PROFESSIONAL EDUCATION & TRAINING | RESEARCH ARTICLE

Undergraduate students’ emotional intelligence and their perceptions of learner autonomy: Interface between social science and English language students

Mohammad Bagher Shabani¹, Gholam Reza Latifi²*, Reza Javaheri² and Masoumeh Mazloum³

Abstract: Emotional Intelligence (EQ) of the students and its impact on their academic achievement has been amply studied since decades ago. However, it seems that the relationship between the students’ EQ and perceptions of Learner Autonomy (LA) has not been appropriately investigated to the date. This study aimed at exploring the relationship between undergraduate students’ EQ and LA. It also aimed at exploring the interaction between the students’ major, and EQ as well as LA. The researcher selected 185 undergraduate students (95 social sciences and 90 EFL) at Allameh Tabataba’i University through convenience sampling. The data were collected through administering adopted learner autonomy and emotional intelligence instruments. The data were analyzed through descriptive statistics, Pearson Product correlation, Spearman rho correlation, and independent samples-t-test. The results showed that there is a significant correlation between Iranian undergraduate students’ emotional intelligence and their perceptions of learner autonomy. It was also found there is not interaction/relationship between the students’ major and EQ as well as LA. The findings have pedagogical implications for undergraduate students, teachers, and teacher educators.

ABOUT THE AUTHOR

Gholam Reza Latifi is an associate professor at social science college of Allameh Tabataba’i University. He has published a number of papers and books on different issues related to social science planning. He is also the editor of some journals. Mohammad Bagher Shabani is an assistant professor at Imam Khomeini International University of Qazvin. He has published several papers in national and international journal. He has presented several papers in international conferences. Reza Javaheri is a Ph. D. candidate at University of Toronto. He has published several papers in international journals. Masoumeh Mazloum is an MA holder in TEFL from the Central Tehran Branch of Islamic Azad University.

PUBLIC INTEREST STATEMENT

Students’ intelligence in general and emotional intelligence in particular intelligence determine educational achievements, social status, and the career selection and success of the students. Therefore, it is of much significance to explore the areas which are affected by emotional intelligence. One of the areas which seems to be correlated with EQ is learner autonomy which determines the students’ academic achievement. The findings showed that the students’ EQ is a significant predictor of their learner autonomy. However, the students’ major does not moderate the relationship between the students’ LA and EQ. Findings can be used by teachers of English and social sciences to promote the students’ learner autonomy and teach them in line with their emotional intelligence. Exploring the components of EQ which best predict the students’ LA can be theoretically and practically significant to both students and teachers.
1. Introduction

An important construct which may have a relationship with the way teachers and students perceive different concepts is emotional intelligence. Intelligence is a psychological notion connected with learning on which educators have based a lot of their professional decisions. Various theories and definitions by different scholars (e.g., Bar-On, 1997; Goleman, 1995) have so far been provided on intelligence, and many investigations (e.g., Mayer & Salovey, 1997; Salovey & Mayer, 1990) have been conducted to measure the capabilities of human intelligence. Christison (1998) argued that intelligence determines educational achievements, social status, and the career selection and success. According to Akbari and Hosseini (2008), intelligence is a developing concept. Different investigators have claimed that flexibility and intelligence are closely related to each other, being flexible paves the way towards individual goals, and different types of human intelligences do exist.

Emotional Intelligence (EQ) was first presented by Salovey and Mayer (1990). Salovey and Mayer (1990) define Emotional Intelligence (EQ) as ability to one’s own and other’s feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions. EQ has also become one of the most significant and frequently mentioned concepts for last years. That is because of the fact that individuals with high EQ are more productive and communicate more effectively day (Ekici & Güven, 2013, p. 351; Weisinger, 1998). One’s EQ level is not determined genetically and it does not develop only in childhood. Unlike genetically stable IQ, the possibility to learn EQ is considerably high (Acar, 2001). If educational environments are arranged taking into account the fact that intelligence is a developable construct with a great variety of dimensions, contributions to learning of the students can be provided. It is having a developable construct leads EQ to have a special importance in education (Gürüşmeyek et al., 2008). The concept of EQ in education has affected the educational understanding which aims to develop students as a whole in order to increase both academic factors and academic success (Rietti, 2008). An individual with developed EQ can form the belief of “doing something and lead a high qualified life by using his ability to control the feelings and so decreasing emotions like anxiety and apprehension. Because EQ has a significant role in determining behaviors, this concept must be involved in the school where one’s behaviors are shaped (Dutoğlu & Tuncel, 2008).

One of the learners’ related variables that seem to be affected by the students’ EQ is their perceptions of autonomy. Learner’s autonomy has recently turned into a major area of interest in foreign language teaching. Consequently, the concept of learner’s autonomy has attracted a lot of attention by different scholars in both the international context of ELT (e.g., Benson, 2010; Borg & Al-Busaidi, 2012; Miller, 2007; Schmenk, 2005; Smith & Ushioda, 2009; Vickers & Ene, 2006) as well as the Iranian ELT setting (e.g., Heidari, 2010; Khaki, 2013; Nematipour, 2012). Over the last 30 years, much has been written regarding the definition of learner’s autonomy and the rationale for promoting it as well as its implications for foreign language teaching and learning. Highlighting the importance of learner’s autonomy, different scholars (e.g., Cotterall, 1995; Palfreyman, 2003) maintained that autonomous learning can enhance the quality of language learning, foster democracy in societies, guide students for life-long learning, and allow learners to exploit learning opportunities both inside and outside of the classroom.

In modern education, learner’s autonomy is established as one of the main goals of learning, usually perceived as the only way of gaining proficiency in various fields after graduation and thus adapting to changing social conditions and demands. Learner’s autonomy is no longer a new idea in the history of education. Changes in the twentieth century in philosophy, social, and political
sciences as well as psychology have led to a growth of interest in autonomy as an educational goal (Finch, 2004). Learner’s autonomy is a goal which is perceived as linked to motivation (Brown, 2001). Creating learner’s autonomy within the individual relies heavily on individual self-motivation. Gardner and Miller (1999) stated that autonomy involves the process of “finding a way to encourage the learners to move from teacher dependence towards independence” (p. 8). Likewise, Benson (2011) claimed that learner’s autonomy refers to the control of one’s own learning. Gardner and Miller (2011) proposed that “the main purpose of the advancement of self-available learning assists the learners to be autonomous (p. 78).” Given the importance of learner’s autonomy, it is of significance to investigate different factors which may play a role in the enhancement of this important variable.

