The Relationship between HEXACO Personality Traits and Iranian EFL Learners’ Speaking Ability

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Abstract

This study aimed to investigate the relationship between HEXACO personality traits and Iranian EFL learners’ speaking ability. In order to achieve the purpose of the study, among all the language institutes (fifteen institutes) in Amol, Mazandaran Province, 8 were selected randomly (four institutes for female and four institutes for male language learners). Then, two classes were selected randomly from each institute. Among all the language learners in these eight institutes and classes, 250 learners (125 male and 125 female learners) were selected using a random cluster sampling method. The participants were asked to complete the HEXACO personality traits questionnaire. Speaking ability of all the learners was checked via scored interview to examine the relationship between HEXACO personality traits (Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience) and their speaking performance. Speaking ability of the learners were evaluated by three interviewers (the researcher and two trained raters) based on IELTS speaking bands in four areas: 1) Fluency and Coherence 2) Lexical Resource 3) Grammatical Resource 4) Pronunciation. The interview was scored out of 9 in this study. To analyze the collected data, Pearson’s correlation coefficient and multiple regressions with stepwise method were used in the study. The findings of the study showed a positive and significant relationship between HEXACO personality traits and speaking performance of the learners. Extraversion, conscientiousness and altruism could predict 90.3 percent of variance of speaking ability.

Keywords: HEXACO personality traits, speaking ability, honesty-humility, emotionality, extraversion, conscientiousness

Introduction

"Speaking in the mother tongue requires ample exposure and skill as well as having normal behavioral/psychological development" (Moghadas, Gol & Haghshenas, 2013, p. 34). Speaking in the foreign language, however, is “often cited by students as their most anxiety producing experience” (Young 1990, p. 539) and also “difficulty in speaking in class is probably the most frequently cited concern of the anxious foreign language students”(Horwitz, Horwitz, & Cope, 1986, p.12). The form and meaning of spoken language depend on the context in which it occurs and the context itself includes the participants, their collective experiences, the physical environment, and the purposes for speaking. Burns and Joyce (1997) argued that speaking is often spontaneous, open-ended, and evolving. However, speech is sometimes predictable and language functions (or patterns) occur in certain discourse situations (e.g., declining an invitation or requesting time off from work) which can be identified and practiced.

According to Schumin (2002), speaking like other language skills needs to be learned and practiced, so EFL learners need explicit instruction in speaking. However, in practice, it is too
often assumed that spoken language skills can be developed simply by getting students to discuss certain subjects or general topics.

Different learners attain different levels of L2 proficiency even though the circumstances in which these learners acquire a target language are almost identical (van Daele, 2005). So, learners’ learning method must match their personality. It seems if foreign language learners rightly choose their own learning method according to their respective situations, they will feel comfortable and effective while acquiring a second language.

Individuals differ in learning a second language; some of them learn it more easily than others. The importance of individual differences in the field of second language acquisition has been established in a significant body of research. Individual differences significantly influence human thinking and behavior and researchers have, thus, confirmed the relationship between the variation in language learning outcomes and various learner characteristics (Dörnyei, 2005, 2006, cited in Oz, 2014).

Personality factors can significantly affect language learning success (Dewaele, 2013; Gregersen & MacIntyre, 2014). Personality factors such as the personality traits of language learners can facilitate or debilitate language learning (O’Connor & Paunonen, 2007) “Personality is made up of the characteristic patterns of thoughts, feelings, and behaviors that make a person unique. It arises from within the individual and remains fairly consistent throughout life” (Pervin, & John, 2001, p. 4).

The learner’s personality trait is one of the influential factors that helps describe how individuals interact with the members of their own cultural and social group as well as out-group members (Cherry, 2013).

Different theorists have classified individuals into different personality types. The Big Five personality traits model is one framework that provides the five personality dimensions. It was started with the research of Fiske (1949) and was further studied in detail by Norman (1997), Goldberg (1981) and McCrae & Costa (1987). Moreover, it is the result of analytical research into personality traits and has been rooted in the lexical hypothesis.

