

# Psychological Characteristics of English Language Teachers: On the Relationship among Big Five Personality Traits and Teacher Efficacy Beliefs

Hossein Navidnia

## Abstract

*The effects of teacher personality and efficacy beliefs on practitioners' performance in the classroom, and student achievement have been well documented. However, little is known about the relationship between teachers' Big Five personality traits and their beliefs about teaching efficacy. The purpose of this study was to examine the relationship between English language teachers' personality, as measured within the framework of Five-Factor personality Model (FFM) by NEO Five Factor Inventory (NEO-FFI), and teacher efficacy beliefs, measured by Teachers' Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001). Participants of the study included 168 English language teachers who were teaching to senior and junior high school students. Data obtained from the above mentioned instruments were analyzed through stepwise multiple regression. Results of the study indicated that two of the NEO-FFM variables, extroversion and conscientiousness, significantly predicted teacher efficacy beliefs. The results also demonstrated that regarding the facets of teacher efficacy beliefs, extroversion was the most significant predictor for classroom management and conscientiousness came out to be the most significant predictor for instructional strategies as well as student engagement. The conclusion and the pedagogical implications of the study are discussed in detail.*

**Keywords:** teacher personality traits, teacher efficacy, Five-Factor Model of personality, NEO Personality Inventory, English language teacher

## Introduction

Classroom teachers have a very important role in the success or failure of each educational system. According to Sanders and Horn (1998), the major

factor influencing students' academic gain is teacher effectiveness, and teacher effects on students' achievement are "additive and cumulative with little evidence that subsequent effective teachers can offset the effects of ineffective ones" (p. 32). Sanders and Horn also maintained that "regardless of race, students who are assigned disproportionately to ineffective teachers will be severely academically handicapped relative to students with other teacher assignment patterns" (p. 254). Similarly, the results of many quantitative studies over the past 30 years indicate that students enrolled in some classrooms learn more than those enrolled in other classrooms, and the explanation favored by most researchers for this difference is that some teachers are more effective than others (Miller, Murnane, & Willett, 2008).

Across professions, personality characteristics are shown to affect job performance (Barrick & Mount, 1991; Lounsbury, Park, Sundstorm, Williamson, & Pemberton, 2004; Rothstein & Goffin, 2006; Ones, Dilchert, Viswesraran, & Judge, 2007), and teaching does not seem to be an exception. Personality is related to teachers' teaching style (Zhang, 2007), job satisfaction (Jacquez, 2004), burnout (Mazur & Lynch, 1989; Cano-Garsia, Padilla-Munoz, & Carrasca-Oritz, 2004; Spaulding, 2007), teaching quality (Emmerich, Roch, & Trapani, 2006) as well as teacher performance and student achievement (Bowers, 2006).

Therefore, teachers' personality can be related at a larger scale to educational outcomes. Tschannen-Moran and Hoy (2001) asserted that teacher efficacy is "powerfully related to many meaningful educational outcomes such as teacher persistence, enthusiasm, commitment and instructional behavior, as well as student outcomes such as achievement, motivation, and self efficacy belief" (p. 783). Furthermore, discussing the significant role of school environment as an element in cultivating students' cognitive self efficacy, Bandura (1994) maintained that "the task of creating learning environment conducive to the development of cognitive skills rests heavily on the talents and self efficacy of teachers" (p. 11). Teachers who have a strong sense of efficacy about their capabilities can motivate their students and improve their cognitive development. In contrast, those who have a low sense of efficacy favor a "custodial orientation that relies heavily on negative sanctions to get students to study" (p. 11).

## **Five Factor Model of Personality**

Personality can be defined as "the relatively enduring style of thinking, feeling, and acting that characterizes an individual" (Costa, McCrae, & Kay,

1995, p. 124). The attempt to systematize the field of personality and to identify the major personality characteristics started by the works of Allport and Odbert by means of a lexical approach to personality (Winter & Barenbaum, 1999). The rationale for lexical studies of personality rests on the assumption that “the most meaningful personality attributes tend to become encoded in language as single word description” (Saucier, Hampson, & Goldberg, 2000, p. 1).

Based on this assumption, Allport and Odbert (1936, cited in Saucier, Hampson, & Goldberg, 2000 ) extracted from an English dictionary almost 18000 words that could be used to describe individual differences. From this list, as many as 4500 words were assigned by Allport and Odbert as likely personality traits, the remainder classified as temporary words or activities, social efforts, physical or medical terms and predominantly evaluations. This work was very influential, serving as the “primary starting point of language-based personality trait research for the last sixty years” (Howard & Howard, 1995, p. 3).