Learner’s autonomy has recently turned into a major area of interest in foreign language teaching. Consequently, the concept of learner’s autonomy has attracted a lot of attention by different scholars in both the international context of ELT (e.g., Benson, 2010; Borg & Al-Busaidi, 2012; Miller, 2007; Smith, 2008; Schmenk, 2005; Smith & Ushioda, 2009; Vickers & Ene, 2006) as well as the Iranian ELT setting (e.g., Haghi, 2009; Heidari, 2010; Kashefian et al., 2011; Khaki, 2013; Nematiipour, 2012). Over the last 30 years, much has been written regarding the definition of learner’s autonomy and the rationale for promoting it as well as its implications for foreign language teaching and learning. Highlighting the importance of learner’s autonomy, different scholars (e.g., Catterall, 1995; Palfreyman, 2003) maintained that autonomous learning can enhance the quality of language learning, foster democracy in societies, guide students for life-long learning, and allow learners to exploit learning opportunities both inside and outside of the classroom.

This implication of autonomy has been explored by different words such as exerting control and personal agency (Boekaerts, 2002). Terms such as self-administration (Schunk, 2001; Schunk & Zimmerman, 1997), personal self-regulation (Nota et al., 2004; Schunk & Zimmerman, 1998), and independence (Wang & Peverly, 1986) have also been used. Given the importance of learners’ autonomy and the fact that the students’ emotional intelligences might bear a significant relationship with this concept, this study aims at investigating the relationship between undergraduate students’ emotional intelligence and their perceptions of learner’s autonomy.

2. Review of literature

2.1. Learner autonomy

Learners’ own perception of the degree of autonomy is very important (Ahmadi & Izadpanah, 2019; Alibakhshi, 2015; Benson & Voller, 2014; Campbell, 2012; Little, 1991, 1995, 2004) as it leads to the reporting of the learning-related behaviors and attitudes. It also enables teachers to direct their learners towards higher levels of confidence in the classroom (Loughran & Derry, 1997; Warton & Goodnow, 1991). It has been argued that the association between learners’ conceptions of autonomy and their observation of themselves as learners plays an important role in achieving education goals (Bacon, 1993). Although much research is needed in this area, researchers have somehow neglected to identify the learners’ conceptions of autonomy.

Sierra (2010) investigated how learners’ conceptions of shared autonomy from learning affect their responses to their academic experience and students’ learning outcomes. The results indicated that the learners’ conceptions of shared autonomy for their learning results in encouraging responses towards their experience and an increased degree of learners’ comprehension of course materials by means of course letter grades. The findings of this study point to an adoption of a more learner-centered classroom in which collaborative learning can be pursued by requiring learners or learner groups to use technological resources such as digital lecture recordings.

Chan (2001) listed a number of characteristics of the autonomous learners and these features were extracted based on their own perceptions: initiative, goal-oriented, well organized, highly
motivated, hardworking, and enthusiastic about learning, flexible, active, willing to ask questions, and making use of every to improve their learning.

Fatemii and Heidarie (2016) investigated the relationship between thinking styles and academic achievement of the students. They selected 320 students through multistage random sampling method. Data were analyzed through the use of Pearson correlation coefficient which indicated a significant relationship between the variables of legislative, executive, oligarchic, monocratic, anarchic, hierarchic, judiciary thinking styles, and academic achievement. In the same vein, Marandi and Sadeghian (2016) investigated the patterns of autonomous behavior among Iranian EFL learners before the implementation of principles of autonomous education in language classroom. They found three factors underlying participants’ autonomous learning behaviors. Also, Salimian and Tabatabaei (2015) investigated the correlation between autonomy and cognitive style among 140 Iranian MA students. They found weak positive association between low-level proficient students and their degree of reflectivity. They also found strong correlation between high proficiency L2 learners’ level of autonomy and their degree of reflective.

Moreover, Saljoughi and Nemati (2015) investigated teachers and learners’ autonomy. They found that there was no significant relationship between teacher autonomy and learner autonomy and the autonomy level of students was high.

Phipps and Borg (2009), in their review of literature on teacher’ beliefs both in general education and specifically in relation to language teaching, hold that teachers’ beliefs about teaching and learning: a) may be negatively or positively influenced by teachers’ previous experiences as learners and are well formed by the time they enter university b) are used by teachers for interpretation of new information and experience c) may be more powerful in effecting teachers’ action in the classroom than their teacher training courses/teacher education d) are not always reflected in teachers’ practice e) can influence and be influenced by practices, and f) greatly influence teachers’ pedagogical decisions.

Borg and Al-Busaidi (2012) shed light on teachers’ positive theoretical dispositions to learner autonomy and their views about the feasibility of promoting it in practice. They also explored teachers’ views on the factors which hinder the development of learner autonomy. The most salient finding of their study was that the learners lack motivation and have limited experience of independent learning. They also found that institutional factors such as a fixed curriculum were barriers to learner autonomy. Balıçkanlı (2010) investigated student teachers’ beliefs about learner autonomy in the Turkish educational context. The study aimed to find out student teachers’ beliefs about learner autonomy, the areas of learner autonomy they perceived as important, and the constraints in the way of development of autonomy. The results of the questionnaire showed that the participants considered autonomy essential for nearly all areas particularly methodology and classroom management.

Al-Shaqsi (2009) examined beliefs held by teachers of English in Oman about the extent to which their learners are autonomous. The study was conducted with 100 teachers of English (55 were male and 45 female) who were teaching Grades 10–12 (the last 3 years of secondary school), where learners were aged 15–17. The findings showed that teachers assessed their students positively in all behaviors.

