

L2 Motivation and Personality as Predictors of the Second Language Proficiency: Role of the Big Five Traits and L2 Motivational Self System

MOTIVATION ET PERSONALITE L2 SONT DES PREDICTEURS DE LA COMPETENCE EN LANGUE SECONDAIRE : ROLES DES GRANDS CINQ TRAITS ET LE SYSTEME D'AUTO-MOTIVATION L2

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Abstract

This study examined the predictability of the L2 proficiency by personality and L2 motivational self system variables among 141 Iranian EFL university students. Participants completed Transparent Bipolar Inventory (Goldberg, 1992) as a personality measure, L2 motivational self system (Papi, 2010), and a self-rated measure of second language proficiency. Regression analyses showed that extroversion and openness to experience accounted for 13% of the variance in L2 proficiency; and ideal L2 self and L2 learning experience accounted for 35% of the variance in L2 proficiency. Further, extroversion, neuroticism, conscientiousness, and openness explained 25% of the variance of in ideal L2 self; neuroticism and conscientiousness explained 24% of the variance in ought-to L2 self; and conscientiousness and extroversion explained 26% of the variance in L2 learning experience. Hierarchical regressions also showed that L2 motivation is a more powerful predictor of L2 proficiency.

Key words: Second language proficiency; Big Five traits; Ideal L2 self; Ought to L2 self; L2 learning experience; Motivation

Résumé

Cette étude a examiné la prévisibilité de la maîtrise de L2 par la personnalité et L2 variables motivationnelles système d'auto parmi les 141 étudiants iraniens universitaires EFL. Les participants ont complété l'inventaire transparent bipolaire (Goldberg, 1992) comme une mesure de personnalité, le système d'auto motivation L2 (Papi, 2010), et une mesure d'auto-évaluation de la compétence en langue seconde. Les analyses de régression ont montré que l'extraversion et l'ouverture à l'expérience représentaient 13% de la variance dans L2 compétences et L2 idéale de soi et expérience d'apprentissage L2 représentaient 35% de la variance dans L2 compétence. En outre, l'extraversion, névrosisme, conscience, et l'ouverture a expliqué 25% de la variance de la L2 moi idéal; névrose et de la conscience a expliqué 24% de la variance devrait à l'auto L2, et la conscience et l'extraversion explique 26% de la variance dans L2 expérience d'apprentissage. Régressions hiérarchiques ont également montré que la motivation L2 est un prédicteur plus puissant de L2 compétence.

Mots clés: Maîtrise de la langue secondaire; Grand cinq traits; Idéal auto L2; Faut-à L2 auto; expérience d'apprentissage L2; Motivation

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INTRODUCTION

Individual differences in second language learning play an important role. Individual differences include factors such as personality, language aptitude, motivation, anxiety, attitude, learning styles, and so force. Dörnyei (2005, p.2) states that individual differences are "the most consistent predictors of learning success". Some studies (Taguchi, 2006; Bernaus, 1995; MacIntyre and Chaos, 1996; Hernandez, 2008; Onwuegbuzie, Bailey and Daley, 2000) have been conducted to find the role of individual differences in second language proficiency. Among different predictors, personality (MacIntyre and Chaos, 1996; Onwuegbuzie et al., 2000) and motivation (Bernaus, 1995) were two significant predictors of language proficiency. However, few studies have examined the role of personality and motivational variables simultaneously. The present study focuses on examining the role of personality and language motivation as predictors of second language proficiency and the relation between personality and L2 motivation.

1. REVIEW OF LITERATURE

1.1 Motivation

Dörnyei (2005) states that motivation "provides the primary impetus to initiate L2 learning and later the driving force to sustain language and often tedious learning process" (p.65). Research on second language motivation has a long history. It started with the Social psychological period by the work of Gardner, Lambert, and their associates that emphasized the role of culture and attitude on second language acquisition. Two important concepts were integrativeness (L2 learners who want to integrate into the target culture) and instrumentality (learners who want to learn an L2 for academic and job purposes). By the emergence of a new period of motivational studies, cognitive situated period, other theories like self-determination and attribution theories became dominant in second language research. Theses theories emphasized concepts like intrinsic and extrinsic motivation, and the role that attribution of past successes and failures plays in shaping motivational tendency (Dörnyei, 2005).

