

# Attribution Theory and Personality Traits among EFL Learners

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## Abstract

This study was designed to determine whether there is any association between learners' personality traits and their set of attributions in learning English as a foreign language. For this aim, 216 lower intermediate English language learners, 111 of whom were male and 105

female, studying in Shokouh English language institutes took part in the study. They were asked to complete NEO-Five Factor Inventory (NEO-FFI) and Attribution questionnaire (ATFLL). The results of the correlational study indicated a significant relationship between some of personality traits and sub-scales of attribution theory. The results of Regression Analyses also demonstrated that some of personality factors are good predictors of the factors learners attribute their successes or failures to.

**Keywords:** Attribution theory, ATFLL questionnaire, Personality, NEO-Five Factor Inventory (NEO-FFI)

## 1. Introduction

Motivation in language learning is defined as “the combination of effort plus desire to achieve the goal of learning the language plus favorable attitudes toward learning the language” (Gardner, 1985, p. 10). Related to this notion, attribution theory was considered as the dominant concept in motivation, social psychology, and educational psychology in the 1970s. This theory mostly concerns with the explanations people tend to make to explain their perceived successes and failures (Weiner, 1974).

Attribution theory is not just a "scientific conception" but rather a "field of study" which concerns with how laypeople answer their "why" questions such as "why did I fail my exam?" and also the result of "causal beliefs" in their success and failure (Weiner & Craighead, 2010, p.184). Foreign language learners face these "why" questions very often in the process of learning and they try to answer them in different ways. Individuals will view these attributions from different perspectives (Dörnyei, 2003). In other words, each learner with his individual difference, perception, and the context in which he is, relates his learning ability or inability to different factors. The wide varieties of learners' attributions could refer back to their personality type which is specific to each individual, so learners' personality traits may help or hinder the process of their language learning. Furthermore, as Williams and Burden (1997) proposed, in the domain of language learning the investigation of how learners perceive themselves and what effect personal constructs have upon the process of learning is helpful for teachers to help the individuals.

It seems that the relationship between learners' personality traits and their attributional factors has not been examined to date. Therefore, based on the gaps in the previous studies and few numbers of studies that considered attribution theory in the field of language learning, and the importance of this theory (Dörnyei, 2005), what qualities the language learners possess that lead them to attributing to different factors needs to be further established. The present study is an attempt to explore the relationship between attribution theory and personality traits among Iranian EFL learners. Teachers' and learners' lack of awareness of this probable relationship can lead to discouragement of language learners' further perseverance.

## 2. Theoretical Background

### 2.1 Attribution Theory

Attribution theory is a dominant conception in the area of motivation, social psychology, and educational psychology. It has stood the test of time as not only does it have a powerful empirical support, but also it has acted responsively to empirical challenges (Weiner, 2000). This theory was introduced by Heider and developed by other scholars including Kelley, Jones, Davis, and Weiner (Feshbach, Weiner, & Bohart, 1996).

To have a better understanding of the ways people try to make sense of every single event that occurs in their lives, Fritz Heider (1944, 1958) introduced what he called a “naive psychology of the layperson” (as cited in Williams & Burden, 1997, p. 104). The central point of what Heider has developed is how a person perceives the event rather than the event in itself that influences behavior. He considered people as active interpreters of the events

happening in their lives when they try to explain and interpret such events in order to understand the world (Manusov & Spitzberg, 2008). Weiner (1979, 1980, & 1986) played an important role in constructing the attribution theory which mostly concerns with the factors people attribute their failures and successes to in education and other domains (Williams & Burden, 1997). He argued that the reasons to which people ascribe their previous success and failure form their motivation for future attempts (Weiner, 1992, as cited in Dörnyei, 2005).