Alibakhshi (2015) investigated the challenges in promoting learner autonomy from Iranian EFL teachers’ perspectives. To do so, a qualitative research design was used and 23 Iranian EFL teachers employed as full-time teachers in different universities in Tehran, Iran were selected through purposive sampling. The data were collected through in-depth interviews and analyzed through content analysis following Randor model. Based on the content analysis of the interviews, three different themes were extracted. The first most frequent-observed theme, institution-related challenges, consisted of prescribed objectives, materials, and assessment methods. The second
theme, learner-related challenges, consisted of seven subthemes. However, the third extracted theme was teacher-related challenges which consisted of four sub-themes.

Alibakhshi et al. (2015) investigated the feasibility and desirability of learner autonomy from English language teachers’ perspectives. In doing so, the learner autonomy instrument consisting of feasibility and desirability sections was administered to 120 EFL teachers (60 high school teachers and 60 language institute teachers). The participants were selected through convenience sampling. The data of the study were analyzed through descriptive and inferential statistics (one-sample t-test and Wilcoxon test). The results showed that both private institutes and state high schools EFL teachers have positive perceptions about learner autonomy. However, they do not have the same beliefs about feasibility and desirability of learner autonomy.

2.2. Emotional intelligence (EQ)

The term EQ was coined by American psychologists Salovey and Mayer (1990). Later, Harvard psychologist Daniel Goleman (1995) published Emotional Intelligence, in which EI was named the capacity to recognize one’s own feeling, fear, motivations, and intentions, as well as the motivations and desires of others. Subsequently, Bar-On (1997) generated his own EQ questionnaire (EQ-i) to measure personal EI.

Following Mayer and Salovey (1997) continuing research, their initial explanation of EI defines was studied to “the ability to perceive emotion, integrate emotion to facilitate thought, understand emotions and to regulate emotions to promote personal growth” (p. 185). Based on this, they made ability-based model in which EI is defined as aptitudes manifested in certain adaptive actions. The model claims that EI includes four types of abilities:

(1) Perceiving emotions—the ability to perceive emotions in faces, pictures, voices, and cultural objects—together with the ability to identify one’s own emotions;

(2) Using emotions—the ability to attach emotions to help different cognitive activities, like thinking and problem solving;

(3) Understanding emotions—the ability to understand emotionally charged to appreciate complicated relationships among emotions such as recognizing and describing how emotions change over time; and

(4) Managing emotions—the ability to control emotions in both ourselves and in others. Consequently, the emotionally intelligent person can attach emotions, even negative ones, and work with them towards the desired goals.

Goleman’s simplified definition of emotional intelligence at first displaced the more careful scientific definition of Mayer and Salovey in the public imagination, although interest has turned back in part to their work, which provides the most convincing case for the idea.

Goleman’s treatment was similar to Mayer and Salovey’s in drawing together research in neurophysiology, psychology, and cognitive science. For this, he drew on their original 1990 article but increased it with many of his own observations based on other parts of the scientific literature.

In Goleman’s opinion, a strong correlation does not exist between the Intelligence quotient (IQ) and success in life, though popular view mainly connects success with this dimension. As stated by Goleman, success is associated mainly with emotional intelligence. It should however be noted that adult income, completion of high school, accomplishment of higher education, prevention of dependence on welfare, avoidance of criminal conviction, and several other factors normally considered aspects of a “successful” life correlate very strongly with IQ, and there is not enough evidence to suggest similar correlations with EI. Goleman does not define “success” in any way that may be objectively tested, so his claim that EI correlates with success may still be true, although not provable.
Further, Bar-On (1997) defined emotional intelligence as “being concerned with effectively understanding oneself and others, relating well to people, and familiarizing and coping with the immediate settings to be more successful in dealing with conservational demands” (p. 16).

Bar-On hypothesizes that those individuals with higher EQ than the average are more successful in meeting environmental demands and stresses.

There have been various efforts to associate the emotional and social mechanisms of Emotional Intelligence. Gardner (1983), for instance, puts for the concept of personal intelligence based on emotional (intrapersonal) intelligence and social (interpersonal) intelligence.

The Encyclopedia of Applied Psychology, in order to explain this situation, suggested and approved of only three main theoretical models:

(a) The Salovey-Mayer Model (1997), which describes EI concept as the capability to identify, understand, manage, and use emotions to improve thinking, measured by an ability-based measure.

(b) The Goleman Model (1998), which views this concept as a wide array of capabilities and skills that drive managerial show, measured by multi-rater assessment.

(c) The Bar-on Model (2000), which describes a cross-section of connected emotional and social abilities, skills, and organizers that influence intelligent behavior, measured by self-report within a theoretically reasonable multi-model approach including interview and multi-rater assessment.

Bar-On has been involved in defining, measuring, and applying numerous aspects of this construct since 1980. He introduced the term EQ in 1985 to describe an approach to evaluate emotional and social functions. Bar-One’s model seeks to graph the impact of emotional and social competencies, skills, and organization on intelligent behavior. According to this model, to be emotionally and socially intelligent means to understand and express one self, to understand and relate well with others, and to successfully deal with daily demands, challenges, and pressures (Bar-On, 2006).

Bar-On (1997) defines Emotional Intelligence as “an array of non-cognitive abilities, capabilities, and skills that affect one’s capability to succeed in coping with environmental demands and processes” (p. 14).

The Bar-On Emotional Quotient Inventory (1997) is divided into five segments:

(a) Intrapersonal: includes measures of self-awareness confidence, self-regard, self-actualization, and independence;
(b) Interpersonal: includes empathy, social relationship, and social accountability;
(c) Stress management: includes stress tolerance and instinct control;
(d) Adaptability: includes problem-solving, reality testing, and
(e) General mood: includes pleasure and positivity.

