

# A Study on Psychological Characteristics of EFL Learners: Predicting Learners' Autonomy through Personality Types

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**ABSTRACT**—*The present research examined the predictability of learner Autonomy through Big-Five personality traits. The participants under study were 150 EFL students, between 19 - 30 years old, at Islamic Azad University of North Tehran, Iran. In order to accomplish the purpose of the study, two instruments were utilized: The learner Autonomy (AU) questionnaire and NEO Five-Factor Inventory (NEO-FFI). The obtained data were analysed through using SPSS software. The results indicated that there is a significant relationship between learners' autonomy and their personality traits. Besides, running multiple regression through forward method showed that extroversion ( $R = .32$ ,  $R^2 = .10$ ) was the best predictor of autonomy and conscientiousness ( $R = .227$ ) showed the least amount of correlation with autonomy. Understanding the relationship between learners' autonomy and their personality traits contributes to the development of more effective teaching and learning methods.*

**Keywords**— *Autonomy, big-five personality traits, effective learning and teaching*

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## 1. INTRODUCTION

According to Scharle and Szabo (2000), autonomy (AU) is the freedom and ability to manage one's own affairs, which contributes to making decisions as well. An autonomous person, according to Paul and Elder (2008), is the one who is not dependant on others and can control his/her thinking. A very apparent reason for fostering autonomy in learners is that teacher may not always be available to guide or instruct. Therefore, according to Nation and Macalister (2010), AU can lead the learners to knowing "how to learn, monitor and be aware of their learning, so that they could become independent learners" (p. 38). Today, autonomy has been considered as one of the main factors in students' success. Therefore, improving this characteristic is crucial in educational process.

### 1.1 Learner Autonomy (AU)

One of the influential factors in learning is learner autonomy. In the domain of teaching and learning, many experts agree to define autonomous learner as one who takes charge of his/her own learning (Holec, 1981). He defined autonomy as "the ability to take charge of one's own learning" (p. 3). According to Little (1991), autonomy is "essentially a matter of the learner's psychological relation to the process and content of learning" (p. 4). Autonomy can also be defined through a discussion of the characteristics that autonomous learners possess. Holec (1981) described an autonomous learner as one who is able to take responsibility for "determining his objectives, defining the contents and progressions, selecting methods and techniques to be used, monitoring the procedure and evaluating what has been acquired" (p. 3). Dam (2000) regarded autonomy in terms of providing learners with a learning atmosphere within the educational system where they are given the possibility to be deliberately involved in their own learning. Nunan (1997) outlined achieving "degrees of autonomy" which range from making students apprised of the learning goals and materials, to making connections between the content of classroom learning and the outside world. Autonomy is a characteristic which encourages the learners to be active participants and managers of their own learning (Broady & Kenning, 1996; Ellis & Sinclair, 1989). Some more studies have been done on AU and some relevant features to it such as the autonomy and language learning ( Little, 1990; 1995; 2003); (Gathercole, 1990); (Pemberton et al., 1996); (Benson, 2007, 2013); (Benson & Voller, 2014); strategies for autonomy (Wenden, 1991); autonomy in language teaching and learning (Gremmo & Riley, 1995); autonomy and motivation (Dickinson, 1995); the role of the teacher in autonomous learning (Voller, 1997); promoting learner autonomy (Cotterall, 2000); the role of autonomy in prosocial behavior (Gagné, 2003).

## **1.2 Big-Five Personality Traits (BFPT)**

Academic success can be strictly influenced by individual differences. Personality is sometimes flexible, and considering the personality of individuals as they enter certain stages of life may predict their educational identity. The learners' personality types are very crucial components that teachers have to take into account if they want to have an outstanding teaching. Personality can be defined in terms of factors that explain behaviour, temperaments, or dispositions (Hogan, Hogan & Roberts, 1996). A brief summary of five dimensions of personality types are as follow:

**Neuroticism** is defined as an enduring tendency to experience negative emotional states (Matthews, Deary & Whiteman, 2003).

**Agreeableness** is a dimension of interpersonal tendencies. Highly agreeable individuals tend to be altruistic, compliant, modest, and trusting, while disagreeable individuals tend to be egocentric, sceptical of others intentions, and very competitive. (Graziano & Eisenberg, 1997)

**Extroversion** is associated with activity, assertiveness, excitement seeking, sociability, and positive emotions. Extroverts are generally energetic, optimistic, and upbeat (Costa & McCrae, 1992).

**Openness to experience** subsumes characteristics such as aesthetic sensitivity, imagination, intellectual curiosity, and independent judgment (Costa & McCrae, 1992). Open individuals tend to be unconventional and willing to question authority and offer new ideas.

