonds between Emotional Intelligence and Self-efficacy: The Case of Iranian EFL University Professors. *Theory and Practice in Language Studies*, 2(5), 956-964.
- [5] Ashkanasy, N.M. (2002). Studies of Cognition and Emotion in Organisations: Affective Events, Emotional Intelligence and Perception of Emotion. *Australian Journal of Management*, 27, 11-20.
- [6] Barchard, K.A., & Hakstian, A.R. (2004). The nature and measurement of emotional intelligence abilities: Basic dimensions and their relationships with other cognitive ability and personality variables. *Educational and Psychological Measurement*, 64, 437-462.
- [7] Bar-On, R. (1985). The development of an operational concept of psychological well-being. Unpublished doctoral dissertation (first draft). Rhodes University, South Africa.
- [8] Bar-On, R. (1988). The development of a concept of psychological well-being. Unpublished doctoral dissertation (final draft). Rhodes University, South Africa.
- [9] Bar-On, R. (1997a). The Emotional Quotient Inventory (EQ-i): A test of emotional intelligence. Toronto: Multi-Health Systems.
- [10] Bar-On, R. (1997b). Bar-On Emotional Quotient Inventory (EQ-i): Technical manual. Toronto: Multi-Health Systems.
- [11] Bar-On, R. (2000). Emotional and social intelligence: Insights from the emotional quotient inventory (EQ-i). In: Bar-On, R., & Parker, J. D. (Eds.), *The handbook of emotional intelligence* (pp. 363-388). Jossey-Bass, San Francisco.
- [12] Biggs, J. (2001). The reflective institution: assuring and enhancing the quality of teaching and learning: *Higher Education*, 41, 221-238.
- [13] Binet, A. (1905). A propos la mesure de l'intelligence. *L'Annee Psychol.*, 2, 411-465.
- [14] Boyatzis, R. E., Goleman, D., & Hay/McBer. (1999). *Emotional competence Inventory*. Boston: Hay/McBer Group.
- [15] Brackett, M.A., Mayer, J.D., & Warner, R.M. (2004). Emotional intelligence and its relation to everyday behaviour. *Personality and Individual Differences*, 36, 1387-1402.
- [16] Busato, V.V., Prins, F.J., Elshout, J.J., & Hamaker, C. (2000). Intellectual ability, learning style, personality, achievement motivation and academic success of psychology students in higher education. *Personality and Individual Differences*, 29, 1057-1068.
- [17] Carbo, M. (1980). An analysis of the relationship between the modality preferences of kindergartners and selected reading treatments as they affect the learning of a basic sight-word vocabulary. (Doctoral dissertation, St. John's University). *Dissertation Abstracts International*, 41, 1389A.
- [18] Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behaviors and outcomes, *Journal of managerial Psychology*, 18, 788-813.
- [19] Chan, D. W. (2004). Perceived emotional intelligence and self-efficacy among Chinese secondary school teachers in Hong Kong. *Personality and Individual Differences*, 36, 1781-1795.
- [20] Chislett, V., & Chapman, A. (2005). VAK Learning Styles Self-Assessment Questionnaire. Retrieved April, 2010 from <http://www.businessballs.com>.
- [21] Chou, H., & Wang, T. (2000). The influence learning style and training method on self-efficacy and learning performance in WWW Homepage Design Training. *International Journal of Information Management*, 20, 455-472.
- [22] Coffield, F., Moseley, D., Hall, E., & Eccles S.K. (2004). Learning styles and pedagogy in post-16 learning. A systematic and critical review. London: Learning and Skills Research.
- [23] Cooper, R.K., & Sawaf, A. (1997). Executive EQ: Emotional Intelligence in Leadership and Organizations, Grosset/Putnam, New York, NY.
- [24] Day, A.L., & Carrol, S.A. (2004). Using an ability-based measure of emotional intelligence to predict individual performance, group performance, and group citizenship behaviours. *Personality and individual Differences*, 36, 1443 -1458.
- [25] Dearborn, K. (2002). Studies in Emotional Intelligence Redefine our Approach to Leadership Development. *Public Personnel Management*, 31(4), 523-530.
- [26] Elias, M.J., Tobias, S.E., & Friedlander, B.S. (1999). Emotionally intelligent parenting: How to raise a self disciplined, responsible, and socially skilled child. New York: Harmony-Random House.
- [27] Fahim, M., & Pishghadam, R. (2007). On the role of emotional, psychometric, and verbal intelligence in the academic achievement of university students majoring in English language. *Asian EFL Journal*, 9, 240-253.
- [28] Felder, R.M. (1996). Matters of style. *ASEE Prism*, 6, 18-23.
- [29] Ferres, N., & Connell J., (2004) . Emotional intelligence in leaders: an antidote for cynicism towards change? *Strategic Change*, 13(2), 61 -71.
- [30] Fidan, N., & Erden, M. (1991). E ğitime Giriş. Ankara: Ferdal Matbaacilik.
- [31] Gardner, H. (1983). Frames of mind: The theory of multiple intelligence. New York: Basic Book.
- [32] Gardner, L., & Stough C., (2002). Examining the relationship between leadership and emotional intelligence in senior level managers. *Leadership & Organisation Development Journal*, 23 (1/2), 68-78.
- [33] Garger, S., & Guild, P. (1984). Learning styles: The crucial differences, *Curriculum Review*, 9-12.
- [34] Gencer, A.S., & Kakiroglu, J. (2007). Turkish pre-service science teachers' efficacy beliefs regarding science teaching and their beliefs about classroom management. *Teaching and Teaching Education*, 23, 664-675.
- [35] Goleman, D. (1995). Emotional Intelligence. New York: Bantam Books.
- [36] Goleman, D. (1998). Working with emotional intelligence. London: Bloomsbury.
- [37] Gregorc, A.F. (1979). Learning/teaching styles: Their nature and effects. In J.W. Keefe (Ed.), *student learning styles: Diagnosing and prescribing programs* (pp.19-26). Reston, VA: National Association of Secondary School Principals.