Big five model includes five personality dimensions: agreeableness, conscientiousness, extraversion, neuroticism, and openness. Cherry (2013) reviewed five categories which are usually described in the following:

1. Extraversion: This trait includes characteristics such as excitability, sociability, talkativeness, assertiveness and high amounts of emotional expressiveness.
2. Agreeableness: This personality dimension includes attributes such as trust, altruism, kindness, affection, and other behaviors.
3. Conscientiousness: Common features of this dimension include high levels of thoughtfulness, with good impulse control and goal-directed behaviors. Those high in conscientiousness tend to be organized and mindful of details.
4. Neuroticism: Individuals high in this trait tend to experience emotional instability, anxiety, moodiness, irritability, and sadness.
5. Openness: This trait features characteristics such as imagination and insight, and those high in this trait also tend to have a broad range of interests.

Cherry noted that each of the five personality factors represents a range between two extremes. For example, extraversion represents a continuum between extreme extraversion and extreme introversion.

McCrae and Costa (1997, p. 515; cited in Shultz & Shultz, 2013) noted that the Big Five factors and their traits appear to represent a “common human structure of personality” that transcends cultural differences.
The five factors of big five model have been found in many languages such as Britain, Germany, Portugal, the Czech Republic, Turkey, and etc. Moreover, these factors are stable and existed in both children and adults. Schacter, Gilbert, Wegner (2011) asserted that factors of the Big five model of personality are consistent in interview, self-description and observations.

The Big Five model has been criticized for some issues such as lack of explanation of other personality dimensions, and being inappropriate for studying early childhood which are explained in details in literature review section. So, based on the critiques of the Big five model, HEXACO was proposed as an alternative to the Big five model. HEXACO is a similar model to the Big Five, also constructed through lexical research and established by factor analysis (Ashton & Lee, 2005).

“Given the evident usefulness of Big Five model, researchers (Anusic, Schimmack, Pinkus, & Lockwood, 2009) might wonder why the HEXACO model has been proposed as an alternative. The reason can be summarized simply: The same objective research strategy that led to the discovery of the five-dimensional model has subsequently revealed a replicable set of six personality dimensions. This six-dimensional space captures some important personality variance not represented within the five-dimensional models while also allowing a better theoretical interpretation of personality variation” (Ashton & Lee, & de Vries, 2014, p. 139-140).

The six factors include Honesty-Humility (H), Emotionality (E), Extraversion (X), Agreeableness (A), Conscientiousness (C), and Openness to Experience (O). Each factor is composed of traits with characteristics indicating high and low levels of the factor. HEXACO differs from the Big Five by its additional sixth trait, Honesty-Humility (Ashton & Lee, 2008a). The sixth factor, Honesty-Humility, has been found lexically in several languages, including German, Hungarian, Korean, Polish, and Italian (Ashton, Lee, & Son, 2000). The model, therefore, shares several common elements with other trait models. However, the HEXACO model seems to be unique mainly due to the addition of the Honesty-Humility dimension (Ashton & Lee, 2007).

HEXACO explains more 5-15 percent variance on behaviors (Kajonius & Dâdermana, 2014). The HEXACO personality model is “consistent with the cross-culturally replicated finding of a common six dimensional structure” (Ashton & Lee, 2007, P.150).

Problem

While studies concerning both personality traits and the speaking ability have a long history in first language contexts, studies about personality and the speaking ability in the field of second language acquisition or foreign language learning have failed to demonstrate robust and consistent findings.

SLA studies of personality and language success have often suffered from a number of methodological flaws. The most crucial flaw in many studies has been small sample sizes in proportion to the number of variables being measured. Several studies of foreign language learning have used questionnaires with an almost equal number of items to that of participants in the study. Furthermore, several researchers showed a lack of understanding of the nature of statistical factors, claiming to find “factors” that were defined by three items or fewer (Friday, 2004).

Finally, one of the major problems of EFL learners is that they are not sure about their ability to learn and speak English. The problem gets worse in an EFL setting, in this study Iran, where learners have little, if any, exposure to the target language outside the classroom (Barjesteh, 2012). There are not ample opportunities for the students to practice English and their practice is limited to classroom environment. Although there have been some studies dedicated to
factors affecting Iranian EFL learners' speaking ability (e.g., Araghi, and Jafari Amineh, 2014), there is not any emphasis on students' personality traits as a probable construct contributing to learners' speaking ability. Moreover, there has not been any consideration of learners' gender in this respect. This study was conducted to determine whether personality traits have any relationship with EFL learners’ speaking ability.