Recently, a new L2 motivational construct has been proposed by Dörnyei (2005). This approach which is called 'L2 motivational self system' is made up of 3 dimensions:

1-Ideal L2 self is "the L2 specific facet of one's ideal self" (Dörnyei, 2005, p.105). If a person wants to become a fluent L2 speaker who communicates with international friends, the imaginary picture of that person's self as a fluent L2 speaker acts as a powerful motivator to learn L2 in order to reduce the discrepancy between actual and ideal selves (Papi, 2010). Thus, it is the language speaker that one would like to become in the future. Taguchi, Magid, & Papi (2009) showed that ideal L2 self is significantly correlated with integrativeness.

2-Ought-to L2 self is the attributes that a person believes ought to possess due to obligations and responsibilities to avoid possible negative outcomes (Dörnyei, 2005). This dimension corresponds to the extrinsic category of Noels (2003) and Ushioda's (2001) taxonomies.

3-L2 learning experience refers to "situation-specific motives related to the immediate learning environment and experiences" (Dörnyei, 2005, p.106). The situation-specific motives refer to the impact of the L2 teacher, the

peer group, the curriculum, and so force. This dimension, in contrast with ideal L2 self and ought-to L2 self, is not related to self image, but is related to engaging successfully with the actual language learning process (Papi, 2010). This dimension corresponds to Noels (2003) and Ushioda's (2001) intrinsic motivation (Dörnyei, 2005).

1.2 Personality

The relation between personality and language learning has been one of the controversial issues. There are different measures of personality. Three of them that have been used largely in L2 research are the *Myers Briggs Type Indicator, (MBTI)* (Myers and Briggs, 1976) *Eysenck Personality Questionnaire, (EPQ)* (Eysenck, 1975), and the *Five Factor Model, (FFM)* (Costa and McCrae, 1992). However, few studies have used the Big Five personality construct in L2 research (Dörnyei, 2005).

Among the different aspects of personality, extraversion/introversion dimension has attracted the attention of many researchers (Ellis, 2008). However, contradictory results have been obtained from studying the relation between language learning and extraversion/ introversion dimension. Kiany (1998) reviewed nine studies that examined the relation between language learning and extraversion/introversion dimension, and found no consistent findings in these studies. Some studies found a positive relation between introversion and language learning, some found a positive relationship between extraversion and language learning, and the rest found no significant relationship between them. Kezwer (1987, p.45) states three reasons for theses discrepancies: "wide variety and dubious validity of personality measures...,the nature of the tasks used to determine second language proficiency, and the structure of classroom interaction". However, openness to experience and conscientiousness have produced consistent results in learning. These two variables have a positive relationship with learning. The other personality trait is neuroticism that has a negative relationship with learning.

Ellis (2008) states that "the research that has investigated personality variables and L2 learning is quite scanty and, in many ways, unsatisfactorily" (p.672). One of the reasons is that the relationship between personality and L2 learning is not direct, and it is mediated by other variables like anxiety, perceived competence, and motivation (Dörnyei, 2005). Therefore, the relation between personality and L2 learning should be considered alongside other variables.

1.3 Personality and Motivation

Krashen (1981) postulated that personality factors are related to motivational variables. By examining the relation of motivation and personality, Lalonde and Gardner (1984) showed that there is a significant relationship between personality factors and L2 motivation. They used Jackson Personality Inventory (Jackson, 1978) and the Personality Research Form (Jackson, 1974) for measuring personality; and Attitude and Motivation Test Battery (Gardner, 1985) for measuring motivation. Their findings showed that motivation is significantly and positively related to Achievement, Breadth of interest, Organization, Responsibility, Self-esteem, and Social desirability; and is significantly and negatively related to impulsivity and aggression.

Also, there are some other studies that have examined the relation between personality and academic motivation. Kaufman, Agars, and Lopez-Wagner (2008) examined the relationship between Big Five personality traits and two types of academic motivation and found that intrinsic motivation was positively and significantly related to extroversion, agreeableness, conscientiousness, and openness to new experiences. Extrinsic motivation was also significantly and positively related to extroversion and neuroticism.