Weiner (1986) suggested four sets of attributions for people's success and failure in any aspects of life: ability, effort, luck, and task difficulty. The first two factors, ability and effort, are internal factors as they come from inside the person while luck and task difficulty are forms of external attribution. Weiner termed these two notions of internality and externality as *locus of causality* which is one of the main attribution dimensions. The other aspect is called *stability*, that is, if the factor is stable or it may be changed. Later, Weiner introduced a third dimension that he called *controllability* which refers to the elements either within people's control or not.

In a constructivist theory of learning, what the learner does constructs personal meaning (Schumann, 1999). Attribution theory has a constructive perspective in which individuals bring their own meaning to the world thus perception of the world and themselves are personal. With regard to specific event and activity, individuals differ in their attributions and dimensions; therefore, it leads to different outcomes. In other words, attributions are not global but rather situation-specific (Williams & Burden, 1997). According to Oxford (2002), this theory is important, however, it has not been studied sufficiently in the domain of language learning.

In educational psychology, considerable attention has been given to the learners' attributions for their successes and failures, however, little research has been done in foreign language learning context (Williams, Burden, Poulet, & Maun, 2004). Among these studies Pishghadam and Modarresi (2008) constructed and validated a questionnaire to investigate the factors English language learners attribute their successes and failures to. Williams, Burden, Poulet, and Maun (2004) found out about attributions for success and failure in foreign language learning and the effect of gender, age, perceived success, and the specific language that the learners studied. Williams, Burden, and Al-Baharna (2001) investigated learners' attributions of success and failure in learning English by highlighting the role of attribution in learners' motivation and cultural background. Pishghadam and Motakef (2011) examined the attributions of high school students with different majors for their success and failure in learning English as a foreign language. Pishghadam and Zabihi (2011) conducted their research to investigate the relationship between EFL learners' attributions in foreign language learning and their achievement in language classes. Peacock (2010) conducted his study trying to investigate the relationship among attribution, proficiency, gender, and academic discipline. Wu (2011) investigated students' attribution preferences and gender difference in learning English. Williams and Burden (1999) tried to find the underlying factors of learners' attributions, how different individuals construct different attributional factors, and the relationship between learners' proficiency and their attributional patterns. As can be seen attribution theory has been studied in a number of studies, however, it needs to be

further established what qualities the language learners possess that lead them to attributing to certain factors.

## 2.2 Personality

Personality is a complex and diverse field which addresses the basic and fundamental question of "what it means to be a functioning human being" (Feshbach, Weiner, & Bohart, 1996, p.1). An individual could be understood and guided if his personality is identified since it has a strong influence on people's relationships, jobs and their entire lives (Karamana, Dogana, & Cobana, 2010). Psychologists and personality theorists have attempted to define the term *personality*, but they lack agreement as they have different individual perspectives. While some have defined this global concept from a comprehensive point of view, others have restricted themselves to a few aspects of personality and all have their own view of it (Feist & Feist, 2002).

Many psychologists believe that personality could be best understood through examining the individual's traits (Feshbach, Weiner, & Bohart, 1996). Therefore, many methods have been suggested: interviews both in 'structured' and more 'open-ended' forms (Boyle & Barton, 2008, p. 166), inventories or questionnaires, also known as scales, and projective test which is an open-ended way of responding to ambiguous stimuli (Haslam, 2007). In this field there has been a long disagreement and tension between objective and subjective methods of assessing personality. Both approaches, having strengths and weaknesses, have been entangled with each other; therefore, in ideal situation multimethod measurement which is the combination of both is recommended (Boyle, Mathews, & Saklofske, 2008).

In order to discover the basic elements of personality many tests were developed such as Cattell's model (1965), which is based on sixteen factors to investigate universal aspects of personality (Cattell & Mead, 2008) and Eysenck model, which is based on three factors to describe and explain the systematic individual differences (1959) (Feshbach, Weiner & Bohart, 1996; Dörnyei, 2005). In the late 1980s, researchers decided to use a common language so they described personality by a five-factor model which was referred to as the "Big Five" (Mynatt & Doherty, 2002). This model is based on adjectives which describe the personality of an individual. The five components of the Big Five which are referred to as *primary traits* are: Openness to Experience, Conscientiousness, Extraversion-Introversion, Agreeableness, and Neuroticism-Emotional Stability (Dörnyei, 2005).