**Review of Literature**

As it was said earlier, personality traits of the language learners can affect their language learning. For example, their personality can influence the choice of language learning strategies or classroom participation (Bielska, 2006). Moreover, Speaking in the classroom situation is affected by personality types of the language learners (Lestari, Sada& Suhartono, 2015; Rostami & Rohani Ravari, 2012). In addition, it was explained earlier that one of the models of personality traits is the Big five model consisting of five personality dimensions: agreeableness, conscientiousness, extraversion, neuroticism, and openness. However, Big Five model has been on some grounds which are explained below.

Paunonen, Haddock, Forsterling, & Keinonen (2003) stated that Big five model doesn't explain other domains of personality, such as religiosity, etc.

Block (2010) summarized some of the critique of the Big Five model in terms of:

- the model's inappropriateness for studying early childhood.
- the use of factor analysis as the exclusive paradigm for conceptualizing personality.
- the continuing non-consensual understandings of the five-factors.

Therefore, HEXACO personality model was propose to classify the personality types of the individuals in 6 dimensions.

Research on the role of personality in the learning process has increased rapidly especially in the last 20 years (Sadeghi, Kasim, Tan, & Abdullah, 2012; Threeton & Walter, 2009). For example, Lestari, Sada& Suhartono (2015) investigated the probable roles of extrovert-introvert personality in the speaking performance of the students. The results revealed a statistically significant difference between the personality types of the participants and the speaking performance. There was also a different learning style between the introvert and extrovert students. Introvert students prefer to study alone while the extroverts prefer to participate and study in group.

Yusef-Hasirchin (2014) investigated the effect of extraversion and introversion on fluent speaking of Iranian EFL students. The results showed that the extravert students outperformed significantly the introvert ones while there was no significant difference between the performance of extravert male students and extravert female students.

Barekat and Tabatabaei (2013) examined the relationship between the Big Five personality traits and Iranian EFL learners’ speaking ability. Findings indicated that only the conscientiousness trait had a significant correlation with the learners’ speaking ability. Moreover, it was found that the conscientiousness trait can act as the best predictor of learners’ speaking ability.

Moghaddas, Gol, and Haqshenas (2013) investigated the relationship between personality traits and Iranian EFL learners’ speaking ability. The findings indicated that there is no relationship between students’ personality traits and their speaking ability.

Rostami and Rohani Ravari (2012) examined the relationship between the Big Five personality traits and English language proficiency of Iranian EFL university students. The results of the study indicated that conscientiousness and openness to experience were positively and neuroticism was negatively related to Language proficiency.
Daele (2005) conducted a study and discovered that extraversion has little effect on oral speech production in terms of fluency, complexity, and accuracy. Moreover, Oya, Manalo, & Greenwood (2004) investigated effects of personality on the oral performance including fluency, accuracy, and complexity components of Japanese speakers of English. They found no significant correlations between extraversion and specific components of participants' oral performance. However, the study found significant correlation between extraversion and participants' 'global impression', which refers to speakers' overall oral performance as judged by interviewers.

It should be mentioned that since HEXACO and its questionnaire are new topics to assess the psychological traits; few studies have been conducted about the individuals’ personality traits and language learning or success using HEXACO questionnaire. Ranjbaran Oskouei and Ramezai (2011) investigated the effect of emotionality and openness to experience on vocabulary learning strategies of Iranian EFL students. The findings showed differences in strategy use indicating that these strategy choices are correlated with the learners' personality type. It was found that there is a positive relation between emotionality and cognitive strategies, and also between emotionality and metacognitive strategies. The results also showed that there is a positive correlation between openness to experience and memory, and social strategies.

**Research question**

Q1. Is there any relationship between the HEXACO personality traits and Iranian EFL learners’ speaking ability?

Q2. Which personality trait can act as a predictor of Iranian EFL learners’ speaking ability?

**Methodology**

**Design**

This research was a descriptive-retrospective study with survey design, in which the relationship between the variables was determined.

**Participants**

The population of this research included all the male and female language learners registered in the language institutes in Amol, Mazandaran Province. Among the language institutes, 8 were selected randomly (four institutes for the female and four for the male language learners). Then, two classes were selected randomly from each institute. Among all the language learners in these eight institutes and classes, 250 learners (125 male and 125 female learners) were selected using a random cluster sampling method. The age of the learners ranged from 14 to 25. The proficiency level of the participants was evaluated earlier by the language teachers of their institutes through OPT, and all of the learners were at the intermediate language proficiency.