Komarraju, Karau, & Schmeck (2009) also found that intrinsically motivated students were conscientious and open to new experiences; and extrinsically motivated students were conscientious, extroverted, and neurotic.

Therefore, the review of literature shows that motivation and personality are important factors in second language leaning. Furthermore, motivation and personality in general and L2 motivation and personality in particular are related to each other. However, not much attention is paid to these relationships. The purpose of the present study is to examine the role of L2 motivational self system and personality traits as predictors of second language proficiency. It also examines how Big Five personality traits relate L2 motivational self system.

2. RESEARCH QUESTIONS

1- Are Big Five personality traits related to L2 motivational self system variables?

2- Is L2 proficiency related to Big Five personality traits?

3- Is L2 proficiency related to L2 motivational self system variable?

4- Is L2 motivational self system a better predictor of L2 proficiency than Big Five personality traits?

3. METHODS

3.1 Participants

A total of 141 English language and literature students (38 male and 103 female) from Ferdowsi University of Mashhad took part in this study. Participants' age ranged from 18 to 35 (mean=21.29, SD=4.12). Participants were accepted through the University Entrance Exam for studying in this major.

3.2 Materials

3.2.1 Measures of L2 Motivational Self System

L2 motivational self system was assessed by 18 items from Papi (2010) on a six-point scale. It measures three subscales based on Dörnyei's (2003) guidelines: a) ideal L2 self; b) ought-to L2 self; and c) L2 learning experience. Each subscale contains six items. The internal consistency of theses scales for ideal L2 self, ought-to L2 self, and L2 learning experience were α =.72, α =.68, and α =.71, respectively.

3.2.2 Personality

Personality was assessed through Goldberg's (1992) Transparent Bipolar Inventory on a nine-point scale. This questionnaire is a 35-item measure of Big Five Personality Traits. The internal consistencies of these scales were: extraversion (α =.70), agreeableness (α =.71), conscientiousness (α =.67), neuroticism (α =.76), and openness to experience (α =.69).

3.2.3 English Language Proficiency

English language proficiency was measured by 4 items, self-rating of listening, speaking, reading, and writing skills on a five-point scale. Self- rating of language proficiency is widely used by many researchers (Yu & Shen, 2011; Ying & Liese, 1991; Duan, 2006; Smith & Baldauf Jr., 1983).

3.2.4 Procedure

The researchers talked to five university professors and asked for their cooperation in giving the questionnaires to their students during the class time. All of them permitted the researchers to use their class time for distributing the questionnaires. The questionnaires were completed in one session. The internal consistency of this scale was α =.75.

4. Results

4.1 Descriptive Statistics and Correlations

Descriptive statistics and correlations between all variables are presented in Table1.

	М	SD	1	2	3	4	5	6	7	8	9
1-Ideal L2 self	28.86	4.63	1								
2-Ought-to L2 self	16.58	6.75	.08	1							
3-L2 experience	26.04	5.96	.66**	.10	1						
4-Extroversion	42.45	10.35	.37**	.11	.45**	1					
5-Neuroticism	35.09	10.83	11	.31**	.06	.09	1				
6-Agreeableness	49.36	9.72	.17*	.20*	.22**	.32**	.18*	1			
7-Conscientiousness	47.24	7.39	.41**	.41**	.46**	.49**	.07	.39**	1		
8-Openness	48.35	8.22	.34**	.24**	.31**	.29**	.18*	.34**	.38**	1	
9-Proficiency	12.08	3.22	.58**	.10	.51**	.31**	02	.19*	.32**	.28**	1

Table1			
Descriptive Statistics and	Correlations	Between	Variables

* P<0.05, **p<0.01

As shown in Table 1, ideal L2 self was positively and significantly related to extroversion(r=.37, p<.01), agreeableness(r=.17, p<.1), conscientiousness(r=.41, p<.01), and openness to experience(r=.34, p<.01). However, no significant negative relationship was found between ideal L2 self and neuroticism.

Ought-to L2 self was positively and significantly related to neuroticism(r=.31, p<.01) and conscientiousness (r=.41, p<.01). However, no significant relationship was found between ought-to L2 self and extroversion.