Personality characteristics and their relationship to success in different activities and tasks has been an interesting area under study in the past half century (Brown, 2007). In this domain many researchers (Busato, Prins, Elshout & Hamaker, 1999; Chamorro-Premuzic & Furnham, 2008; Chamorro-Premuzic, Furnham & Lewis, 2007; Chen & Zhang, 2011; Duff, Boyle, Dunleavy & Ferguson, 2004; Furnham, Monsen & Ahmetoglu, 2009; Karamana, Dogana, & Cobana, 2010; Lee & Klein, 2002; Müller, Palekčić, Beck, & Wanninger, 2006) have studied the relationship between the Big Five Personality Factor Theory and different variables such as personality traits, human resources, risk-taking, psychopathology, cultural diversity, age, gender, and academic achievement.

It could be stated at this point that, although personality factors have been applied to the learning domain and second and foreign language learning, studies have not investigated the probable effect of learners' personality traits on their success and failure and the factors to which they ascribe their failing or succeeding in language learning. The present study, thus, focuses on the relationship between learners' personality types and their set of attributions in learning English as a foreign language.

### 3. Research Questions

As learners' right or wrong attributions play an important role in their future successes or failures and as investigating the effect of personal constructs upon the process of learning a new language has been one of the main concerns of researchers, this study aimed at seeking the relationship between language learners' personality traits and their attributional factors. Therefore, this study was set out to answer the three following questions:

Q1: Is there any significant relationship between EFL learners' attributions and their personality traits?

Q2: Can EFL learners' personality traits predict their attributional factors?

### 4. Method

#### 4.1 Participants

The total population participating in this study included 216 English language learners overall, 111 of whom were male and 105 female whose age varied from 12 to 17 years old. All were Iranian EFL learners studying at Shokouh, a private language institute in Mashhad. For this study lower intermediate students (as they were classified by the authorities of the institute) were chosen as they had quite enough experience in language learning to be able to give their views on the factors that cause their success or failure in their learning process.

#### 4.2 Instruments

Researchers used two instruments to collect the data: NEO-Five Factor Inventory and ATFLQ Questionnaire.

##### 4.2.1 ATFLQ Questionnaire

In order to check learners' attributional factors ATFLQ Questionnaire was used. Developed by Pishghadam and Modarresi (2008), this questionnaire is the only validated instrument designed to investigate the factors to which the learners attribute their successes and failures in the process of learning English as a foreign language. In ATFLQ questionnaire the four factors of ability, effort, luck, and task difficulty, which Weiner (1979) had suggested as the sets of attribution, were given new labels of Emotions, Self-image, Intrinsic Motivation, and Language Policy. The number of items for each factor is as follows: the first factor consists of 9 items, the second factor 11 items, the third factor 6 items, and the fourth factor 4 items. This 30-item questionnaire is in the 5-point Likert-type scale with "strongly agree" at one end and "strongly disagree" at the other and it was written in Persian language. The reported reliability was 0.84 and in this study the reliability of the whole items (i.e. 30 items)

estimated by Cronbach Alpha was 0.80.