Knowledge is thought to depend on a “truth condition” or warrant that compels its acceptance as true by community … Propositional knowledge then requires epistemic standing; that is, some evidence to back up the claim. Beliefs, however, do not require a truth condition. (p. 3)

Bar-On’s model (1996) considers five main categories of intelligence: intrapersonal, interpersonal, adaptability, stress management, and general mood. He asserts that people who are emotionally
intelligent are successful in managing these five characteristics. According to Bar-On and Parker (Bar-On, 2000), emotional-social intelligence is considered as a cross-section of interconnected emotional and social competencies, skills, and facilitators that conclude how well we understand and express ourselves, understand others and relate to them, and cope with daily demands, challenges, and pressures. The emotional and social competencies, skills, and facilitators included in this wide definition of the construct are based on the five meta-factors that were confirmed by a series of second-order factor analyses in the development of the Bar-On psychometric measure of this construct. Bar-On’s EQ-I (1997) consists of 5 composite scales: intrapersonal, interpersonal, stress management, adaptability, and general mood. Each of these five scales is composed of specific factors, with a total number of 15 items. These factors are: problem-solving, happiness, independence, stress tolerance, self-actualization, emotional self-awareness, reality testing, interpersonal relationships, optimism, self-regard, impulse control, flexibility, social responsibility, empathy, and assertiveness. Although emotional intelligence can be identified as one of the contributing factors to the autonomy of the language learners, very few studies have investigated the relationship between the two in general and the specific components in particular. Benson (2001; 2007) argues that in language learning, autonomy is related to the ability of processing independently by using language and applying it to communicate individual meanings in authentic contexts (autonomy as a communicator).

One study by Buvoltz et al., (2008) investigated the relationship between undergraduate learners’ autonomy and its relationship with EQ. The study evaluated the relationship with regard to its impact on the learners’ retention. 129 college learners were asked to provide answers to an EI self-assessment and an autonomy questionnaire. The results revealed that the two constructs were positively correlated. Vakola et al. (2004) investigated the role of emotional intelligence and personality variables on approaches to organizational change, explored how emotional intelligence and the Big Five dimensions of personality can assist organizations to adapt at the individual level by probing the connection between these attributes and attitudes toward organizational change. The study involved 137 professional participants who finished self-report inventories evaluating their emotional intelligence, personality traits and attitudes toward organizational modification. The results confirmed a relationship between personality features and employees’ attitudes toward change.

Although learner autonomy and emotional intelligence of the students have to a great extent studied, the review of the related literature shows that the relationship between these two variables have not been explored, yet. More importantly, this study aims at investigating the interaction between the undergraduate students’ major and their perceptions of autonomy and emotional intelligence. More specifically, the following research questions were raised:

1. Is there any significant relationship between undergraduate students’ emotional intelligence and their perception of autonomy?
2. Is there any significant correlation between the students’ major and emotional intelligence?
3. Is there any relationship between the students’ major and their learner autonomy?

3. Method

3.1. Participants

The Participants of the present study were 185 male and female undergraduate students (90 students of English as a foreign language and 95 students of social sciences) who were selected through convenience sampling at Allameh Tabataba’i university, in Tehran, Iran. The participants were all selected among senior students. They were informed about the purpose of the study and were allowed to withdraw from the study whenever they liked. They also signed the informed consent form.
3.2. Instrumentation
The data were collected through administering two adopted instruments. Each is explained as follows:

(a) Emotional Intelligence Inventory
In brief, the EQ-i contains 90 items in the form of short sentences and employs a 5-point response Likert scale with answers ranging from strongly agree (5) to strongly disagree. The EQ-i is suitable for undergraduate students and any one whose age exceeds 17. It takes approximately 40 minutes for a respondent to complete the instrument. It contains five subscales: (a) intrapersonal (b) interpersonal (c) adaptability (d) stress management and (e) general mood. The reliability of this questionnaire was estimated by piloting the instrument and running Cronbach's Alpha on the collected data. The internal consistency of the scale and its sub-scales exceeded 0.87, suggesting that the instrument enjoyed acceptable level of internal consistency.

B. Learner Autonomy Questionnaire
The researchers used a Likert-type questionnaire developed by Xu et al., (2004). The questionnaire consists of 32 items (the minimum and maximum scores are 32 and 160, respectively. This questionnaire explores the learners' conceptions of autonomy for learning. The questionnaire was originally written in English, but since it was assumed that students might have different levels of English proficiency, it was translated into Persian by a native Persian speaker with high English language proficiency. The English version was later on evaluated by an English professor with high English language proficiency to confirm the accuracy of the translation. The reliability of the translated version was estimated through submitting the participants' scores to Cronbach's alpha. The questionnaire enjoyed high level of internal consistency (a = 0.89).

3.3. Design of the study
The present study adopted a descriptive research design in the sense that there was no manipulation in the research context. In fact, for research questions 1 and 2, correlational research design was used. Besides, for research question 3 a factorial research design was used.

3.4. Data collection procedure
The individuals who met the criteria mentioned in the participants section were contacted by the researcher. A brief description was provided about the nature of the study and the purpose of data collection. Upon the student' agreement to participate in the study, a package containing a copy of the two questionnaires was distributed among them. The questionnaires were sent to some of the participants through e-mail, but some received the hard copies at the university campus. Among the selected participants, 185 students returned the completely answered questionnaires. Each participant was coded either as 1 (1 = EFL) or 2 (Social science). For research questions 1 and 2, the scores of all participants on the two variables were submitted to correlational and regression analysis; however, for the last research question the researchers added a two-level variable (major) to the design. Therefore, the researchers entered two types of scores (autonomy and EQ) and a group variable with two levels: EFL and social science. Finally, the data were analyzed appropriately.

3.4.1. Data analysis
First, Kolmogorov-Smirnov (K-S) test was employed for checking whether the data were normally distributed or not. A non-significant result (p > 0.05) in the K-S test indicated that the normal distribution of the data. Then, Pearson correlation coefficient was run to investigate whether there was a correlation between the participants' scores on EQ and perception of LA. In addition, to answer the second and third research question, the researchers employed independent samples-t-test and Spearman rho correlation.
4. Results

4.1. Research question 1
The first research question aimed at exploring the relationship between Iranian undergraduate perceptions of learners’ autonomy and their emotional intelligence. In order to answer this question, the correlation coefficient between the students’ scores on learners’ autonomy and emotional intelligence was submitted to Pearson Product Correlation. The results including descriptive statistics and Pearson Correlation are presented in the following Tables.

