

Investigating Competitive Forces of Emotions and Intellects in Academic Performance of Iranian Adult EFL Learners

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Abstract

To testify the contrastive properties of two combinations of Emotional Intelligence (EI) index including emotional vs. cognitive subscale dyads among one hundred and twenty university students (52 male & 68 female), this study was carried out to predict their success in their General English (GE) course during one academic semester. Datasets were obtained through a self-report Bar-On's EI Questionnaire (1977) and mapped over the participants' academic linguistic performance through Discriminant Function Analyses (DFA) techniques within two successive phases: In the first phase, the statistical results revealed that, overall, Wilks's Lambda was significant: $\Lambda = .000$, $\chi^2(2, N = 120) = .000$, $p < .001$. This indicated that the two predictors could differentiate between the two groups of success/non-success. In the second phase, in order to verify which combinatory subscale dyads of EI (cognitive vs. emotional) could predict success in either of success vs. non-success groups, the results obtained through Fishers' linear discriminant function was used which showed EI emotional set involving two 'assertiveness' and 'self-awareness' factors could better predict success in non-success compared with success group. Finally, possible pedagogical implications of considering university students' EI indices and their language learning as a social practice were discussed for teaching English at tertiary levels.

Keywords: Emotional intelligence, Academic linguistic performance, Assertiveness, Self-awareness

1. Introduction

In Language Learning (LL) contexts, an attempt has always been made by the scholars in the field to distinguish successful from the so-called unsuccessful or struggling language learners. Various criteria have

long been explored across cognitive, social as well as emotional factors in a way that after a research has been accomplished, a list of effective learner variables have usually been marshaled against some ineffective ones that could have marked

out some learners as efficient and the rest within inefficient dichotomy regarding their language learning practices.

In the long history of LL, within cognitive constructs '*foreign language aptitude*' coined by Carroll and Sapon is a case in point which differentiated efficient or successful from inefficient (unsuccessful) language learners (Carroll, 1965, 1973; Petersen & Al-Haik, 1976; Sasaki, 1996). In Carroll's four component model of aptitude for language learning, for example, four factors including phonemic coding ability, grammatical sensitivity, inductive language learning ability along with associative memory were correlated with end of the term performance within subjects and were thought as best predictors of success among learners. Such gross classifications by Carroll and other contemporary scholars of his time came under severe attacks by some other scholars who criticized their studies not to be applicable in instructional settings (Krashen, 1981). Krashen accentuated that aptitude can be a criteria just for instructional settings where explicit rule-focus, non-communicative activities are current. He suggested instead that aptitude was not relevant for acquisition and the subconscious induction and internalization of language rules.

Other cognitively oriented factors, which were thought to have predictive values for success/nonsuccess, were cognitive and learning styles (Dornyei & Skehan, 2007). The attraction of style studies in second language acquisition (SLA) was associated due to the fact that they did not have such a fixed status as aptitude in order to uniquely classify some as efficient and the rest as inefficient language learners. Accordingly, some learning styles were translated into better or worse scales for differentiating learners (Chappell & Green, 1992). Within social factors, a range of studies focusing on motivation as a social construct has recently been turned into a more complex network of research articles in the social

milieu of SLA concerning individual differences for determining success/nonsuccess dichotomies (Gardner, 1985). The noteworthy Canadian social psychological approach denoted that attitudes as social factors related to an L2 society could exert a strong influence on one's L2 learning and even override cognitive factors within language learners. Gardner's classification of learning goals having been translated into integrative and instrumental motivation is a case in point. Here, successful/nonsuccessful dichotomy was seen to be ratable in terms of the learners' social goals for learning rather than their internal cognitive constructs.

In LL research literature, the factors cited above have been frequently verified through correlational studies termed by Dornyei and Skehan (2007) as '*correlation challenges*' which have suggested vast individual differences concerning SLA. From 1990s, such approaches were revolutionized with new statistical movements like Structural Equation Modeling (SEM) and causal modeling approaches at the time, which let the interrelationship between and among all related constructs whether cognitive or social in a more precise way.

1.1. Context of the problem

The point is that classifying some learners into gross successful and some as unsuccessful or struggling on many linguistic aspects seems not to be a fair task on the part of language researchers and experts, since in so doing the danger in generalizing the results might come about in neglecting various intricate underlying factors that might have also been in action otherwise. As Rampton (1999) asserted in complex systems like language learning both the 'self' and 'other' are intricately in conflict which make gross classifications on various social and psychological accounts very difficult.