L2 learning experience was significantly and positively related to extroversion(r=.45, p<.01), agreeableness(r=.22, p<.01), conscientiousness(r=.46, p<.01), and openness to experience(r=.31, p<.01). No significant relationship was found between L2 learning experience and neuroticism.

Proficiency was positively and significantly related to ideal L2 self(r=.58, p<.01), L2 learning experience(r=.51, p<.01), extroversion(r=.31, p<.01), agreeableness(r=.19, p<.1), conscientiousness(r=.32, p<.01), and openness to experience (r=.28, p<.01). No significant relationship was found between proficiency and neuroticism.

4.2 Regression Analyses

The first regression was performed to test the predictability of L2 motivation (ideal L2 self, ought-to L2 self, and L2 learning experience) by personality factors. The results are presented in Table 2.

As can be seen, personality accounted for 25% of the variance in ideal L2 self [F (5,135) = 10.50, p<.001, Adj. R²=.25]. Openness to experience (β =.23, t=2.84, p<.01), conscientiousness (β =.25, t=2.79, p<.01), extroversion (β =.21, t=2.49, p<.05), and neuroticism (negatively, β = -.18, t= -2.49, p<.05) were the four significant predictors of the ideal L2 self.

For ought-to L2 self, personality explained 24% of the variance [F (5,135) =10.28, p<.001, Adj. R^2 =.24]. Neuroticism (β =.28, t=3.81, p<.001) and conscientiousness (β =.45, t=4.97, p<.001) were the two significant predictors of ought-to L2 self.

Personality also accounted for 26% of the variance in L2 learning experience [F (5,135) =11.31, p<.001, Adj. R²=.26]. Extroversion (β =.27, t=3.24, p<.01) and conscientiousness (β =.28, t=3.22, p<.01) were the two significant predictors of the L2 learning experience.

Table2Multiple Regressions with Personality Variables asPredictors of the L2 Motivational Self System

Factor	Predictor	Beta	t
Ideal L2 self	Extroversion Neuroticism Agreeab Conscientiousness Openness F (5,135) Adj R ²	.21 18 04 .25 .23 10.50*** .25	2.49* -2.49* 53 2.79** 2.84**
Ought-to L2 self	Extroversion Neuroticism Agreeableness Conscientiousness Openness F (5,135) Adj R ²	16 .28 .001 .45 .06 10.28*** .24	-1.88 3.81*** .01 4.97*** .06
L2 learning experience	Extroversion Neuroticism Agreeableness Conscientiousness Openness F (5,135) Adj R ²	.27 006 02 .28 .13 11.31*** .26	3.24** 08 -2.66 3.22** 1.62

* P<0.05, **p<0.01, ***p<0.001

A second regression was performed to examine the predictability of the second language proficiency by personality factors (Table 3). As can be seen, personality accounted for 13% of the variance in second language proficiency [F (5,135) = 5.26, p <.001, Adj. R²=.13]. Openness to experience (β =.17, t=2.00, p<.05) and extroversion (β =.19, t=2.14, p<.05) were the two significant predictors of the second language proficiency.

Table3Regression Model with Personality VariablesPredictors of the L2 Proficiency	as
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Factor	Predictor	Beta	t
Proficiency	Extroversion Neuroticism Agreeableness Conscientiousness Openness F (5,135) Adj R ²	.19 .03 .13 09 .17 5.26*** .13	2.14* .39 1.35 -1.11 2.00*

* P<0.05, **p<0.01, ***p<0.001

The third regression was performed to test the predictability of the second language proficiency by L2 motivation (Table4). L2 motivational self system accounted for 35% of the variance in second language proficiency [F (3,137) = 26.20, p <.001, Adj. R²=.35]. Ideal L2 self (β =.43, t=4.75, p<.001) and L2 learning experience (β =.21, t=2.29, p<.005) were the two significant predictors of the second language proficiency.

Finally, a hierarchical regression was performed to test the predictability of the second language proficiency by personality and L2 motivation (Table 5). Personality variables were entered at step1 as covariates and L2 motivational variables at step2. As can be seen, by adding L2 motivational variables, 13% variance of personality variables in second language proficiency increased to 33%. In other words, L2 motivational variables added 20% variance in second language proficiency beyond that of personality.