**Model of the study**

In this study HEXACO model of personality traits was used. This model is a six-dimensional model of human personality structure. It was developed by Ashton and Lee (2001) based on findings from a series of lexical studies. The six factors of this model include Honesty-Humility (H), Emotionality (E), Extraversion (X), Agreeableness (A), Conscientiousness (C), and Openness to Experience (O). The six dimensions of HEXACO personality traits are provided in the following:
**Honesty-Humility:** Persons with very high scores on the Honesty-Humility scale avoid manipulating others for personal gain, feel little temptation to break rules, are uninterested in lavish wealth and luxuries, and feel no special entitlement to elevated social status.

**Emotionality:** Persons with very high scores on the Emotionality scale experience fear of physical dangers, experience anxiety in response to life's stresses, feel a need for emotional support from others, and feel empathy and sentimental attachments with others.

**Extraversion:** Persons with very high scores on the Extraversion scale feel positively about themselves, feel confident when leading or addressing groups of people, enjoy social gatherings and interactions, and experience positive feelings of enthusiasm and energy.

**Agreeableness (versus Anger):** Persons with very high scores on the Agreeableness scale forgive the wrongs that they suffered, are lenient in judging others, are willing to compromise and cooperate with others, and can easily control their temper.

**Conscientiousness:** Persons with very high scores on the Conscientiousness scale organize their time and their physical surroundings, work in a disciplined way toward their goals, strive for accuracy and perfection in their tasks, and deliberate carefully when making decisions.

**Openness to Experience:** Persons with very high scores on the Openness to Experience scale become absorbed in the beauty of art and nature, are inquisitive about various domains of knowledge, use their imagination freely in everyday life, and take an interest in unusual ideas or people.

Each factor of HEXACO contains four "facets", or narrower personality characteristics. Altruism is also included and represents a blend of the Honesty-Humility, Emotionality, and Agreeableness factor. So, each facet is described as follow:

- **Honesty-Humility (H):** Sincerity, Fairness, Greed Avoidance, Modesty
- **Emotionality (E):** Fearfulness, Anxiety, Dependence, Sentimentality
- **Extraversion (X):** Social Self-Esteem, Social Boldness, Sociability, Liveliness
- **Agreeableness (A):** Forgivingness, Gentleness, Flexibility, Patience
- **Conscientiousness (C):** Organization, Diligence, Perfectionism, Prudence
- **Openness to Experience (O):** Aesthetic Appreciation, Inquisitiveness, Creativity, and Unconventionality

"An important strength of the HEXACO model is its derivation from cross-culturally replicated findings based on analyses of variable sets that are culturally indigenous and representative of the personality domain. But in addition to the close correspondence of the HEXACO framework to the empirically observed structure of personality variation, an advantage of this model is its theoretical interpretability “(Ashton & Lee, 2007, p.155).

**Instruments**

**HEXACO personality inventory-revised**

The HEXACO personality inventory-revised (Ashton & Lee, 2004) was used in this study. This questionnaire consists of 6 factors: Honesty-Humility (H), Emotionality (E), Extraversion (X), Agreeableness (A), Conscientiousness (C), and Openness to Experience (O). It includes 100 items. Each factor contains four "facets, and there are four questions for each facet. An additional 25th narrow facet, called Altruism, is also included and represents a blend of the Honesty-Humility, Emotionality, and Agreeableness factors. Items will be scored on a 5-point Likert scale from strongly disagree to strongly agree (from one to five, respectively). Ashton and Lee (2004) estimated the reliability and validity of HEXACO personality questionnaire through Cronbach’s alpha for each factor: Honesty-Humility: .92, Emotionality: .90, Extraversion: .92, Agreeableness: .89, Conscientiousness: .89, Openness: .90.
Interview

In order to evaluate the speaking ability of the learners, an interview was conducted by three interviewers (the researcher and two trained raters) based on IELTS speaking bands in four areas: 1) Fluency and Coherence 2) Lexical Resource 3) Grammatical Resource 4) Pronunciation. The interview was scored out of 9 in this study. To determine inter-rater reliability, the correlation between the scores obtained from the three raters’ evaluation of the learners’ speaking ability was calculated and was equal to 0.78.

IELTS speaking test was in three parts and lasted 11-14 minutes. In the first part (4-5 minutes), the examiner asked a number of general questions on familiar topics. The learners should be prepared to introduce themselves and talk about themselves and their family. In the second part, learners were given a task card on a particular topic, and this included key points that they should talk about. The students had 1 minute to prepare to speak, and then he/she talked for 1-2 minutes. In the last part, the participants were asked further questions which were connected to the topics discussed in part 2.