One of these currently investigated lines of research in language arenas which have largely been utilized for distinguishing successful from unsuccessful language

learners is Emotional Intelligence (EI) trait. 'EI' refers to the capacities to recognize and regulate emotions in ourselves and in others. From psycholinguistic standpoints, it refers to the capacities in an individual to recognize and regulate emotions in oneself and in others (Goleman, 1995). It entails the innate ability of a person and can be improved by external factors such as the environment and/or social forces. From the time it has been introduced to language learning contexts, higher indices of EI have long been associated with students' more optimum performances and/or more progress and has been considered even as a much more powerful predictor of success in various life challenges like LL at social levels compared with Intelligence Quotient (IQ) as a gross cognitive asset within learners. As Goleman (1995) explicitly accentuated, the possession of high IQ rating is not the sole indicator when it comes to being successful in all fields of enquiry.

1.2. Significance of the study

In fact, EI is among those social constructs needed for adult learners to effectively learn a language as a social phenomenon or practice but, in clear terms, the subscales of this psychological construct which work in the complex job of LL must not be overlooked since it is intermingled with a subset of both cognitive and social variables (Goleman, 1995). This makes decisions on success/nonsuccess in complex issues like language areas much harder to vindicate. There have been considered many subscales within EI trait both with cognitive properties like 'problem solving' and 'reality testing' as well as social assets like 'assertiveness', 'emotional perception' and 'interpersonal relationship' etc. (Bar-On, 1977). In fact, if any contrasting interconnected relationships among cognitive vs. emotional subscales of EI can be found with linguistic achievement of learners, the concept of overall EI index relationship with more linguistic performance or success must

become in effect blurred which make classificatory decisions for success and nonsuccess very difficult for language researchers. Accordingly, the results coming from the present research study might be worthy on accounts of extending theoretical domains of EI indices for psycholinguists on the one hand and on the other hand more precise prediction of language success on EI accounts might be brought about for L2 researchers and language testing practitioners to make more accurate and fair decisions for success vs. nonsuccess among L2 learners.

Few research studies discussing EI theory seem to have been oriented towards investigating the interrelationship between its subscales comprising both cognitive and social variables and associations among them for linguistic achievements thus far. This study is thus presented to fill in this gap in the literature.

2. Previous research on overall EI and LL success

EI has been mostly investigated by EFL scholars in the last decades due to its relevance to social communicative skills especially among adult learners. In English Language Teaching (ELT) domains, there is recently a bulk of research on EI traits and various aspects of academic achievements where EI trait has been estimated as an overall trait to bear relationship with linguistic success within learners. Jamali Naseri, Karimi and Filinezhad (2012), Low (2000), Lowenstein (1987), Majdi, Arzjani, and Esmailpour (2014), Nelson and Low (2005), Pishghadam and Ghonsooli (2008), Saeidi's and RimaniNikou (2012) and Vanett and Jurich (1997) are just some examples.

Regarding some recent publications, Jamali Naser et al, (2012) correlated higher vocabulary knowledge with higher EI among some language learners. In another research study by Majdi, et al, (2014), the relationship between EI and bilingual learners' competence on a group of Arabic-

Turkish high school students in an Iranian context was found to be significant among some bilingual vs. monolingual student concerning their overall EI. Concerning educational achievement, Pishghadam & Ghonsooli, (2008) also found a significant relationship between EI and overall language proficiency. Saeidi and RimaniNikou (2012) had explored EFL Teachers' EI and their students' language achievement. In their study, a significant relationship was found between the two variables. In all these studies, the higher the teachers' EI, the more students' language achievement could be estimated. Accordingly, higher EI index has at times been deemed as one pertinent asset within learners that has in effect been considered as a yardstick in separating successful from unsuccessful learners. It is believed that those learners having a lower index of EI trait are less able to get across their messages for their intended situations.

In the reviewed literature, research studies where not overall cognitive and social factors but the cases in which subscales /scales matching had been matched over academic performance through more detailed data analysis techniques like SEM, DFA etc. were scarce.

Regarding the dearth of research topics on EI subcomponents and academic performance, the reasons could possibly be explored in the lack of consensus among scholars concerning the role of trait EI in academic performance. On the one hand, there were some scholars taking EI trait models who believed that emotional accounts as rated through EI questionnaires could not be relevant to cognitive loaded constructs pertained to academic settings (Mavroveli, Petrides, Sangareau, & Furnham, 2009; Mavroveli, Petrides, Shove, & Whitehead, 2008; Mavroveli & Sánchez-Ruiz, 2011; Petrides, 2011, all cited in Perera & DiGiacomo, 2013). On the other hand, some other scholars like Ferrando et al., (2011) and Petrides,

Frederickson and Furnham, (2004) provided evidences that if academic demands prevail over cognitive resources and under stressful conditions, it is mostly probable that trait EI will surely affect academic achievement. This seems worthy of note for foreign language settings where students are usually under pressure to achieve higher standards which are expected of them esp. in academic settings specifically among under achievers as the present research proved it.