Banking on Allport and Odbert’s idea, many other researchers have tried to reduce the number of this list of traits. Cattell (1945, cited in John & Srivastava, 1999), for example, used both semantic and empirical clustering procedures as well as his own review of the literature to eliminate more than 99% of the Allport and Odbert’s list and reduced the 4500 trait terms to 35 variables.

As John and Srivastava (1999) maintain, following Cattell’s work, other researchers such as Tupes and Christal in 1961 embarked on using similar data gathering and analysis techniques to reduce dictionary-based personality taxonomies into smaller clusters of personality dimensions. As John and Srivastava put it, they reanalyzed correlational matrices from eight different samples and found “five relatively strong and recurrent factors and nothing more of any consequence” (p. 105). These factors were typically labeled as:

1. Extroversion or surgency (talkative, assertive, energetic)
2. Agreeableness (good-natured, cooperative, trustful)
3. Conscientiousness (orderly, responsible, dependable)
4. Emotional stability versus Neuroticism (calm, not neurotic, not easily upset)

5. Intellect or openness (intellectual, imaginative, independent-minded) (John & Srivastava, 1999, p. 105).

In the late 1950s, Warren Norman at the University of Michigan learned of Tupes and Christal's work (Howard & Howard, 1995), and in 1963, he replicated their study and confirmed the five factor structure for trait taxonomy. The structure became known as Norman's Big Five, while it should be called Tupes and Christal's Big Five (Howard & Howard, 1995).

In sum, the Five Factor Model (FFM) of personality is "an empirical generalization about the covariation of personality traits" (McCrae & Costa, 1999, p. 139). In other words, "if a large number of rating scales is used and if the scope of the scales is very broad, the domain of personality description is almost completely accounted by five robust factors" (Digma & Inouye, 1986, cited in McCrae & Costa, 1999, p. 139).

## **Universality and Cross-cultural Studies of Big Five**

In 1997, McCrae and Costa reported data from different countries including Portugal, Germany, Japan, and South Korea supporting the universality of FFM structure (McCrae, 2004). Similarly, as McCrae puts it "subsequent studies in Iceland, Estonia, Malaysia, the Philippines, Turkey, Russia, Zimbabwe, and many other cultures have continued to support this hypothesis" (p. 7).

A controversial comment put forward by McCrae (2004) is that "culture does not affect personality, but that the personality traits, in the aggregate, may in some circumstances affect culture" (p.5). Moreover, he maintains that "traits are not affected by culture, but they are instead shaped solely by biology, which is the common heritage of the human species. In consequence, their characteristic properties ought to be universal" (p. 7). Similarly, as Plomin and Caspi (1999, cited in Piedmont & Aycock, 2007) put it "behavioral genetic research has documented that between 40% and 60% of the variance of these constructs is genetically determined" (p. 1060).

In spite of these observations, there are still controversies about the impact of genetics and environment on personality. According to Piedmont and Aycock (2007), there is a "complex interaction between nature and nurture, and no aspect of human behavior can be understood solely in terms of just one of these perspectives" (p. 1060). However, some researchers in the field of behavioral genetics believe that "the rate between what is known

and what is not yet known about genetics and personality is very small” (Plomin & Caspi, 1999, cited in Piedmont & Aycock, 2007, p. 1060).

## **Personality as a Factor in Teaching**

Personality construct and testing has been “demonstrated to be useful for explaining and predicting attitudes, behaviors, performance, and outcomes in organizational setting” (Ones, Dilchert, Viswesraran, & Judge, 2007, p. 995), making it a favorite research topic over the past 80 years. Referring to the study of Hsu (2004), Rothstein and Goffin (2006) maintained that personality testing is “a \$400 million industry in the United States and it is growing at the average of 10% a year” (p. 156).

Research on effective teaching and personality characteristics which support quality teaching, is not new and has been an “integral part of the academic milieu for over 40 years” (Rushton, Morgan, & Richard, 2007, p. 433). As Fairhurst and Fairhurst (1995) put it “knowing ones temperament and personality is important for teachers so that they can recognize the differences between their personality types and their students’ learning styles” (cited in Rushton et al., 2007, p. 434).

Past personality research has investigated the relationship of personality with different aspects of teaching. Zhang (2007), for example, investigated the relationship between teacher personality traits and their teaching styles among 157 Chinese high school teachers. The results indicated that teachers’ personality as measured by NEO inventory significantly contributed to teachers’ teaching styles.

Using NEO Personality Inventory Revised (NEO-PIR), Cano-Garcia et al. (2005), investigated the role of personality and contextual variables in teacher burnout. The results confirmed the important role of personality structure in combination with some of the selected contextual variables, both in the description and prediction of teacher burnout.