**Conscientiousness** is associated with achievement striving, competence, dutifulness, and self-discipline (Costa & McCrae, 1992). High scores in conscientiousness domain are positively related to academic and occupational performance (Schmidt & Hunter, 1998).

Several studies have been done about big-five personality traits such as the effect of personality traits on job performance (Barrick & Mount, 1991); (Judge, Higgins, Thoresen & Barrick, 1999); a research on personality domains (Jang, Livesley & Vernon, 1996); (Gosling, Rentfrow & Swann, 2003); (De Raad, 2000); (Loehlin, McCrae, Costa & John, 1998); (Roccas, Sagiv, Schwartz & Knafo, 2002); (Zhao & Seibert, 2006); the effect of personality traits on academic achievement (O'Connor & Paunonen, 2007); (Komarraju, Karau, Schmeck & Avdic, 2011); (Komarraju, Karau & Schmeck, 2009); differences in personality traits between two opposite genders (Schmitt, Realo, Voracek & Allik, 2008).

## **2. PARTICIPANTS**

One hundred and fifty Iranian EFL learners between 19-30 years old, majoring in English Language Teaching and Literature were randomly selected for the purpose of the study and were given two questionnaires. There were 59% women and 41% men.

## **3. INSTRUMENTS**

### **3.1 Personality Questionnaire**

A questionnaire of personality trait, NEO Five-Factor Inventory (NEO-FFI) was used. This questionnaire measures the five domains of adult personality, containing Neuroticism (N), Extroversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C) which included 60-item form (Costa & McCrae, 1992). Sixty items were rated on a 5-point Likert-scale (1= strongly disagree to 5= strongly agree) and required 15 minutes to be filled out. Internal consistency reliabilities for the NEO-FFI were computed for all the five sub-components. The reliability coefficient ranged from 0.68 (A) to 0.86 (N). Also, test-retest reliabilities ranged from 0.79 (E and O) to 0.89 (N) (Costa & McCrae, 1992).

### **3.2 Autonomy Questionnaire**

To evaluate the participants' level of autonomy, questionnaire of autonomy, developed by Spratt, Humphreys, and Chan (2002), including 52 items was administered. The instrument consisted of four sections. Respondents were required to indicate their answers in 15 minutes in a Likert scale, sequentially assigning values of 1,2,3,4, and 5 to options of "not at all", "a little", "some", "mainly", and "completely". The reliability coefficient of the questionnaire has proved to be 0.82 (Fahim & Behdani, 2011).

## **4. PROCEDURE**

Initial information about the purpose of the study and data collection was given to 150 students of Islamic Azad University of Tehran north branch. After giving the instruction, each participant received a package of research instruments containing the Personality questionnaire and Autonomy questionnaire. The participants were asked to fill in each questionnaire in 15 minutes and return the results.

## 5. RESULTS

### 5.1 Correlation between learner AU and BFPT

The results of the Pearson correlation, Table 1, indicated that there is a significant relationship between learners' degree of autonomy and their five domains of personality ( $p < .05$ ). Among the components of personality, extroversion showed the highest correlation with autonomy ( $R = .325$ ,  $p = .000 < .05$ ) and conscientiousness showed the least amount of correlation with autonomy ( $R = .227$ ). Likewise, neuroticism showed negative correlation with autonomy ( $R = -.289$ ).

**Table 1:** Correlation between Autonomy and Personalities

		<b>autonomy</b>
Neuroticism	Pearson Correlation	-.289**
	Sig. (2-tailed)	.000
	N	150
Extroversion	Pearson Correlation	.325**
	Sig. (2-tailed)	.000
	N	150
Openness to experience	Pearson Correlation	.258**
	Sig. (2-tailed)	.001
	N	150
Agreeableness	Pearson Correlation	.276**
	Sig. (2-tailed)	.001
	N	150
Conscientiousness	Pearson Correlation	.227**
	Sig. (2-tailed)	.005
	N	150

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 5.2 Predictability of AU through BFPT

A multiple regression was run to examine the power of personality traits in predicting autonomy. As displayed in Table 2, extroversion ( $R = .32$ ,  $R^2 = .10$ ) was the best predictor of AU. It predicted 10 percent of AU scores. Openness to experience was the second best predictor, which increased the predictive power to 14 percent ( $R = .38$ ,  $R^2 = .14$ ). The third best predictor, agreeableness increased the predictive power to 17 percent ( $R = .41$ ,  $R^2 = .17$ ). Finally, the last best predictor was neuroticism which increased the predictive power to 19 percent ( $R = .44$ ,  $R^2 = .19$ ). Results of the ANOVA test ( $p < .05$ ) indicated that the regression models at the three abovementioned steps enjoy statistical significance (Table 3).