2.1 Complex nature of EI subscales

In a recent study by Andrei, Mancin, Trombini, Baldaro and Russo, (2014) who investigated incremental validity of EI over a group of Italian adolescent's emotional maladjustment it was found out that there was an overlap for EI subcomponents with many other personality traits. This was in line with Warwick, and Nettelbeck's, (2004) study in which some psychological variables that underlay EI via a multi-method assessment were sought in an exploratory way. Weak to moderate positive correlations were found between openness, extraversion, conscientiousness, and agreeableness and EI. The Trait Emotional Intelligence Questionnaire (TEIQue) by Petrides (2009) were utilized in their research for investigating fifteen facets of EI which loaded on four factors involving Well-being, Self-control, Emotionality and self-control. In their study, although the construct validity for the explored trait EI was confirmed, the reliability coefficients for eight facets and two factors were rather low. This was expressed by the authors as an urgent need for reexamining EI content domain. One more interesting result in Andrei, et al (2014) study was found which made the whole area of EI account in need of more rigorous investigations in terms of sub scales instead of oval estimation was the predictive effect of the TEIQue which appeared to be due mainly to the factor Well-Being compared with other subscales.

2.1.1. Previous research on EI subscales and LL success

Inspecting into EI literature, only a dearth of research studies could be found in which the researchers had specifically focused on the interaction between specific linguistic abilities with specific aspects of EI traits hidden within its subscales. In a recent study by Hassanzadeh and Shah Mohammadi (2011), two of the EI main components, Intrapersonal Intelligence including 'independence', 'assertiveness', 'self-actualization', 'self-regard', and 'self-awareness' subscales and General Mood (GM) comprising 'optimism' and 'happiness' were positively thought to have been correlated with language achievement. Fahim and Pishghadam(2007) found a correlation between linguistic overall proficiency, intrapersonal and GM with stress management dimensions of LL. Parker et al. (2004) found a positive relationship between linguistic success and intrapersonal, stress management and adaptability intelligences defined within EI construct.

Among the explored studies, there was an interesting research by Gardner, Trembley and Masgoret (1997). They had conducted a research in which all cognitive and emotional variables which were already thought to be individually in action for LL success/nonsuccess were explored separately. In their study, they worked on one hundred and two Canadian university students in an introductory French class. Three self-report questionnaires were utilized, focusing on a total of thirty four variables within the domains of attitudes, motivation, achievement, perceived French competence, anxiety, learning strategies, aptitude, field dependence/independence, and finally language history. Two measurement methods were used for their data analyses: Factor Analysis and SEM. In the end, they found out that "language attitudes" had actually caused "motivation". "Motivation" in turn caused both "self-confidence" and

"language learning strategies." Then, "motivation", "language aptitude", and "language learning strategies" were all seen as predictors of "language achievement". In this study, "Field independence" correlated significantly with "language aptitude" and "language achievement" caused "self-confidence". Here, they proposed a model in which a unified framework catering for an array of cognitive, emotional and social factors which have evidently helped to define LL process within learners in a sequence of cause and effect array to signify more or less of a success for L2 settings not gross classifications as was the case before 1990s.

In another case, Lopez (2011) found out that emotional variables like EI influence indirectly on LL via going through a series of phases like 1) Evoking emotions, 2) enhancing learners' self-esteem and sympathy, 3) contributing to positive attitudes, and finally facilitating learning.

Now, the point is that in those earlier studies on the relationship between EI traits and language learning success, to what extent we can be sure that those learners who are generally higher in overall EI index, are also generally more favored in their LL tasks at all respects of EI. Before considering the issue from this standpoint, a comprehensive analysis of underlying factors constituting EI as a social/cognitive construct seems pertinent.

2.1.2. A historical interpretation of EI cognitive/emotional subscales

Since 1969, concerning rational vs. emotional ways of knowing in EI, there have been major controversies over the separation of the two knowing ways above. Within 1970-1989, psychologists were mainly concerned with the effect of emotions on thought as a separate entity and finally in 1990, the concept of EI was assumed as a separate trait from cognition and rational mind.