#### 4.2.2 NEO-Five Factor Inventory (NEO-FFI)

To find out about the personality traits of learners in this study NEO-Five Factor Inventory (NEO-FFI) was used. According to Cano-Garcia, Padilla-Munoz, and Carrasco-Ortiz (2005) "the personality inventory NEO-FFI is the reduced version of the NEO-PI-R, one of the most frequently used instruments in the evaluation of Big Five Factors, these being basic elements of personality structure" (p. 932). It has 12 items per domains in the form of statements. These statements are either in the first person (for self-report) or in the third person (for observing rating). The overall number of questions to be answered is 60 which are scored according to a Likert-type scale of five points (strongly agree, agree, neutral, disagree and strongly disagree) (McCrae & Costa, 2008). In this study, the Persian adaptation of the NEO-Five Factor Inventory was utilized. The reliability and validity of this 60-item inventory was examined in Iran by Garousi, Mehryar and Ghazi Tabatabayi (2001). Cronbach's  $\alpha$  coefficient was used to examine the reliability of this inventory and the reported alpha was between 0.56 and 0.87. The reliability of NEO-Five Factor Inventory with 60 items as checked in this study was equal to 0.74.

#### 4.3 Procedure

The process of data collection started and ended in August, 2011. Two hundred and sixteen language learners, who were homogenized by the institute as they were studying at certain levels in Shokouh English Language Institutes in Mashhad, were given the two questionnaires (NEO-Five Factor Inventory (1992) and ATFLL questionnaire (2008)). NEO-FFI consists of 60 items and the attribution questionnaire has 30 questions. Both questionnaires were administered in one session. It took about 30 to 40 minutes for the respondents to complete the questionnaires.

After collecting the data, it was entered and processed with SPSS 16 program. First the reliability of both questionnaires was measured. The Pearson product moment formula was used to calculate the correlation between learners' personality traits and attributional factors. Multiple regression analysis was also used to see which personality traits were better predictors of the factors to which learners attributed for their success and failure.

### 5. Results

The first question of this study to be dealt with was whether there was a relationship between learners' personality traits and their attributional factors. Therefore, this relationship was put to test by means of Pearson product moment correlation. The following table shows the result of the correlational analysis.



Table 1. Correlational Analyses/ Personality Traits &amp; Attributional Factors

	Neuroticism	Extraversion	Openness to Experience	Agreeableness	Conscientiousness
Emotions	-.193**	.122	-.028	.173*	.175**
Self-image	-.406**	.253**	.112	.341**	.337**
Intrinsic Motivation	-.102	.214**	.027	.238**	.373**
Language Policy	-.069	.170*	.063	.126	.143*

\*  $p < .05$ , \*\*  $p < .01$

As Table 1 demonstrates, Neuroticism correlated negatively with Emotions ( $r = -.193$ ,  $p \leq .05$ ) and Neuroticism and Self-image ( $r = -.406$ ,  $p \leq .05$ ). There is a moderate correlation between Extraversion and Self-image ( $r = .253$ ,  $p \leq .05$ ), Extraversion and Intrinsic Motivation ( $r = .214$ ,  $p \leq .05$ ), and Extraversion and Language Policy ( $r = .170$ ,  $p \leq .05$ ). Interestingly, Openness to Experience did not correlate with any of the attributional factors. Agreeableness correlated moderately with Emotions ( $r = .173$ ,  $p \leq .05$ ), Self-image ( $r = .341$ ,  $p \leq .05$ ), and Intrinsic Motivation ( $r = .238$ ,  $p \leq .05$ ). It was quite interesting that the only personality type that correlated with all attributional factors was Conscientiousness: Conscientiousness and Emotions ( $r = .175$ ,  $p \leq .05$ ), Conscientiousness and Self-image ( $r = .337$ ,  $p \leq .05$ ), Conscientiousness and Intrinsic Motivation ( $r = .373$ ,  $p \leq .05$ ), and finally Conscientiousness and Language Policy ( $r = .143$ ,  $p \leq .05$ ).

To answer the second research question, regression analysis was run using learners' personality traits as the predictor of their types of attributions.

Table 2. Regression Analyses Predicting Attribution to Emotions

Predictors	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	p	B
Neuroticism	.193	.037	.033	8.238	.005	-.157
Neuroticism Conscientiousness	.245	.060	.051	6.811	.001	-.141 .113

Table 2 shows that Neuroticism can predict about 4% of the variance in Emotions ( $R^2 = .037$ ,  $p < .05$ ). Moreover, Neuroticism and Conscientiousness together can predict about 6% of variance in this attributional factor ( $R^2 = .060$ ,  $p < .05$ ). Therefore, Neuroticism and Conscientiousness can be good predictors for learners' attribution to Emotions.