As it is shown in Table 1, the mean score of the participants on learner autonomy is 70.1, which fell below the cutoff point (cutoff point for learner autonomy was set to be 80, 50% of the total score on learner autonomy. Results also show that the mean scores of the participants on EQ is 340.2 which seems to be high. For the participants, empathy (M = 25.8) and social responsibility (M = 25.7) have the highest mean scores followed by interpersonal relation (24.8), happiness (M = 24.2), self-regard (M = 23.7), self-actualization (M = 23.2), optimism (23.1), and problem—solving (M = 23.1). Results also show that for the students, reality testing and impulse control obtained the lowest mean scores, 9.5 and 19, respectively. Therefore, it can be inferred that the general EQ of the participants of the study was high enough indicating that EFL and social science students have emotional intelligence. However, when it comes to the participants’ scores on the subcomponents of EQ, it can be seen that the recruited participants’ scores on the subcomponents of EQ are not the same.

As Table 2 shows, there is no significant relationship between the undergraduate students’ perceptions of learner autonomy and assertiveness (p = .14, r = .11 > 0.05), interpersonal relation (p = .16, r = .091), flexibility (p = 0.09 > 0.5, r = .10), and social responsibility (p = .08 > 0.05, r = .11). Therefore, it can be strongly argued that the students’ assertiveness, flexibility, interpersonal relation, and social responsibility do not correlate with and predict the students’ feelings and perceptions of learner autonomy. However, results show that there is a statistically significant, direct, and positive relationship between the participants’ perceptions of autonomy and their problem-solving (p = .01,<0.05, r = .33), happiness (p = .05,<0.05, r = .23), independence (p

| Table 1. Descriptive statistics of the students’ scores on EI and LA | Mean | N |
|---|---|---|
| Problem solving | 23.1 | 185 |
| Happiness | 24.2 | 185 |
| Independence | 22.5 | 185 |
| Stress tolerance | 19.1 | 185 |
| Self-Actualization | 23.2 | 185 |
| Self-Awareness | 22.7 | 185 |
| Reality Testing | 19.5 | 185 |
| Interpersonal Relation | 24.8 | 185 |
| Optimism | 23.1 | 185 |
| Self-regard | 23.7 | 185 |
| Impulse Control | 19 | 185 |
| Flexibility | 20.1 | 185 |
| Social Responsibility | 25.7 | 185 |
| Empathy | 25.8 | 185 |
| Assertiveness | 20.5 | 185 |
| Total EQ | 340.2 | 185 |
| Autonomy | 70.1 | 185 |
Table 2. Pearson correlation results for EQ and autonomy

|                           | Autonomy |
|---------------------------|----------|
| Problem solving           | Pearson correlation | 0.33 |
|                           | Sig (2-tailed)     | 0.01 |
| Independence             | Pearson Correlation | 0.75 |
|                           | Sig (2-tailed)     | 0.001 |
| Stress tolerance         | Pearson correlation | 0.29 |
|                           | Sig (2-tailed)     | 0.05 |
| Self-Actualization       | Pearson correlation | 0.54 |
|                           | Sig (2-tailed)     | 0.001 |
| Self-Awareness           | Pearson correlation | 0.24 |
|                           | Sig (2-tailed)     | 0.01 |
| Reality Testing          | Pearson correlation | 0.26 |
|                           | Sig (2-tailed)     | 0.05 |
| Interpersonal Relation   | Pearson correlation | 0.091 |
|                           | Sig (2-tailed)     | 0.16 |
| Optimism                 | Pearson correlation | 0.18 |
|                           | Sig (2-tailed)     | 0.05 |
| Self-regard              | Pearson correlation | 0.29 |
|                           | Sig (2-tailed)     | 0.05 |
| Impulse Control          | Pearson correlation | 0.26 |
|                           | Sig (2-tailed)     | 0.05 |
| Flexibility              | Pearson correlation | 0.10 |
|                           | Sig (2-tailed)     | 0.09 |
| Social Responsibility    | Pearson correlation | 0.11 |
|                           | Sig (2-tailed)     | 0.08 |
| Empathy                  | Pearson correlation | 0.28 |
|                           | Sig (2-tailed)     | 0.05 |
| Assertiveness            | Pearson correlation | 0.11 |
|                           | Sig (2-tailed)     | 0.14 |
| Total EQ                 | Pearson correlation | 0.37 |
|                           | Sig (2-tailed)     | 0.001 |

= .001,<0.05, r = .75), stress tolerance (p = .05,<0.05, r = .29), self-actualization (p = .001,<0.05, r = .54), self-awareness (p = .05, r = .24), optimism (p = .05, r = .18), self-regard (p = .05, r = .29), impulse control (p = .01, r = .26), and empathy (p = .01, r = .28). Detailed analysis of the correlation coefficient (r) shows that only the correlation between the independence component of EQ and learner autonomy is strong (R = 0.75) and the correlation between and the participants’ scores on the self-actualization component of EQ and their perceptions of learner autonomy is moderate (r = 0.54). Whereas the correlation between the participants’ LA and the other components of EQ, although statistically significant, is rather weak or somehow moderate. Moreover, results show that there is a significant moderate relationship between the participants’ scores on total EQ and their perceptions of autonomy (p = .001, <0.05, r = .37). That is, the students who have higher emotional intelligence feel more autonomous and they make decisions about different components of the curriculum. However, the students who have lower emotional intelligence do not have positive perceptions of learner autonomy.
4.2. Research question 2

The second research question aimed at investigating the difference between the social science and EFL students’ EQ and LA. Results are presented in Tables 3 and 4.

Table 2 indicates that the mean scores of EFL and social science students on LA are 70.06 and 70.04, respectively, and the two groups' scores on emotional intelligence are 340.25 and 340.16, respectively, suggesting that two groups have somehow the same LA and EI. Detailed analysis shows that the EFL and social science students' scores on learner autonomy fell below the midpoint of 50%, which indicates that the two groups of the students do not have high learner autonomy; however, their scores on emotional intelligence exceeded the midpoint (50%), indicating that they have high emotional intelligence. Therefore, it could be argued that two groups of the students have somehow the same learner autonomy and emotional intelligence. However, to see whether the differences are not statistically significant, the mean scores were submitted to two independent samples-t-tests. Results are shown in the following Table 4.