Goleman (2001) who was also the founder of EI believed that human

beings have two ways of knowing: The rational or cognitive and the emotional. Both of these ways of knowing were thought as interwoven; His EI model included: 1. Knowing one's emotions, 2. Managing emotions, 3. Motivating oneself, 4. Recognizing emotions in others and 5. Handling relationships.

In their seminal article, Salovey & Mayer (1990) defined EI as, *The subset of social intelligence that involves 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).

As the definition implies, EI refers to a set of mental abilities which characterize emotions and the processing of emotional information by the learners in which cognition and attitudes as social phenomena work together with a delicate precedence of the cognitive over emotional factors. In other words, in this definition of EI by Salovey and Mayer, cognition is mainly sublimated through emotion and affective factors. Some other scholars did not think that cognition and emotion could be separated as such. The idea of multiple intelligences by Gardner (1985), for instance, which identified differences among students on many cognitive and emotional accounts challenged the educational systems by saying that no successful-unsuccessful dichotomies could be set in the process of learning. So, everyone was not assumed to learn the same materials in the same, uniform way. The routes were considered different for achieving success. Interesting as it may seem, delving into deeper levels of cognitive and emotional processes might reveal a better picture of what is involved in the hidden sides of the mind.

Gardner (1983) suggested that all individuals have personal intelligence profiles that consist of a combination of several different intelligence types, including linguistic. Gardner (1997) and

Gardner and MacIntyre (1993) have described Linguistic Intelligence as sensitivity to spoken and written language and the ability to use language to accomplish goals, as well as, the ability to learn new words. We will benefit in many ways from having a high level of emotional intelligence and indeed some scholars as mentioned before considered higher Emotional Quotient (EQ) to be more important than having intellectual abilities (book smarts), although in recent times there has been more emphasis on achieving balance rather than assuming all you need is EQ.

The most recent definitions that attempt to cover the whole construct of EI describes it as the ability, capacity, skill, or potential to feel, use, communicate, recognize, remember, describe, identify, learn from, manage, understand and explain emotions (Hein, 2007).

Since the introduction of EI to educational settings, scientific circles have proposed many diverse models. In this study, the intention is to verify the interconnectivity of cognitive vs. emotional subcomponents of EI through Bar-On's model (1977) since the variables in this model have been componentially factored across an array of cognitive and social subcomponents. Below, a brief but concise account of this model is first depicted.

2.2 Bar-On's model of EI

Bar-On (1977) proposed a model for emotional competencies in which five main intellectual/emotional sets of sub skills were though as hidden. His model of EI differed from later ability models like Salovey and Mayer (1990) in a way that combined mental abilities with emotional characteristics. In this model of EI, five main sets of traits have been defined; the first includes 'intra-personal skills' where one can recognize his /her emotions, evaluate the probable risks in the environment and how to react to those threatening situations

and flourish his/her potentialities. The second skill specification in Bar-On model involves 'inter-personal skills'. Here, self-awareness of feeling extends to recognizing others' feelings and emotions through maintaining plausible relationship with others. Social liability and empathy helps people to be accepted as a constructive and helpful member of a community in which they are living. The third set in Bar-On model involves 'Adaptability'. It refers to a person's ability to recognize various aspects of a problem and actually tests the reality though not forgetting his / her flexibility when a problem arises unexpectedly. Then comes the fourth trait set that is tolerating stressful situations and is technically termed as 'Stress Management'. Finally, the last includes 'General Mood' which is defined as a person's capability to feel and appreciate happiness, self-satisfaction in life and bring his / her built-in delight to others. Such optimism includes considering the positive aspects of life and maintaining such feeling even when one faces unfavorable situations. All in all, Bar-On model is estimable on a 90-item inventory questionnaire which assesses subjects at fifteen different subscales for each set. Below, a brief discussion of these fifteen sub traits within the five major traits mentioned above is first given for clarifying social/cognitive dimensions of EI for Bar-On model.

2.2.1. EI subscales of Bar-On model

Emotion perception: This scale measures *emotional* perception in one's own self as well as in others. Those who score highly on this scale are clear about what they feel and able to decode other people's emotional expressions. In contrast, people with low scores on the emotion perception scale are often confused about how they feel and do not pay much attention to the emotional signals that others send out.

Assertiveness: Individuals with high scores on this *emotional* subscale are forthright and frank. They know how to ask for things,

give and receive compliments, and confront others when necessary. They have leadership qualities and can stand up for their rights and beliefs. Low scorers tend to backdown even if they know they are right and have difficulty saying 'No' even when they feel they must say 'No' in an occasion. As a result, they often end up doing things they do not want to do. In most cases, they prefer to be part of a team rather than to lead it.