**Table 2:** Model Summary Autonomy and Personalities

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.325 <sup>1</sup>	.106	.100	20.767
2	.381 <sup>2</sup>	.145	.133	20.377
3	.417 <sup>3</sup>	.174	.157	20.100
4	.442 <sup>4</sup>	.196	.173	19.901

1. Predictors: (Constant), Extroversion

2. Predictors: (Constant), Extroversion, openness to experience

3. Predictors: (Constant), Extroversion, openness to experience, Agreeableness

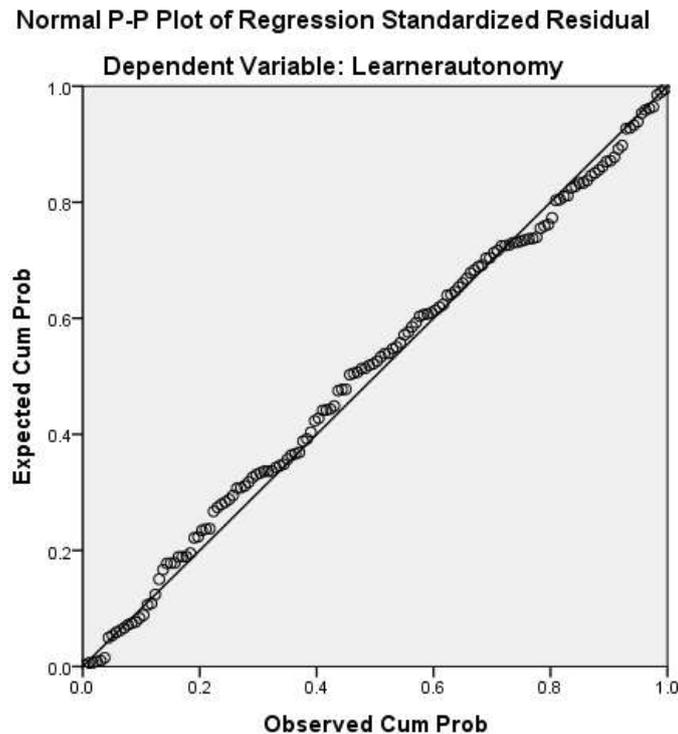
4. Predictors: (Constant), Extroversion, openness to experience, Agreeableness, Neuroticism

**Table 3:** ANOVA test of Significance of Regression Model AU and BFPT

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	7555.626	1	7555.626	17.519	.000 <sup>2</sup>
1 Residual	63830.748	148	431.289		
Total	71386.373	149			
Regression	10348.561	2	5174.280	12.461	.000 <sup>3</sup>
2 Residual	61037.812	147	415.223		
Total	71386.373	149			
Regression	12398.417	3	4132.806	10.229	.000 <sup>4</sup>
3 Residual	58987.956	146	404.027		
Total	71386.373	149			
Regression	13959.290	4	3489.823	8.812	.000 <sup>5</sup>
4 Residual	57427.083	145	396.049		
Total	71386.373	149			

1. Dependent Variable: Learner autonomy
2. Predictors: (Constant), Extroversion
3. Predictors: (Constant), Extroversion, openness to experience
4. Predictors: (Constant), Extroversion, openness to experience, Agreeableness
5. Predictors: (Constant), Extroversion, openness to experience, Agreeableness, Neuroticism

As illustrated in the normal probability plot in Figure 1, scores appear to be reasonably normally distributed. This means that the distribution did not show a significant deviation from normality.



**Figure 1:** Testing Normality Assumptions

## 6. DISCUSSION

This study investigated the relationship among five major traits of personality and the level of autonomy in EFL students of university. This study considered a novel idea with major emphasis on predictability of autonomy. The findings of this study revealed that there was a significant correlation between domains of personality and autonomy of EFL students. The results of the ANOVA test of significance also indicated that extroversion, openness to experience,

and agreeableness were the best predictors of autonomy. The present research is one of the few empirical studies of individual differences and the level of autonomy in educational learning. The data in this study has been obtained from 150 EFL students of university. According to the results, it can be inferred that personality traits can be an important factor in enhancing autonomy toward educational learning.

## 7. CONCLUSION

Understanding the relationship between personality types and autonomy can be one of the many innovative factors in academic success which informs creative teachers what aspects of personality traits can predict and promote learners' autonomy in educational system. Improving autonomy in learners, they can be aware of their own knowledge and monitor their learning process. The result of this study may help teachers and instructors to consider personality differences in fostering autonomy in students. Combination of these two factors can be used as a more intensive predictor of learning. This study is about seeking to create and foster autonomy which can make students take an active role in their own learning and that of their classmates. Therefore, it can be a relevant idea for teachers and instructors to consider the types of students' personality and its relationship to autonomy.

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