Table4

Regression Model with L2 Motivational Self System Variables as Predictors of the L2 Proficiency

Factor	Predictor	Beta	t
Proficiency	Ideal L2 self Ought-to L2 self L2 learning experience F (3,137) Adj R ²	.43 .02 .21 26.20*** .35	4.75*** .30 2.29*

* P<0.05, **p<0.01, ***p<0.001

Table5

Hierarchical Regression with Personality and L2 Motivational Self System Variables as Predictors of L2 Proficiency

	Beta	t
Extroversion	.19	2.1*
Neuroticism	09	-1.11
Agreeableness	.03	.39
Conscientiousness	.13	1.35
Openness	.17	2.00*
	F(5,135)=5.26***	Adj. $R^2 = .13$
Extroversion	.06	.70
Neuroticism	01	21
Agreeableness	.05	.74

To be continued

Continued

Beta	t
03	35 .68
.41	4.20***
.18	.19 1.89*** Adj R ² =.33
	03 .05 .41 .01

* P<0.05, **p<0.01, ***p<0.001

4.3 Mediation Analyses

Following Ellis (2008) and Dörnyei (2005) that using correlational approach for examining the relationship between personality and L2 learning is naïve, and the effect of personality may be mediated by other variables like motivation, researcher used SEM approach for testing the mediated effects of the L2 motivation.

According to Holmbeck (1997), for testing the effect of the mediated variables some conditions should be met: (1) the path from independent variable to dependent variable and the path from independent variable to mediated variable should show an adequate fit; (2) the path from mediated variable to dependent variable should also show an adequate fit; (3) assessing the fit of the independent variable -> mediated variable ->dependent variable when: a) the *independent variable ->dependent variable* path is constrained to zero, and b) the *independent variable* ->dependent variable path is not constrained; (4) if addition of the *independent variable* -> *dependent variable* path to the constrained model does not improve the fit, a meditational effect exists. Improvement in fit is assessed with a chi-square test. It should be noted that a lower chisquare value shows a better fit to the data.

After considering the first two conditions, two models (including openness to experience, L2 learning experience, and ideal L2 self) were specified for SEM meditational analyses, the results of which are presented in Figures1-2 in Appendix.

As Figures1-2 show, all models showed an adequate fit to the data and after considering the third and fourth conditions, it was shown that addition of the path from openness to experience to second language proficiency does not improve the fit (chi-square values are reported in Appendix). Therefore, ideal L2 self and L2 learning experience mediate the relationship between personality (openness to experience) and second language proficiency.

DISCUSSION

This study examined the relationships between personality, L2 motivational self system, and second language proficiency. It also attempted to examine the predictability of the L2 motivational self system and second language proficiency by personality variables.

The results of this study showed that personality is

related to L2 motivation and second language proficiency. L2 motivation was also strongly related to second language proficiency.

Regression analyses clarified the relation of these variables in a more systematic manner. First, personality variables accounted for 25% of the variance in ideal L2 self. Ideal L2 self was positively related to openness, extroversion, and conscientiousness, and was negatively related to neuroticism. These results suggest that those students who learn English to become a competent L2 speaker (ideal L2 self) are open to new experiences, extroverted, and conscientious. These students are not neurotic and self-conscious, and in contrast they are relaxed and self-satisfied when they are learning English.

Second, personality variables accounted for 24% of the variance in ought-to L2 self. Ought-to L2 self was positively related to neuroticism and conscientiousness. In other words, students who learn English for the obligations and responsibilities to avoid possible negative outcomes experience some degrees of anxiety and are responsible and self-organized.

Third, personality variables accounted for 26% of the variance in L2 learning experience. Students who were more extroverted and conscientious scored higher on L2 learning experience. It suggests that students who learn English for the sake of it and because they enjoy learning English, are sociable and feel responsible for their English learning.