- [38] Guild, P. (1994). Making sense of learning styles. *School Administrator*, 51, 8-13.
- [39] Harrod, N.S., & Scheer, S.D. (2005). An exploration of adolescent emotional intelligence in relation to demographic characteristics. *Adolescence*, 40, 503-512.
- [40] Hartman, V.F. (1995). Teaching and learning style preferences: transitions through technology. *VCCA Journal*, 9, 18-20.
- [41] Hatcher, J. A. (2000). Motivation, instructional preferences, and learning strategies among Japanese university (EFL) students. M.A. Thesis, University of Hawaii. Dissertation Abstracts AAC 1401875.
- [42] Hopkins, M.M., & Bilimoria, D. (2008). Social and emotional competencies predicting success for male and female executives. *Journal of Management Development*, 27, 15-35.
- [43] Hsun, S.M. (2002). An investigation of English language learning strategies of grades (5-6) students in Taipei Taiwan. Ed. D. degree, Spalding University. Dissertation Abstracts AAC 3062003.
- [44] Kafetsios, K. (2004). Attachment and emotional intelligence abilities across the life course, *Personality and Individual Differences*, 37(1), 129-145.
- [45] Kalsbeek, D.H. (1989). Linking Learning Style Theory with Retention Research: The TRAILS Project. *Association for Institutional Research*, 32, 1-7.
- [46] Kolb, D.A. (1984). *Experimental Learning: Experience as the Source of Learning and Development*, Prentice Hall, Englewood Cliffs, N.J. Prentice Hall.
- [47] Malterer, M.B., Glass, S.J., & Newman, J.P. (2008). Psychopathy and trait emotional intelligence. *Personality and Individual Differences*, 44, 735-745.
- [48] Mayer, J.D., Caruso, D., & Salovey, P. (1999). Emotional intelligence meets traditional standards for intelligence. *Intelligence*, 27, 267-298.
- [49] Mayer, J.D. & Geher, G. (1996). Emotional intelligence and the identification of emotion. *Intelligence*, 22, 89-113.
- [50] Mayer, J.D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence*, 17, 443-442.
- [51] Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? Implications for educators, In Salovey, P. & Sluyter, D. (Eds.), *Emotional development, Emotional Literacy, and Emotional Intelligence* (pp. 3-31). Basic Books, New York, NY.
- [52] Palmer, B., Donaldson, C., & Stough, C. (2002). Emotional intelligence and life satisfaction. *Personality and Individual Differences*, 33, 1091-1100.
- [53] Perry, C., Ball, I., & Stacey, E. (2004). Emotional intelligence and teaching situations: Development of a new measure. *Issues in Educational Research*, 14(1), 29-43.
- [54] 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.
- [55] Pham, N.P. (2000). Learning styles. Retrieved January, 2010 from <http://payson.tulan.edu/pham/learning/lstyles.html>.
- [56] Riazi, M., & Riasati .M.J. (2007). Language learning style preferences: a case study of Shiraz EFL Institutes. *The Asian EFL Journal Quarterly*, 9(1), 97 -125.
- [57] Saklofske, D.H., Austin, E.J., Galloway, J., & Davidson, K. (2007). Individual differences correlates of health -related behaviours: Preliminary evidence for links between emotional intelligence and coping. *Personality and Individual Differences*, 42, 491 -502.