As it can be seen in Table 3, the results of the Levene's test show that the variances of the groups' scores on both EQ (F = 0.002, p = 0.96) and LA (F = 0.017, p = 0.89) are homogenous indicating that the assumption of the t-test was not violated, and the researchers did not need to delete the participants who obtained high or low scores and all participants were kept in the final analysis. Therefore, the information in the first row (equal variances assumed) is reported. Detailed analysis also shows that the mean scores of social science and EFL learners on Emotional Intelligence (t = 0.66, df = 183, p = 0.89) is not significant, indicating that the two groups have the same emotional intelligence. With regard to the two groups’ scores on Learner Autonomy, results show that the difference with the EFL and social science students is not statistically significant (t = −0.67, df = 183, p = 0.49). That is, they have the same emotional intelligence and the same perceptions of learner autonomy. In other words, the major of the students does not affect their perception of autonomy and their emotional intelligence.
4.3. Research question 3
The third research question aimed at delving into the relationship between the students’ majors and their perceptions of LA and EQ. The scores were also submitted to Spearman’s rho correlation. The results are presented in the following Table 5.

![](Table 5. The relationship between the students' majors and their EQ and LA

| Spearmen's rho Groups | Correlation Coefficient (r) | Sig. (2-tailed) | Number |
|-----------------------|-----------------------------|----------------|--------|
|                        |                             | .000           | .043   |
|                        |                             | .998           | .565   |
|                        |                             | 185            | 185    |

It can be seen in Table 4, there is no statistically significant correlation between the undergraduate students’ major and their emotional intelligence (rho = 0.000, p = 0.99, N = 185). Therefore, it can be strongly argued that the students’ major is not correlated with their emotional intelligence. Moreover, with regard to the relationship between the students and their perceptions of learner autonomy, the results show that the correlation between the students’ major and learner autonomy is not statistically significant (rho = 0.04, p = 0.56, N = 185). Therefore, it can be strongly argued the students' major is not a significant predictor of their emotional intelligence and learner autonomy.’

5. Discussion
The main objective of the present study was to explore the relationship between undergraduate students’ emotional intelligence, and perceptions about learner autonomy. Regarding the first research question, results indicated that there is a significant correlation between Iranian EFL teachers’ scores on perceptions about learner’s autonomy and their emotional intelligence. Therefore, the null hypothesis was rejected and it could be strongly argued that the higher teachers’ emotional intelligence the more positively they think of the learners’ involvement in different components. The finding also revealed that the particular measure of EQ (Golem, 1998) used during present research imitates emotional intelligence as a trait; however, this is in contrast with findings by Caruso et al. (2002). According to Caruso et al. (2002), EQ is found to be an independent construct of personality. It is possible that the independence is observed because Caruso et al. used an ability-based measure of EI. In the other hand, in differentiate validity study of EI conducted by Schutte et al. (1998), realized that EI measure did not correlate with the big five personality measures except for openness to experience. These results are in contrast with the present research; the reason for this difference could be that the focus of validation study conveyed by Schutte et al. (1998).

Another finding was that there was no significant relationship between the undergraduate students’ perceptions of learner autonomy and assertiveness, interpersonal relation, flexibility, and social responsibility. It could be justified that teachers who are more reflective and socially responsible like to interact with the students, welcome the students’ ideas, perceptions, and attitudes towards the content of the syllabus, teaching, and learning strategies, as well as the assessment strategies and approaches. That is, why these traits are significant predictors of learner autonomy. Therefore, people with high level of interpersonal relationship and social responsibility like to cooperate with the other people, teachers, and learners. That is why, the higher students’ sense of responsibility and interpersonal relation, the lower level of learner autonomy.

It was also found that there is no significant relationship between assertiveness and learner autonomy. Such a finding can be justified because assertiveness is a social skill that relies heavily on effective communication while simultaneously respecting the thoughts and wishes of others. People who are assertive clearly and respectfully communicate their wants, needs, positions, and boundaries to others. There is no question of where they stand, and no matter what the topic is. Individuals who are high in
assertiveness do not shy away from defending their points of view or goals, or from trying to influence others.

It was also found that only two components of EQ are strongly correlated with learners’ autonomy and the other factor have either weak or moderate relationship with LA. The first strongly related factor is independence. Independent students can do their tasks by their own and rarely ask for the others’ support. As a rule of thumb, it can be argued that independent students desire to be autonomous. That is why; independence factor of EQ has positive strong relation with autonomy. This result is echoing the findings of Valizadeh (2016) which indicated that independence is the only predictor of learner autonomy, but contrast with the findings of other researchers who have identified problems with the negative attitudes of learners towards schools and learning and their social cooperative behaviors (Bacon, 1993). Although Valizadeh (2016) found that students’ self-actualization has weak correlation with their autonomy, the results of this study showed that self-actualization has a strong relationship with their learner autonomy. The difference in the findings might be related to the demographic information of the participants of two studies.

The inconsistencies between the findings of the present research with those of the other researchers need further studies using alternative measurements, different sample sizes, and research methods. With regard to the lack of relationship between the students’ major and their EQ and learner autonomy, it can be argued that social sciences and EFL students have the same perceptions of learner autonomy and EQ. Therefore, it can be inferred that EQ and learner autonomy are not major bound. As the participants were selected from one university, the findings must be generalized carefully and the other researchers are called for to replicate the study using a larger sample of participants from different universities and investigate the role of the students’ age and personality types in their EQ and LA.

6. Conclusions and implications
The finding of the present study has theoretical implications for psychologist in general and psycholinguists in particular to reformulate their perception of the role of EQ trait in general intelligence and emotional intelligence. The finding can also be implied by university teachers to bear in mind that all teachers can practice learner autonomy in higher education settings. More specifically, the results can be used by higher education stakeholders to know that all university students with different majors agree to welcome the learners’ contribution to teaching and learning process and accordingly through cooperation between teachers and learners mismatches between them are reduced and learning conditions are maximized.

Due to the limitation of the study, the researchers were not able to take into account the components of learner autonomy, the other researchers are welcome to replicate the study and analyze the data one more to see whether there is any difference between the teachers’ scores on different components of EQ and LA. Cultural issues might also be influential. Therefore, the other researchers are recommended to replicate the study in the other settings to see whether teachers’ cultural background affects their performance on learner autonomy and emotional intelligence.

Funding
The authors received no direct funding for this research.