Procedures

After selecting the participants of the study, Students were informed that their participation is voluntary, and anonymous instrument were provided for language learners to produce objective and honest responses. Learners were convinced that their answers will in no way jeopardize their status and score.

Participants were asked to fill out the HEXACO questionnaire. Administering the questionnaire lasted three weeks, and immediately an interviewed was conducted to find whether there was any relationship between the personality traits of the subjects and their speaking skill. The interview was like the module of IELTS speaking test; it was 11-14 minutes long and was in three parts. Also, it was interactive and close to a real-life situation. In part 1 of the speaking test students were asked to confirm their identity. Then, general questions on familiar topics were asked. The second section of the speaking test gave learners the opportunity to speak for longer on a topic. Students were given a card that asked them to talk about a person, a place, or an event. The learners had one minute to prepare to talk about the topic on the task card. A pencil and paper was provided for them to make notes. Participants had to talk for 1-2 minutes, and then they were asked one or two questions on the same topic. Part 2 took 3-4 minutes in total. In the third part the learner talked with the examiners about issues related to the topics on the card. This part of the test was designed to give students the opportunity to talk about more abstract issues and ideas. It lasted 4-5 minutes.

Methods of data analysis

In order to answer the research questions, correlation coefficient and multiple regressions with step-wise method using LISREL were run.

Results

Table 1 below shows the descriptive statistics of the variables.

Table 1. Descriptive statistics of the variables
<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Variance</th>
<th>Kurtosis</th>
<th>Skewedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honesty-humility</td>
<td>2/06</td>
<td>4/88</td>
<td>3/40</td>
<td>0/48</td>
<td>0/23</td>
<td>0/038</td>
<td>-0/070</td>
</tr>
<tr>
<td>agreeableness</td>
<td>1/69</td>
<td>4/81</td>
<td>3/07</td>
<td>0/50</td>
<td>0/25</td>
<td>0/323</td>
<td>-0/333</td>
</tr>
<tr>
<td>emotionality</td>
<td>1/88</td>
<td>5/75</td>
<td>3/30</td>
<td>0/51</td>
<td>0/26</td>
<td>0/434</td>
<td>1/422</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>2/31</td>
<td>4/50</td>
<td>3/36</td>
<td>0/43</td>
<td>0/183</td>
<td>0/055</td>
<td>-0/125</td>
</tr>
<tr>
<td>extraversion</td>
<td>2/13</td>
<td>4/94</td>
<td>3/48</td>
<td>0/47</td>
<td>0/233</td>
<td>0/002</td>
<td>0/430</td>
</tr>
<tr>
<td>Openness to experience</td>
<td>1/88</td>
<td>4/75</td>
<td>3/32</td>
<td>0/51</td>
<td>0/262</td>
<td>0/155</td>
<td>0/245</td>
</tr>
<tr>
<td>Altruism</td>
<td>1/50</td>
<td>5</td>
<td>3/74</td>
<td>0/69</td>
<td>0/482</td>
<td>-0/499</td>
<td>0/054</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>4</td>
<td>9</td>
<td>6/81</td>
<td>1/12</td>
<td>1/23</td>
<td>0/078</td>
<td>-0/471</td>
</tr>
<tr>
<td>fluency and coherence</td>
<td>4</td>
<td>9</td>
<td>6/55</td>
<td>1/08</td>
<td>1/16</td>
<td>-0/058</td>
<td>-0/824</td>
</tr>
<tr>
<td>grammatical range and accuracy</td>
<td>4</td>
<td>9</td>
<td>6/78</td>
<td>1/05</td>
<td>1/09</td>
<td>-0/202</td>
<td>-0/563</td>
</tr>
<tr>
<td>lexical resource</td>
<td>4</td>
<td>9</td>
<td>6/77</td>
<td>1/05</td>
<td>1/09</td>
<td>0/037</td>
<td>-0/183</td>
</tr>
<tr>
<td>Speaking</td>
<td>4/50</td>
<td>8/75</td>
<td>6/73</td>
<td>0/94</td>
<td>0/88</td>
<td>0/005</td>
<td>-0/479</td>
</tr>
</tbody>
</table>

Table 1 shows that mean of all the components of HEXACO and speaking were higher than 3. Since items of the questionnaire and speaking questions were scored based on a 5-point and 9-point scale, a mean of more than 3 indicated that the status of the respondents is higher than the mean of the population (i.e. an eligible status) in all the components.