- [58] Saklofske, D.H., Austin, E.J., & Miniski, P.S. (2003). Factor Structure and Validity of a Trait Emotional Intelligence Measure, *Personality and Individual Differences*, 34, 707-721.
- [59] Salovey, P., Bedell, B., Detweiler, J., & Mayer, J.D. (2000). Current directions in emotional intelligence research. In M. Lewis & J.M. Haviland-Jones (Eds.), *Handbook of emotions* (Second Edition, pp. 504-520). New York: Guilford Press.
- [60] Salovey, P., & Mayer, J.D. (1989/1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9, 185-211.
- [61] Samouei, R. (2003). Azmoune houshe hayajani (Bar-On's EQ-i). Tehran: Moasseseye Tahghighatie Olume Raftarie Sina.
- [62] Schaie, K.W. (2001). Emotional intelligence: Psychometric and development characteristics – Comments on Roberts, Zeidner and Matthews (2001). *Emotion*, 1, 243-248.
- [63] Shuttes, N.S., Schuetplez, E., & Malouff, J.M. (2001). Emotional intelligence and task performance . *Imagination, Cognition and Personality*, 20, 347-354.
- [64] Singh, D. (2003). *Emotional intelligence at Work* (2nd ed.). New Delhi: Sage Publications.
- [65] Slaski, M., & Cartwright, S. (2002). Health, performance and emotional intelligence: an exploratory study of retail managers. *Stress and Health*, 18, 63-68.
- [66] Thorndike, R.L. (1920). Intelligence and its uses. *Harpers Magazine*, 140, 277-235.
- [67] Thornike, R.L. (1950). The problem of classification of personnel. *Psychometrika*, 15, 215-235.
- [68] Van Rooy, D.L., Alonso, A., & Viswesvaran, C. (2005). Group differences in emotional intelligence test scores: Theoretical and practical implications. *Personality and Individual Differences*, 38, 689-700.
- [69] Weymes, E. (2002). Relationships not leadership sustain successful organizations. *Journal of Change Management*, 3(4), 319-331.
- [70] Witkin, D.B. (1973). The role of cognitive style in academic performance and in teacher-student relations. *Research Bulletin, Educational Testing Service*, Princeton, NJ, 73-101.
- [71] Zins, J.E., Travis, L.F., and Freppon, P.A. (1997). Linking research and educational programming to promote social and emotional learning. In Salovey, P., and Sluyter, D. J. (eds). *Emotional Development and Emotional Intelligence* (pp. 257-274). Basic Books, New York.

Parviz Alavinia He was born in Urmia, 1978. He got his PhD in TEFL/TESOL from Allameh Tabataba'i University in Tehran, Iran, 2010, his MA (in the same major) from The University for Teacher Training in Tehran, Iran, 2004, and his BA degree from Urmia University, Urmia, Iran, 2001. He is currently involved as a full-time assistant professor and staff member at Urmia University.

His main areas of interests include psycholinguistics, philosophy of language, critical discourse analysis and particularly emotional intelligence. He used to be TELLSI member from 2004 to 2008, and a member of the Linguistic Society of Iran from 2003 till 2006, and has been L-test member since 2003.

Sara Ebrahimpour She was born in Bandarabbas, 1984. She is currently an MA student in TEFL in Maragheh Islamic Azad University, and got her BA in translation from Payam-e-Nour University, Naghadeh, Iran, 2006.

She is mainly interested in psycholinguistics and in particular emotional intelligence and learning styles.