Personality was a significant predictor of the second language proficiency, too. It accounted for 13% of the variance in second language proficiency. The results showed that students who were more extroverted and open to new experiences were more proficient language learners. Previous studies (Eysenck & Cookson, 1969; Furnham, Chamorro-Premuzic and McDougall, 2003) have shown that introverts have an advantage over extroverts with respect to learning in general, because they spend more time studying alone than extroverts. However, because second language learning involves tasks and activities that go beyond learning-by-doing (Skehan, 1989), extroverts are much better than introverts.

L2 motivational self system was also a significant predictor of the second language proficiency and accounted for 35% of the variance in it. It shows that students with different reasons for learning English are different in their level of language proficiency. Students who learn English to have an ideal self-image expressing the wish to become a competent L2 speaker and students who learn English for intrinsic reasons, like enjoying and positive attitudes toward learning English, are more proficient than those students who learn English due to the "duties and obligations imposed by friends, parents and other authoritative figures" (Dörnyei, 2009, p.32).

The predictability of the second language proficiency by L2 motivation and personality variables was also measured. The results showed that L2 motivation outperform the personality variables in explaining second language proficiency. In other words, what causes difference in second language proficiency is more due to students' reasons for learning English than their personality variables. The implication of this finding is that even if language learners are not extroverted or open to new experiences (as two of the personality predictors of the second language proficiency), second language learners' proficiency can be improved by motivating students in the right way.

The results of the meditational analyses also showed that L2 motivation mediates the relationship between personality and second language proficiency. Ideal L2 self and L2 learning experience mediated the relationship between openness and second language proficiency. Hence, it implies that language learners who are curious may be more proficient if their reasons for learning English are to become a competent L2 speaker or to enjoy learning English.

This study showed that there is a relationship between personality traits, L2 motivational self system, and second language proficiency. The results suggested that language learners with various personality characteristics have different reasons for learning English. Therefore, language learners need different incentives to learn a second language. It is implied that second language teachers should be aware that students are not homogenous in their L2 motivation or in their personalities. Therefore, second language teachers play an important role in providing the appropriate incentives for the language learners by devising teaching, planning and learning strategies that are suitable for individual needs (Clark and Schroth, 2009). It means second language teachers should use a variety of tasks and activities for different preferences of the students.

As was shown, ideal L2 self type of motivation was the most significant predictor of the second language proficiency. Therefore, by activating ideal L2 self, second language learners' proficiency will improve. Here again, second language teachers play an integrative role in activating language learners' ideal L2 self. Dörnyei (2009) explain that various classroom activities like warmers, icebreakers, and various communicative tasks like playing music and video, and engaging in cultural activities can activate the ideal L2 self.

There were some limitations in this study that can be addressed in future research. First, students were asked to show their second language proficiency on a self-reported scale. Although self-reported language proficiency is used by many researchers, subjects may underestimate or overestimate their true ability. Future researchers can assess students' actual L2 proficiency by using standard English language tests, like TOEFL or IELTS. Second, as Ellis (2008) and Brown (2005) argued, other individual difference variables like learners' beliefs, situational anxiety, and learning styles also mediate the relationship between language learning and personality. Therefore, future research can employ these individual differences. Finally, participants' age and sex were not controlled in the present study. Boys and girls may have different reasons for attending at college, and future research can shed light on it.

In conclusion, the present study takes a great step in our understanding of the relationship between personality variables, L2 motivation, and second language proficiency. It provides a good foundation for second language teachers and researchers to consider personality and motivation in improving the second language proficiency.

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L2 EXPERIENCE

Appendix

L2 Motivation as a Mediator of the Relationship Between Personality and L2 Proficiency



CONSCIENTIOUSNESS .31***(reduced to .09 with L2 learning experience)

Figure 1 Ideal L2 Self as a Mediator of the Relationship Between Conscientiousness and L2 Proficiency

When conscientiousness -> proficiency path is constrained to zero: Chi-square=0.13

When conscientiousness -> proficiency path is not constrained: Chi-square=1.23

Figure 2 L2 Learning Experience as a Mediator of the Relationship Between Conscientiousness and L2 Proficiency

When conscientiousness -> proficiency path is constrained to zero: Chi-square=0.09

When conscientiousness -> proficiency path is not constrained: Chi-square=1.23