Author details
Mohammad Bagher Shabani1
E-mail: mshabani@hum.ikiu.ac.ir
Gholam Reza Latifi2
E-mail: latifi@atu.ac.ir
Reza Javaheri3
E-mail: rjavaheri@mail.utoronto.ca
Masoumeh Mazloum4
E-mail: mmazloum@yahoo.com

1 Assistant Professor, Imam Khomeini, International University, Qazvin, Iran.
2 Associate Professor, Allameh Tabataba’i University, Tehran, Iran.
3 Ph.D. Candidate, University of Toronto, Toronto, Canada.
4 TEFL, Central Tehran Branch, Islamic Azad University, Tehran, Iran.

Citation information
Cite this article as: Undergraduate students’ emotional intelligence and their perceptions of learner autonomy: Interface between social science and English language students, Mohammad Bagher Shabani, Gholam Reza Latifi, Reza Javaheri & Masoumeh Mazloum, Cogent Education (2020), 7: 1850194.

References
Acar, F. T. (2001). Duygusal zeka yeteneklerinin göreve insana yönelik liderlik davranışları ile ilişkisi [Doktora Tezi]. İstanbul Üniversitesi Sosyal Bilimler Enstitüsü.
Ahmadi, M., & Izadpanah, S. (2019). The study of the relationship between learning autonomy, language anxiety, and thinking styles: A case of Iranian university students. International Journal of Research in English Education, 4(2), 73–87. https://doi.org/10.2952/jree.4.2.73

Akbari, R., & Hosseini, K. (2008). Multiple intelligences and language learning applications of the Myers–Briggs Type Indicator. Consulting Psychological Press.

Alibakhshi, G. (2015). Challenges in promoting EFL learners’ autonomy: Iranian EFL teachers’ perspectives. Issues in Language Teaching, 4(1), 79–98.

Alibakhshi, G., Keikha, A., & Nezakatgoo, B. (2015). On the feasibility and desirability of learner autonomy from Iranian EFL teachers’ perspectives. International Journal of Applied Linguistics and English Literature, 4(6), 141–147.

Al-Shaqsi, T. S. (2009). Teachers’ beliefs about learner autonomy. In S. Borg (Ed.), Researching English language teaching and teacher development in Oman (pp. 157–165). Ministry of Education, Oman.

Bacon, C. S. (1993). Student responsibility for learning. Adolescence, 28(109), 199–212.

Belgakhanli, C. (2010). Learner autonomy in language learning: Student teachers’ beliefs. Australian Journal of Teacher Education, 35(1), 90–103. https://doi.org/10.14221/ajte.2010v35n1.8

Bar-On, R. (1997). The Emotional Quotient Inventory (EQ-I): Technical manual. Multi-Health Systems, Inc.

Bar-On, R. (2000). Emotional and social intelligence: Insights from the emotional quotient inventory (EQ-I). In R. Bar-On & J. D. Parker (Eds.), The handbook of emotional intelligence (pp. 363–388). Jossey-Bass.

Bar-On, R. (2006). The Bar-On Model of Emotional-Social Intelligence (ESI). Psychotemia, 18(2), 13–25. WWW. http://www.psichotemia.com/

Benson, P. (2007). Autonomy in language teaching and learning. Language Teaching, 40(1), 21–40. https://doi.org/10.1017/S0261444807003958

Benson, P. (2010). Teacher education and teacher autonomy: Creating spaces for experimentation in secondary school English language teaching. Language Teaching Research, 14(3), 259–275. https://doi.org/10.1177/1362168810365236

Benson, P. (2011). Teaching and researching autonomy in language learning (2nd ed.; first published, 2001). Pearson Education.

Benson, P., & Voller, P. (2014). Autonomy and independence in language learning. Routledge.

Boekaerts, M. (2002). Bringing about change in the classroom: Strengths and weaknesses of the self-regulated

Borg, S., & Al-Busaidi, S. (2012). Learner autonomy: English language teachers beliefs and practices. ELT Research Paper, 12(1), 3–7.

Brown, H. D. (2001). Teaching by principles: An interactive approach to language pedagogy. Addison Wesley Longman.

Buvolz, K.A., Powell, F.J., Solan, A.M., & Longbotham, G.J. (2000). Exploring emotional intelligence, learner autonomy, and retention in an accelerated undergraduate degree completion program. New Horizons in Adult Education and Human Resource Development, 22(3–4), 26–43. https://doi.org/10.1002/nhr.10415

Campbell, C. M. (2012). Language anxiety in men and women: Dealing with gender differences in the language classroom. In D. J. Young (Ed.), Affect in foreign language and second language learning: A practical guide to creating a low-anxiety classroom atmosphere (pp. 191–215). New York: McGraw-Hill Education.

Caruso, D. R., Moyer, J. D., & Salovey, P. (2002). Emotional intelligence andemotional leadership. In R. E. Riggio, S. E. Murphy, & F. J. Pirozollo (Eds.), LEA’sorganization and management series (pp. 55–76). Multiple intelligences and leadership

Chan, V. (2001). Readiness for learner autonomy: What do our learners tell us? Teaching in Higher Education, 6(4), 505–518. https://doi.org/10.1080/13562510120070045

Christison, M. A. (1998). Applying multiple intelligence theory in pre-service and in service TEF education programs. English Teaching Forum, 36(2), 2–13.

Cotterall, S. (1995). Developing a course strategy for learner autonomy. ELT Journal, 49(3), 27–219. https://doi.org/10.1093/elt/49.3.219

Dutoğlu, G., & Tuncel, M. (2008). The relationship between candidate teachers’ critical thinking tendencies and their emotional intelligence levels. Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 8(1), 11–32.

Ekici, G., & Güven, M. (2013). Öğrenme-öğretme yaklaşımları ve uygu Salaamları. Pegem Akademiroyun (Ed.). Some challenges in teacher autonomy.

Fatemi, M., & Heidari, A. (2016). Relationship between thinking styles and academic achievement of the students. International Journal of Humanities and Cultural Studies, 2(4), 1353–1361.

Finch, A. E. (2004) English Reflections. Doegu: KNU Press.

Gardner, D., & Miller, L. (1999). Establishing self-access. University Press.

Gardner, D., & Miller, L. (2011). Directions in self-access. Hong Kong University Press.

Gardner, H. (1983). Frames of mind: The theory of multiple intelligence. New.

Goleman, D. (1998). Working with emotional intelligence. Bloomsbury.