The final model of examining the second research question has been presented in figure 1.
The obtained findings regarding to the assessment of the significance of the data in model is shown in figure 2.

Based on figure 1 and 2, the power of the relationship between HEXACO personality traits and EFL learners' speaking ability is equal to 0.71 indicating an eligible correlation. Also, t-value was calculated and is equal to 11.15 which is larger than 1/96. It showed that the observed correlation is statistically significant.

**Goodness of fit model**
There are several fitness features for assessing the structural model. In this study, the following features have been used for assessing the models: The Chi-square index divided by degrees of freedom ($\chi^2$/df), the root mean square error of approximation (RMSEA), Goodness of fit index (GFI), adjusted Goodness of fit index (AGFI), Normalized Fit Index (NFI), Non Normalized Fit Index (NNFI) and Incremental fit index (IFI).

The normal chi-square index is one of the common indexes to consider the free parameters in calculating fitness indexes, which is calculated by dividing the chi-square into the model’s degrees of freedom. So, the amount ranging between 1 - 3 is optimal. Normal chi-square index was calculated to measure the goodness of the main structural equation model.

$$\frac{\chi^2}{df} = \frac{325/24}{169} = 1.92$$

According to the amount of normal chi-square, it can be concluded that the model has a desirable goodness of fit index. In addition, other goodness of fit indexes are acceptable and shown in table 2.

### Table 2. Goodness of fit indexes of structural model for research hypotheses

<table>
<thead>
<tr>
<th>Goodness indexes</th>
<th>RMSEA</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>NNFI</th>
<th>IFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable amounts</td>
<td>&lt;0.1</td>
<td>&gt;0.9</td>
<td>&gt;0.9</td>
<td>&gt;0.9</td>
<td>&gt;0.9</td>
<td>0-1</td>
</tr>
<tr>
<td>Observed amounts</td>
<td>0.021</td>
<td>0.96</td>
<td>0.93</td>
<td>0.99</td>
<td>0.98</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Since Root Mean Square Error of Approximation is equal to 0.021, and the observed amount of other goodness indexes match the acceptable amount, the model has a desirable goodness of fit index.

Therefore, the first research question is supported, and it can be said that there is a positive relationship between HEXACO personality traits and Iranian EFL learners’ speaking ability.

In order to determine the best predictor of speaking ability, multiple regressions with step-wise method has been used. It should be mentioned that extraversion, conscientiousness and altruism have been entered into the regression equation. The obtained results are presented in table 3 and 4.

### Table 3. The stepwise regression analysis of extraversion, consciousness and altruism

<table>
<thead>
<tr>
<th>Steps</th>
<th>predictors</th>
<th>R</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>extraversion</td>
<td>0.948</td>
<td>0.899</td>
<td>0.899</td>
<td>0.298</td>
</tr>
<tr>
<td>2</td>
<td>Conscientiousness</td>
<td>0.950</td>
<td>0.903</td>
<td>0.902</td>
<td>0.293</td>
</tr>
<tr>
<td>3</td>
<td>Altruism</td>
<td>0.951</td>
<td>0.904</td>
<td>0.903</td>
<td>0.291</td>
</tr>
</tbody>
</table>
The results of table 3 indicate that extraversion can explain 89.9 percent of variance in the speaking ability ($\Delta R^2 = 0.899$), and in the second step, by adding conscientiousness to extraversion one percent of variance in the speaking ability happens ($\Delta R^2 = 0.902$). Finally, adding altruism caused one percent increase in the variance of the speaking ability ($\Delta R^2 = 0.903$).

Extraversion, conscientiousness and altruism could predict 90.3 percent of variance of speaking ability.