Table 3. Regression Analyses Predicting Attribution to Self-image

Predictors	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	P	B
Neuroticism	.406	.164	.161	42.129	.000	-.367
Neuroticism Conscientiousness	.497	.247	.240	34.964	.000	-.334 .238
Neuroticism Conscientiousness Extraversion	.511	.261	.250	24.927	.000	-.325 .204 .158

As Table 3 shows, it can be said that Neuroticism accounts for about 16% of the variance in attributing to Self-image ( $R^2 = .164$ ,  $p < .05$ ). Neuroticism and Conscientiousness together can predict about 25% of variance in this attributional factor ( $R^2 = .247$ ,  $p < .05$ ). Moreover, Neuroticism, Conscientiousness and Extraversion can account for 26% in predicting Self-image ( $R^2 = .261$ ,  $p < .05$ ). Neuroticism, Conscientiousness and Extraversion can be good predictors for learners' attributing the outcome of their performances to Self-image.

Table 4. Regression Analyses Predicting Attribution to Intrinsic Motivation

Predictors	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	p	B
Conscientiousness	.373	.139	.135	34.581	.000	.114

Table 4 indicates that Conscientiousness accounts for about 14% of the variance in attributing to Intrinsic Motivation ( $R^2 = .139$ ,  $p < .05$ ). Therefore, it can be predicted that conscientious learners attribute to Intrinsic Motivation.

Table 5. Regression Analyses Predicting Attribution to Language Policy

Predictors	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	p	B
Extraversion	.170	.029	.024	6.396	.012	.084

Table 5 demonstrates that  $R = .170$  and  $R$  Square = .029. It can be said that Extraversion accounts for about 3% of the variance in attributing to Language Policy ( $R^2 = .029$ ,  $p < .05$ ). It can be predicted that extravert language learners attribute to Language Policy.

## 6. Discussion

The major aim of the present study was first to investigate the relationship between EFL learners' attributions and their personality traits and second to see how much EFL learners'

personality traits predict their attributional factors.

With regard to the first aim, the correlational study showed that Emotions correlated positively with Agreeableness and Conscientiousness, while it correlated negatively with Neuroticism. Agreeable learners, who are friendly, cooperative, generous, and kind, as well as conscientious learners who are social, expressive and often experience positive emotions attribute their success or failure in learning to Emotions. The other group is emotionally stable learners, who are calm, relaxed, comfortable, and content. Weiner (2000) suggested that from attributional approach the most common human emotions are happiness, frustration, hope, fear, pride, anger, pity, gratitude, and shame. Learners' attributions to negative emotional factors are problematic as they will continuously expect failure which will result in depression and designation. Self-image is related to all personality factors except for Openness to Experience. There is a close relationship between doing well in learning and having a positive Self-image. This factor measures learners' attitudes towards their own capabilities and sense of competence. Therefore, if learners have negative Self-image, they mostly attribute their failures in learning to stable and uncontrollable factors which has a negative consequence. The positive feelings of personal control must be fostered in those learners to avoid more failures. Intrinsic Motivation correlates with Extraversion, Agreeableness and Conscientiousness. Intrinsically motivated learners tend to work to improve their English rather than to please their teachers by achieving good grades. Therefore, they will have a better chance of future success as they are internally involved and have their own reasons for achieving competence. The last factor of attribution theory, Language Policy, is just related to Extraversion and Conscientiousness. This factor refers to the effect of educational system, the textbooks and teaching methods. Language Policy is an external factor over which the learner does not have control. This stability will lead to pessimism. Interestingly, Conscientiousness correlated with all sub-constructs of attribution theory: Emotions, Self-image, Intrinsic Motivation and Language Policy. On the other hand, none of these four factors correlated with Openness to Experience.