Self-esteem: The self-esteem scale measures one's overall evaluation of oneself. High scorers have a positive view of themselves and their achievements. They are confident, positive, and satisfied with most aspects of their life. Low scorers tend to lack self-respect and to not value themselves very highly. Lower self-esteem scores are often the result of *emotional* challenges in one or more of the other areas that the Bar-On EI Questionnaire assesses.

Self-actualization: People with high scores on this scale are driven by a need to produce high quality work. They search for the best ways to bring to front their inner capacities. Lower scorers on this sub trait tend to need a lot of incentives and encouragement in order to get things done. They need constant reward to keep going and they are more likely to give up in the face of adversity. This sub trait is socially oriented on *emotional* accounts.

Seeking Independence: 'Independence' refers to one's ability to control oneself without others' aid. Independent people are those who rely on their own first. High indices at this score mean self-regulated behavior against need towards protection and support from outside. Self-reliance depends much on one's inner criteria for flourishing desires without being slavered by those desires. This sub trait is also *emotionally* oriented.

Empathy: This subscale, also as an emotionally-oriented asset, measures the 'perspective-taking' aspects of life within people; seeing the world from someone else's point of view. In other words, it has to do with whether one can understand other people's

needs and desires. People with higher scores on this scale tend to be skillful in conversations and negotiations because they take into account the viewpoints of those they are dealing with. They can put themselves in someone else's shoes and appreciate how things seem to them. Low scorers have difficulty adopting other people's perspectives. They tend to be opinionated and argumentative and may often seem self-centered.

Inter-personal Relationships: This sub scale is mainly concerned with one's personal relationships, including close friends, partners, and family. It is about starting and maintaining emotional bonds with others. High scorers usually have fulfilling personal relationships that positively affect their productivity and emotional well-being. They know how to listen and be responsive to the people close to them. Low scorers find it difficult to bond well with others and tend to undervalue their personal relationships. They often behave in ways that hurt those close to them.

Social Responsibility: This sub scale assesses the ability to prove oneself as a useful member of the society one lives. This shows itself as a liability that a person feels even though s/he isn't directly benefitted in various affairs. Such people have strong social conscience and inter-personal sensitivity. Those with lower index on this sub scale are usually interpreted as anti-socials who irritate others.

Problem-solving: As a cognitively oriented sub scale, problem solving involves recognizing various aspects of a problem, knowing its nature and testing different ways to solve it. Problem solving skills follow some specific patterns among human beings like feeling the existence of a problem, having the required motivation to be inspired to move towards eradicating it then defining the aspects of a problem as much precisely as possible. Decision making is the last step that brings choosing one of the approaches towards removing the blocks in front.

Reality Testing: Another cognitively oriented sub scale is reality testing. The ability to differentiate between what exists and what is experienced by a person is called reality-testing. Perceiving the present situation, attempt to understand the situation correctly by people without any dreaming so that one can really assess his/ her surrounding to the maximum explicit way is what is reality-testing mainly about.

Adaptability: High scorers at this sub scale are flexible in their approach to work and life. They are willing and able to adapt to new environments and conditions – in fact, they may even enjoy novelty and regular changes. Lower scorers are change-resistant and find it difficult to modify their work and life-styles. They are generally inflexible and have fixed ideas and views. This sub scale is *emotionally* oriented.

Stress management: High scorers on this emotionally oriented sub scale can handle pressure calmly and effectively because they have developed successful coping mechanisms. More often than not, they are good at regulating their emotions, which helps them tackle stress. Lower scorers are less likely to have developed stress-coping strategies. They may prefer to altogether avoid situations that are potentially hectic, rather than deal with the associated tension. Their vulnerability to stress is problematic, as it leads them to reject important, but time-demanding projects.

Impulse Control: This scale measures mainly dysfunctional (unhealthy) rather than functional (healthy) impulsivity. Low impulsivity involves thinking before acting and reflecting carefully before making decisions. High scorers on this sub scale weigh all their formation before they make up their mind, without being overly cautious. Low scorers tend to be impetuous and to give in to their urges. Much like children, adults with lower scores on this sub scale want immediate gratification and have low self-control. They often speak without having thought about things

thoroughly and they change their minds frequently. This is also emotionally organized within the mind.