### Table 4. Analysis of variance to determine the significance of the regression of extraversion, conscientiousness and altruism

<table>
<thead>
<tr>
<th>Sources of changes</th>
<th>sum of squares</th>
<th>df</th>
<th>mean squares</th>
<th>F-ratio</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>196.35</td>
<td>1</td>
<td>196.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>22.07</td>
<td>248</td>
<td>0.089</td>
<td>2206.73</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>248.42</td>
<td>249</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>197.18</td>
<td>2</td>
<td>98.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>21.24</td>
<td>246</td>
<td>0.086</td>
<td>1146.64</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>248.42</td>
<td>249</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>197.52</td>
<td>3</td>
<td>65.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>1.168</td>
<td>0.061</td>
<td>0.062</td>
<td>3.105</td>
<td>0.002</td>
</tr>
<tr>
<td>Altruism</td>
<td>20.45</td>
<td>246</td>
<td>0.085</td>
<td>774.97</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>248.42</td>
<td>249</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of table 4 show a correlation between extraversion, conscientiousness and altruism, and extraversion, conscientiousness and altruism have the ability to predict the criterion variable (speaking ability).

### Table 5. Results of regression coefficients

<table>
<thead>
<tr>
<th>Models</th>
<th>Sources of changes</th>
<th>unstandardized B</th>
<th>SE</th>
<th>Beta (β)</th>
<th>T- value</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Constant</td>
<td>0.187</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extraversion</td>
<td>-1.882</td>
<td>0.040</td>
<td>0.948</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>46.976</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Constant</td>
<td>-0.236</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extraversion</td>
<td>1.873</td>
<td>0.039</td>
<td>0.943</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>47.417</td>
<td>0.000</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conscientiousness</td>
<td>-1.168</td>
<td>0.061</td>
<td>0.062</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.105</td>
<td>0.002</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Constant</td>
<td>-0.330</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extraversion</td>
<td>1.852</td>
<td>0.041</td>
<td>0.933</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>45.560</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conscientiousness</td>
<td>0.123</td>
<td>0.044</td>
<td>0.056</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.813</td>
<td>0.005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As shown in the table 5, at the first step, the extraversion variable entered in the model and its equation was formulated as follow:

\[ \hat{Y} = a + b_1 x_1 \]

Speaking skill=0.187+ (1.882) × (extraversion)

Based on the finding of table 5, it was revealed that the amount of standardized β for extraversion is equal to 0.948 indicating that extraversion affects speaking ability directly, and extraversion can predict 0.948 variance of the speaking ability.

At the second step, extraversion and conscientiousness were entered in the regression equation and its equation has been formulated as follow:

\[ \hat{Y} = a + b_1 x_1 + b_2 x_2 \]

Speaking skill= -0.236+ (1.873) × (extraversion) + 0.135 (conscientiousness).

Based on the finding of table 5, one can see that the amount of standardized β for conscientiousness is equal to 0/062 indicating that conscientiousness affects the speaking ability directly, and conscientiousness can predict 0/062 variance of the speaking ability.

In the third model, all the related variables such as extraversion, conscientiousness and altruism have been entered in the regression equation, and the equation has been arranged as follow.

\[ \hat{Y} = a + b_1 x_1 + b_2 x_2 + b_3 x_3 \]

Speaking skill= -033+ (1.85)× (extraversion) + 0.123(consciousness) + 0.056(altruism).

Based on the finding of table 5, the amount of standardized β for altruism is equal to 0/041 indicating that altruism affects the speaking ability directly, and altruism can predict 0/041 variance of the speaking ability. So it can be said that among the HEXACO personality traits, extraversion, conscientiousness and altruism are the best predictors of the speaking ability (P≤0/01).

**Discussion**

The results of the study show that the power of relationship between HEXACO personality traits and EFL learners’ speaking ability was equal to 0.71 indicating an eligible correlation. Also, t-value was equal to 11.15 which is larger than 1/96. Moreover, the amounts of all the goodness of fit indexes were acceptable, so the model has a desirable goodness index. Therefore, the first research hypothesis was supported, and it can be said that there is a positive relationship between HEXACO personality traits and Iranian EFL learners’ speaking ability. Moreover, the findings of the study reveal that among the HEXACO personality traits, extraversion, conscientiousness and altruism are the best predictors of speaking ability (P≤0/01). Extraversion, conscientiousness and altruism could predict 90.3 percent of variance of speaking ability.

The findings of this study are in line with several studies (Bouhenika, 2015; Lestari, sada and Suhartono, 2015; Yusef-Hasirchin, 2014; Abdallah, 2014; Rostami and Rohani Ravari, 2012). Also, Molaei (2013) supported the findings of this study revealing that there is a positive and significance relationship between the personality types of the language learners and their speaking ability, and that extraversion and conscientiousness are good predictors of speaking ability. Furthermore, results of Ghapanchi, Hassan Khajavy and Asadpour’s study (2011) support the results of this study. The findings of their study revealed that openness to new experiences,
extroversion, and conscientiousness could predict learners' speaking ability. So, the difference between the results of Ghapanchi, Hassan Khajavy and Asadpour's study and this study is that in this study extraversion, conscientiousness and altruism could also predict the speaking performance of the participants.