Goleman, D. (1995). Emotional intelligence. Bantam.

Gürüşmekteş, I., Vural, D. E., & Demiröz, E. S. (2008). The relation between emotional intelligence and communication skills of teacher candidates. Mehmet Akif Ersoy University Journal of Education Faculty, 16(1), 1–11.

Haghi, M. (2009). The relationship between perceived self-efficacy and Iranian EFL learners’ autonomy [Unpublished master’s thesis]. Islamic Azad University, Science and Research Branch.

Heidari, M. (2010). The relationship among EFL learner’s left/right brain dominance, autonomy, and reading comprehension of the academic and general reading modules of IELTS [Unpublished master’s thesis]. Islamic Azad University, Central-Tehran Branch.

Khaki. (2013). The relationship between learner autonomy and willingness to communicate (WTC) in Iranian EFL learners. International Journal of Applied Linguistics & English Literature, 2(5), 98–109. https://doi.org/10.7575/aicol.jjelv.2n.5p.97

Little, D. (1991). Learner autonomy: Definitions, issues and problems. Authentik.

Little, D. (1995). Learning as dialogue: The dependence of learner autonomy on teacher autonomy. System, 23(2), 175–182. https://doi.org/10.1016/0346-251X(95)00006-6

Little, D. (2004). Constructing a theory of learner autonomy: Some steps along the way. In K. Makinen, P. Kaikkonen, & V. Kohonen (Eds.), Future perspectives in foreign language education (pp. 15–25). Publications of the Faculty of Education in Oulu University.
Loughran, J., & Derry, N. (1997). Researching teaching for understanding: The students’ perspective. *International Journal of Science Education*, 19(8), 925–938. https://doi.org/10.1080/0950069970190806

Mardani, S. S., Sadeghian, S. (2016). A shift into autono-
mous education. *Journal of English Language Teaching and Learning*, 17(1), 75–92

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–31). Basic Books.

Miller, L. (2007). Introduction. In L. Miller (Ed.), *Learner autonomy: Autonomy in the classroom* (pp. 1–6). Authentic Language Learning Resources.

Nematipour, M. (2012). A study of Iranian EFL learners’ autonomy level and its relationship with learning style. *English Linguistics Research*, 1(1), 126–136. https://doi.org/10.5430/elr.v1n1p126

Noto, L., Soresi, S., & Zimmerman, B. J. (2004). Self-regulation and academic achievement and resilience: A longitudinal study. *International Journal of Educational Research*, 41(3), 198–215. https://doi.org/10.1016/j.ijjer.2005.07.001

Païfremyan, D. (Eds.). (2003). *Learner autonomy across cultures: Language education perspectives*. Palgrave MacMillan.

Phipps, S., & Borg, S. (2009). Exploring tensions between teachers’ grammar teaching beliefs and practices. *System*, 37(3), 380–390. https://doi.org/10.1016/j.system.2009.03.002

Rietti, S. (2008). Emotional intelligence as educational goal: A case for caution. *Journal of Philosophy of Education*, 42(3–4), 631–643. https://doi.org/10.1111/j.1467-9752.2008.00647.x

Salimian, R., & Tabatabaei, O. (2015). Relationship between L2 learners’ autonomy and their cognitive style: Reflectivity in focus. *International Journal of Foreign Language Teaching & Research*, 3(9), 17–26. Available at: http://jfltaun.ac.ir/article_562797.html

Saljoughi, S., & Nemati, A. (2015). The relationship between teacher autonomy and learner autonomy among EFL students in Bandar Abbas. *International Journal of Language Learning and Applied Linguistics World*, 9(2), 178–185.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(2), 185–211. https://doi.org/10.2190/DUUG-PZ4E-52WK-6CDG

Schmenk, B. (2005). Globalizing learner autonomy. *TESOL Quarterly*, 39(1), 107–118. https://doi.org/10.2307/3588454

Schunk, D. H., & Zimmerman, B. J. (1997). Conclusions and future directions for academic interventions. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulated learning-from teaching to self-respective practice* (pp. 225–235). Guilford Press.

Schunk, D. H. (2001). Social cognitive theory and self-regulated learning. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives* (2nd ed., pp. 125–152). Lawrence Erlbaum Associates.

Schunk, D. H., & Zimmerman, B. J. (1998). *Self-regulated learning: From teaching to self-reflective practice*. Guilford Press.

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25, 167–177

Sierra, J. J. (2010). Shared responsibility and student learning: Ensuring a favorable educational experience. *Journal of Marketing Education*, 32(1), 104–111. https://doi.org/10.1177/0273475309344802

Smith, R., & Ushioda, E. (2009). Autonomy: Under whose control? In R. Pemberton, S. Too Good, & A. Barfield (Eds.), *Maintaining control: Autonomy and language learning* (pp. 241–253). Hong Kong University Press.

Vakola, M., Tsaousis, I., & Nikolau, I. (2004). The role of emotion intelligence and personality variables on attitudes towards organizational change. *Journal of Managerial*, 19(2), 88–110. https://doi.org/10.1108/02683940410526082

Valizadeh, M. (2016). Iranian EFL students’ emotional intelligence and autonomy in distance education. *English Language Teaching*, 9(10), 22–30. https://doi.org/10.5539/elt.v9i10p22

Vickers, C. H., & Ewe, E. (2006). Grammatical accuracy and learner autonomy in advanced writing. *ELT Journal*, 60(2), 109–116. https://doi.org/10.1093/elt/cci097

Wang, M. C., & Pevery, S. T. (1986). The self-instructive process in classroom learning contexts. *Contemporary Educational Psychology*, 11(4), 370–404. https://doi.org/10.1016/0361-476X(86)90031-7

Warton, P. M., & Goodnow, J. J. (1991). The nature of responsibility: Children’s understanding of “Your Job”. *Child Development*, 62(1), 156–165. https://doi.org/10.2307/1130711

Weisinger, H. (1998). Emotional intelligence at work. *Jossey-Bass.*

Xu, J. F., R. Z. Peng & W. P. Wu. (2004). A survey and analysis of non-English major undergraduates’ autonomous English learning competence. *Foreign Language Teaching and Research*, 1, 64–68