Happiness: This sub scale concerns pleasant emotional states, primarily directed towards the present rather than the past (life satisfaction) or the future (optimism). High scorers are cheerful and feel good about themselves. Lower scorers often feel blue and can be overly negative about things. More generally, people with lower scores on this sub scale tend to be disappointed with their life as it is at present. Along with *self-esteem* and *optimism*, this sub scale reflects our general psychological states at present as Bar-On believes and finally,

Optimism: like happiness, this sub scale is linked to well-being, albeit in a forward-looking way. High scorers look on the bright side and expect positive things to happen in their life. Lower scorers are pessimistic and view things from a negative perspective. They are less likely to be able to identify and pursue new opportunities and tend to be risk-averse. Along with *happiness* and *self-esteem*, this sub scale reflects our general psychological state at this point in time.

3. The present research

Due to the complex nature of EI structure with its sub components and also the few number of researches on the specific linguistic abilities with specific sub scales of EI, this study was undertaken to fill in the research gap in this area of enquiry. For practicality purposes, four subscales within EI account proposed by Bar-On model (1977) which were thought to bear more relationship to language settings were selected. This four-component block included two subscales from cognitively oriented construct of EI and two were mainly emotionally oriented. The cognitive dyad included 'reality testing' and 'problem solving' and the two selected components for emotional orientation were 'emotional self-awareness' and 'assertiveness'. The

intention was to evaluate the degree to which each dyad (cognitive vs. emotional) might predict success among the participants who were a group of Persian learners of English as a foreign language at tertiary level. Thus the question, which was specifically proposed for this purpose, was: 1. Which selected subscale dyads of cognitive vs. emotional EI sub traits could significantly predict more linguistic achievements in General English (GE) courses among university students?

3.1 Method

In the present research, it was first tried to testify the predicting effect of two EI subscales of problem solving and reality testing within cognitive domain of EI and emotional self-awareness along with assertiveness from emotional domain through an exploratory approach. Then it was tried to identify which combination of (cognitive vs. emotional) subscales of EI could best predict group membership as defined by academic success of a group of randomly selected university students in their GE course.

Since here the aim was to interpret the pattern of differences among two predictors, the analyses were done through Discriminant Function Analysis (DFA) statistical method to predict the participants' success on a dichotomous pass/fail outcome variable first. Accordingly, the students' success in the course was rated by the common threshold criteria of pass/fail determined by three different sources including the students' final exam scores, their midterm exam plus their class activity score. Those low achievers whose averaged score coming from all those three ratingscales above was under the threshold level of 10 were dummy coded as unsuccessful (0) and those above it as successful (1). A validated EI Questionnaire for assessing the participants' from Bar-On model (1977) was mapped over the students' academic performance in their GE

course. Below, a brief description of the employed strategies for selecting the participants and the utilized instruments are first given.

3.2 Participants

The participants included one hundred and twenty adult Iranian EFL learners (52 male & 68 female) with an age range of 20 and 35. Three excluding criteria were applied over the original one hundred and eighty students. For homogenization purposes, two extreme poles of highest and the lowest 20 % scores on the distributions of a Nelson proficiency test battery were excluded at this phase of the study. Subsequently, some twenty four students were excluded at this initial stage. In addition, some twelve students whose EI questionnaire had not been filled to completion were excluded for final analyses since this restrained us in doing further exploration over their dataset while using multivariate analysis techniques like DFA. Likewise, some twenty-four students were list wise deleted in final analyses due to having missing values in each evaluation scales for classification aims of the study into passing/failing groups. During their course semester, the students attended their weekly classes taking three hours a week. Their major was law studies. They attended two different classes taught with the same English professor who was one of the researchers of the present study. Table 1 displays the descriptive statistics concerning the distribution of the participants in terms of their EQ levels and group membership (Pass/Fail).

Table 1. *Participants' EQ Levels mapped on their academic success*

EQ Levels	academic success		Total
	Failed	Passed	
low EQ	13	46	59
medium EQ	15	23	38
high EQ	5	18	23
Total	33	87	120

3.3 Instrumentation

Two instruments had been employed prior to this study for selecting the participants and successive EI evaluation for success/nonsuccess decisions. First, Nelson proficiency test version at elementary level had first been administered among the target group to ensure the learners' homogeneous levels. A typical test of this series entailed 50 items comprising a 37-item grammar section along with 13 items on vocabulary knowledge. Finally, two extreme poles of highest and the lowest 20 % scores on the distributions were discarded to ensure maximum homogeneity among the participants. A week later, an attempt was made to assess the participants' EI traits. Accordingly, a translated version into Persian of Trait (EI) questionnaire involving ninety items by Bar-On (1977) was administered among the remaining participants. (Appendix A) The translation to Persian was prepared and checked by two English professors in order to ensure that all the items were fully understood by all the subjects. Scoring was accomplished on a Likert scale.