The results of this study are also in line with Oz (2014) in some parts. Oz (2014) investigated the relationship between personality traits and the speaking performance in a second language. The results showed that the Big Five factors of extraversion agreeableness, and openness to experience were significant in predicting the speaking performance of the students. It can be understood that extraversion can predict the speaking ability of the language learners. However, in this study, conscientiousness and altruism predicted learners' speaking performance in the second and third step. In addition, the findings of the study are in accordance with the study conducted by Barekat and Tabatabaei (2013) indicating that among the five personality traits the conscientiousness trait can act as the best predictor of learners’ L2 speaking ability.

Another personality factor which had a positive relationship with the learners' speaking ability and predicted it in this study was conscientiousness. Pavičić Takač and Požega (2011) also found a positive relationship between conscientiousness and L2 speaking. Conscientiousness is related to successful academic performance in students. With speaking skills it has a negative correlation. It is argued that low intellectual capacity would tend to lead to high conscientiousness, and vice versa. The rationale underlying the negative relationship between conscientiousness and measures of intelligence is that less able individuals in a competitive educational or work environment may become more conscientious over time as a way of compensating for their relatively low intellectual ability (Moutafi et al., 2002, 2003). These students are organized and generally do their work with full concentration.

This study is not in line with the studies conducted by Souzandehfar, Soozandehfar, Farsi and Sharif, 2014; Moghaddas, Gol, and Haqshenas, 2013. These studies show that there is not any relationship between personality traits and learners' speaking ability. Also, Mirkamali, Azizmohammadi and Maghsoudi (2014) revealed that there is not any relationship between personality traits and the language proficiency of the learners.

According to the studies that are and are not in line with the findings of this study, it can be concluded that there are not consistent results about the correlation between the personality types and language learning generally, and speaking ability specifically. Dörnyei (2005) believed that there are four reasons for inconsistencies in the studies of personality traits and language learning. The reasons are as follow:

1. **Interaction with situation-specific variables**: “personality factors interact with various variables inherent to the social context of the learning situation, which prevents generalized linear associations (such as correlations) from reaching overall significance. Farsides and Woodfield (2003) also believed that the personality–learning relation is to a great extent the function of contextual features (Dörnyei, 2005: 21-22)”.

2. **Need for less simplistic models**: there is the need for a more complex theoretical structure about the relationship of personality types with language learning and there isn’t “a systematic structure from which unerring predictions and explanations can be made” (Aiken, 1999:169; cited in Dörnyei, 2005).

3. **Supertraits or primary traits**: Supertraits are the main factors or dimensions of the personality model. Primary traits are the facets of the supertraits. For example HEXACO personality traits
have six supertraits and twenty four primary traits. Furnham (2003b) and Matthews et al. (2000) believed that it’s better to use the primary traits in the relationship of personality types with language learning, since individuals with the same supertraits may have different primary traits, and some strong correlation between the primary traits and language learning has been obtained.

4. Methodological issues: inconsistencies in the results may be due to methodological limitation such as using different criteria for language learning or success, having different time lapse between the collection of predictor and criterion data and employing convenience samples.

Conclusion
The purpose of the study was to investigate the relationship between HEXACO personality traits and Iranian EFL learners’ speaking ability. The findings of the study showed a positive and significant relationship between HEXACO personality traits and speaking performance of the learners. Moreover, results of the study revealed that extraversion, conscientiousness and altruism could predict 90.3 percent of variance of speaking ability.

Based on the results of the study, one can assert that to improve the speaking ability of the foreign language learners, it's better to pay attention to and promote the extraversion and conscientiousness dimensions of the learners' personality. Second, in order for the learners to have a better accuracy and fluency in their speech, it is useful for the learners to learn some strategies to control their anxiety, or the less anxiety-inducing class environment can be provided by the instructors for the learners to be relaxed in the class. Furthermore, instructors’ expectations about the speaking performance of their students should—to some extent—be changed depending on what they know about the personality characteristics of their students and the relative anxiety-inducing nature of the situations in which the students are required to talk.

References