With regard to the second aim, it should be mentioned that the results obtained in Regression Analysis demonstrated that Neuroticism and Conscientiousness could predict learners' attributions to Emotions. Neurotic people are not stable in their emotions and have more negative emotions (Watson, Clark & Harkness, 1994). The results of so many studies showed that Neuroticism could be very disagreeable in work and study (Barrack & Mount, 1993; Chamorro-Premuzic, Furnham & Lewis, 2007; De Fruyt & Mervielde, 1996; Zhang, 2003). Zhang (2003) and Chamorro-Premuzic, Furnham and Lewis (2007) conducted researches which showed that Neurotic students resorted to surface learning approach rather than deep and achieving approaches; therefore, they obtained poor grades in school. These students were externally motivated and Neuroticism caused them to learn the minimum requirements to pass their courses. Therefore, language teachers must be aware of learners' attributions to negative emotions to reduce the probability of future failures. Conscientious learners are systematic, efficient, hardworking, responsible, self disciplined, goal oriented and achievement striving. They devote themselves wholly to work and pursue accomplishments and competence (Costa & McCrae, 2008; Dörnyei, 2005; Whalen & Gates, 2007). This group

of people seems to be quite focused and tends to motivate themselves to continue. They also have tendency to organize themselves as well as environment (Müller, Palekčić, Beck, & Wanninger, 2006). Neuroticism, Extraversion, and Conscientiousness could be good predictors of Self-image. The introversion-extraversion dichotomy is the most researched personality dimension in the field of second language learning. According to International Personality Item Pool (IPIP-NEO) “Extraverts enjoy being with other people, are full of energy and often experience positive emotions” (cited in Whalen & Gates, 2007, p.85). Some studies suggest that Extraversion has a significant role for experiences of competence and success in classrooms (Mayer, 2006 as cited in Müller, Palekčić, Beck, & Wanninger, 2006; Grant & Cambre, 1990). The best prediction of Intrinsic Motivation could be Conscientiousness. Finally, attributing to Language Policy can be best predicted by Extraversion. The results showed that Agreeableness and Openness to Experience could not act as predictors of any attribution factors. Some studies which were carried out in academic domains did not show a relationship between Agreeableness and academic success or motivation (De Fruyt & Mervielde, 1996; Zhang, 2003).

EFL learners have certain perceptions of their learning and these beliefs are under the influence of many factors such as individual differences and specifically personality traits. Therefore, the results of the current study can raise awareness in both language teachers and learners about avoidance of wrong, stable, and uncontrollable attributions which may cause negative attitudes toward learning English. If language learners’ perception of their success and failure in the process of learning is wrong, it will have a direct effect on their future attempts. As Dörnyei (2001) explains “we learn best when we expect success” (p.57). The results of this study can also come in handy for researchers in the process of Attribution Retraining. Learners’ subjective explanations of the result and outcome of their learning play an important role when they start planning their future actions. Therefore, in reattribution process the researchers should consider different factors which have control over these inappropriate attributions to raise the chances of more future success and less repeated failure because of incorrect attitude toward learning. Learners’ personality traits could lead to wrong attributions which might cause depression or determination. As a result, the researchers could offer suggestions to foster positive attitudes for compensation.

Learners’ attribution can be effected by many different factors; therefore, many other studies related to the same topic can be carried out so that factors other than personality traits are taken into account. This study used NEO-FFI to determine learners’ personality traits so other personality questionnaires and scales can be used as their use might yield more significant results. The data of this study were collected from lower intermediate learners aged from 12 to 17. It is recommended that various age groups with different proficiency levels be included in the replications. The same study can be replicated in settings other than language institutes, for example in junior high school, high school, and university. It is suggested that future studies add more variables such as culture, social class, family background, IQ, EQ, and learning styles.

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