The validity for the self-report trait EI in relation to personality had already been psychometrically demonstrated as discriminately reliable in Iranian Contexts by Dehshiri, (2007). Its Chronbach Alpha had been reported 73 % which showed an acceptable index. The whole 90-item inventory had been made to examine fifteen different scales which were fully elaborated earlier above.

3.4 Data Analyses

To reiterate the design of the present research, the two selected EI subcomponents for cognitive and emotional dyads in this study involved 'problem solving' and 'reality testing' along with 'emotional self-assertiveness' and 'assertiveness' from cognitive and emotional domains of EI scales respectively. The EI questionnaire

was rated via a self-report evaluation 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). In order to estimate the discriminatory functions for the two dyads, the gained scores for each two component were collapsed for all participants ranging from 1 to 5.

In multivariate statistical techniques such as DFA, preliminary data analyses for further exploration over the dataset are usually pertinent to manage first, though this technique is more robust regarding its assumptions compared with other similar techniques for group membership purposes. First, initial statistical adjusting procedures over the data are reported then.

Tests of equality of Group means as to cognitive vs. emotional indices shown in table 2 informed us about a significant difference in the means of the predictors between the two groups. As the table shows, the F tests were significant for both cognitive and emotional EI subcomponents indicating that successful and unsuccessful students differed on both indicators.

Table 2. *Tests of Equality of Group Means*

	Wilks' Lambda	F	df1	df2	Sig.
Cognitive EI	.000	.000	1	118	.000
Emotional EI	.000	.000	1	118	.000

Secondly, the homogeneity of covariance matrices assumption was also met based on the results obtained from Box's M analyses, which showed a non-significant alpha level (.067) indicating the similarity of covariance matrices for the two passing/ failing groups. These preliminary stages ensured us to proceed with interpretations coming from DFA analyses over the dataset.

4. Results

In this study, the main intention was to testify cognitive vs. emotional driving

forces of EI subcomponents to check if the two contrasting subcomponents of EI could predict linguistic success. A simultaneous DFA was thus conducted to determine whether the two selected a) cognitive and b) emotional EI factors could predict academic success of a group of university students in their GE course.

First, for determining the contrastive combinatory effects of cognitive vs. emotional EI among the successful and unsuccessful groups of the present study, DFA initial table outcomes were examined. The overall Wilks's Lambda was significant: $\Lambda = .000, \chi^2 (2, N= 120) = .000, p < .001$. This indicated that overall predictors differentiated between the two failing vs. passing performance groups (Table 3). In other words, the classification results in Table 4 below demonstrated that the discriminant function was able to classify the cases for each group of the dependent variable. This discriminant function correctly classified 52.5 % of all cases. In statistical terms, the discriminant function could have better predicted the unsuccessful group (60%) compared with successful one (49 %). Thus, on the basis of chance alone, we could predict membership in one of two groups to be no more than 50 % though this was not statistically substantial.

Table 3. *Classification Results for passing /failing group membership*

Academic success	Predicted Group Membership		Total
	Unsuccessful	Successful	
Unsuccessful (fail)	20%	13%	33
Successful (pass)	44%	43%	87
Unsuccessful(fail)	60.0%	39.0%	100.0
Successful (pass)	50.0%	49.0%	100.0

a. 52.5% of original grouped cases correctly classified.

In the next stage and in line with our proposed research question, in order to check which of the two combinatory sets of EI subcomponents (cognitive vs. social) could best predict success/ nonsuccess in our dataset, then we checked classification function coefficient table by Fishers' linear discriminant function (table 4).

Table 4. *Classification Function Coefficients for the two Cognitive vs. Emotional dyads*

	academic success	
	unsuccessful	Successful
Cognitive EI	9.000	9.000
Emotional EI	10.000	9.000
(Constant)	-33.000	-32.000
Fisher's linear discriminant functions		

As table 4 clearly displayed, the strategy for interpreting those variables that have contributed most to the prediction of group membership was the ones with the largest (standardized) regression coefficients. As displayed in table 5, Emotional sets with 10.000 regression coefficients could have better predicted success in the failing compared with passing group. This result could not be distinguishing in the passing or successful group. This indicated that EI accounts on emotional variables among struggling students were better predictors of success while for the successful students, cognitive/emotional dichotomy though contributing significantly to discriminant classifications overall, it was not significantly different for high achievers when subcomponents were examined contrastively. Possible interpretations and pedagogical suggestions for this interesting result have been discussed in the next section.

5. Discussion

To reiterate the research question in the present research, the intention was to determine if the two selected subscale

dyads of cognitive vs. emotional EI trait could predict academic success among some university students in their GE course or not. The model which was obtained through DFA study could significantly though not substantially differentiate among the participants in their academic achievement level. The results indicated that in those lower levels of linguistic performance, EI emotional factors made a difference for the students to make best benefit from their language learning situation compared with cognitive factors.

The findings in this exploratory research were in line with some other similar research studies like Farsides and Woodfield (2003) and Zandi (2012). In their study, they had examined a large group of university students and explored Openness to Experience and Agreeableness among personality traits to predicted final grades in an academic setting. It was found that among the selected subcomponents of (IQ), verbal intelligence and among EI, Openness along with a record of absences could explain over 40% of the variance in final grade scores among their subjects. Also, in a different study by Zandi (2012) on a group of male French learners, EI subcomponents including Stress Management General Mood, interpersonal Intelligence and adaptability were explored in terms of a correlation study with the students' reading and speaking skills. The results obtained from this study indicated that EI subcomponents were correlated with four language skills; Self-management and Adaptability were correlated with students' reading skill and Stress Management, General Mood and Adaptability were correlated with the students' speaking skill.

The present study had also some confounding conflicts with some other similar studies on contrastive accounts like Ghabanchi and Rastegar (2014). In their study, they explored the contrastive effects of IQ vs. EQ on reading scores of some

Iranian students. They found out that the relation between IQ as a main cognitively oriented construct and reading comprehension was stronger than the relationship between total EI on social dimensions and reading comprehension. However, concerning some subcomponents of EI including interpersonal abilities, intrapersonal abilities, and stress management, small but significance correlations were found.

5.1. Contribution of the present research

In the present research, it was tried to verify the contrasting effect of two cognitive vs. emotional oriented subcomponents of EI over the subjects' academic performance in their GE course. Concerning linguistic achievements, the overall EI has always been estimated and reported for academic performance. The innovation of the present study was in signifying the discriminatory effects of Bar's On EI subcomponents for predicting English academic performance which as the results suggested the constituent components of EI at emotional level were better indicators of success among struggling students compared with higher level students. This might indicate among other things that increasing motivation by improving the struggling students' EI level at emotional traits could really help those linguistically under achievers in our LL settings at tertiary level. The researchers believing that EI can be learned and strengthened assert that emotional training can lead those suffering from lower EI towards better leaning. Some general points based on commonplace emotional skill training might be for the victims to exercise the ability to control and handle frustration, anger, sorrow, joy, annoyance, and other emotions, recognizing and reacting to the impact that their words and actions are having on others, whether they notice or not. This signifies among other things the fact that for academic ELT settings, emotional assets play a great role compared with intellectual assets.

Lastly, if we accept that EI is a hallmark in becoming a successful learning cooperater, some other research based techniques seem essential. As Tunkey (2002) accentuates the research studies conducted so far to explore the relationship between (EI) and language performance shows that the extent to which EI can be put into practice to improve language teaching and learning needs more deliberation. Maybe further research can contribute more to this interesting line of research on EI account for linguistic performance.

6. Limitations of the study

Two points are speculative of caution in interpreting the results in this study which must be refereed to for sound interpretation of the discussed results. Firstly, the results obtained in this study could remind us of the fact that though both emotion-oriented and cognitive accounts hidden in EI construct could discriminate among the students' performance, a minimum threshold level only (52.5%) could hardly indicate a valid model for predicting students' absolute linguistic performance from their EI scores. This is worthy of mentioning that the influence by moderating factors like gender, ethnicity and cultural barriers at subject level and various methodological constraints like measurement hitherto (Perera & DiGiacomo, 2013) might have been in action to bring about more or less of success among the participants in this research. Secondly, regarding instruments used for rating EI, as it was mentioned earlier in this study, validity issues for EI subscales have been recently estimated and considered suboptimum (Andrei et al, 2014). Accordingly, more detailed investigation of EI is needed since sampling domain of trait EI may be too broad among the participants which complicate the issues in reaching a reliable result, since many other personality traits might be intermingled with EI traits that make

interpretations much more delicate. This might have also been at work in our dataset since other still hidden personality traits might have confounded our results not to reach a more valid model. It is hoped that further research can highlight still other hidden aspects of EI contribution to LL settings specifically at tertiary levels where emotional variables can possibly determine more success for university students.

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