Furthermore, Clayson and Sheffet (2006) investigated the relationship between teacher personality and the student evaluation of teaching. In their findings, students’ perception of the instructor personality and the evaluation of instruction were found to be significantly related.

## **Teacher Efficacy**

The notion of teacher efficacy is one of the offshoots of Bandura's Social Cognitive Theory. Bandura (1994) defines perceived self efficacy as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (p. 2). Also, he believes that self efficacy determines how people feel, think, motivate themselves, and behave through cognitive, motivational, affective, and selection processes. In 1999, Bandura observed that efficacy beliefs form the foundation of human agency since people who do not believe that they can produce desired results by their actions will have little incentive to act or to persevere in the face of difficulties.

The construct of self efficacy has important implications for the teaching profession. Efficacy in teaching is teacher's belief about his/her capabilities to bring about positive effects on students learning (Tschannen-Moran & Hoy, 2001). Teacher efficacy is comprised of two dimensions: Personal Teacher Efficacy (PTE) which refers to a teacher's belief, as an individual, that s/he can bring about positive effects on students' learning, while General Teacher Efficacy (GTE) refers to teachers' belief that teaching in general can bring about student change (Chacon, 2005). The notion of teacher efficacy has proved to be "powerfully related to many meaningful educational outcomes such as teacher persistence, enthusiasm, commitment and instructional behavior, as well as student outcomes such as achievement, motivation, and self efficacy belief" (Tschannen-Moran & Hoy, 2001, p. 783).

There are four sources of efficacy, according to Bandura (1977, 1994, 1999): mastery experience, vicarious experience, verbal persuasion, and physiological and affective states. The most important element in raising efficacy expectations is mastery experiences, which refers to previous successful experiences in a domain. Vicarious experience, on the other hand, is observing the successful performance of others and coming to positive conclusions about one's own success. Verbal (sometimes also known as social) persuasion is simply 'pep talk', or positive verbal feedback from a significant other, such as a mentor, or professor. Physiological states deal with feelings of fatigue or anxiety that can affect one's (perception) of performance. In the present study, it is hypothesized that personality is also an element that can be related to teachers' perceived sense of self-efficacy.

While the effects of teacher personality and efficacy on practitioners' performance in the classroom and students' achievement have been well documented, few studies in the ELT literature have investigated the relationship between these two important constructs. Moreover, the present

literature search found no studies which investigated the relationship between FFM and teacher efficacy among English language teachers. Therefore, the present study intended to make up for this neglect by investigating the relationship among the Big Five personality traits and three facets of teacher efficacy. Thus, the following hypothesis was stated:

H<sub>0</sub>: The five personality traits do not significantly predict the three teacher efficacy facets.

Moreover, the researcher intended to investigate on which of the five factors of personality and which of the three facets of teacher efficacy the teachers would rate themselves higher. Furthermore, the researcher intended to find out which of the five factors of personality had the most significant predictability of classroom management, instructional strategy, and student engagement as facets of teacher efficacy.

## Method

### Participants

The sample for this study consisted of 168 EFL teachers who were teaching junior and senior high school students. Teachers in the sample had a range of 2 to 12 years of teaching experience with a mean of 5.14 years, and ranged in age from 23 to 40 with an average age of 27.3. From among the 168 participants, 147 were male and 35 were female. Within this sample, 21 (12.5%) held a Master's degree, 133 (79.2%) had a Bachelor's degree, while the remaining 14 (8.3%) had an Associate degree in teaching English.

### Instrumentation

In order to measure the two main variables of the study, the researcher used two instruments.

#### ***The NEO Five Factor Inventory***

NEO Five Factor Inventory (NEO-FFI) is the reduced version of 240-item NEO Personality Revised (NEO-PI-R). Since the 240-item version of the

instrument was too lengthy, McCrae and Costa (1992) developed the 60 item NEO-PI-R based on item factor analysis. It is one of the most frequently used instruments in the evaluation of Big Five Factor and is composed of 60 statements providing a concise measure of the five domains of personality: (a) neuroticism, which measures adjustment or emotional stability; (b) extroversion, which measures sociability; (c) openness to experience, an index of one's imagination, sensitivity and curiosity; (d) agreeableness, a measure of interpersonal tendencies; and (e) conscientiousness, which measures the degree of control one has over impulses (Costa & McCrae, 1992). Each of the five dimensions is assessed by 12 statements scored in both directions. For each statement, the participants rate themselves on a five-point Likert scale from 0 to 4, ranging from 'strongly disagree' to 'strongly agree'. Cronbach's alpha indices for the sections of this questionnaire based on a normative sample of employed adults' scores are reported by Costa & McCrae (1992) as: 0.86 (Neuroticism), 0.77 (Extroversion), 0.73 (Openness), 0.68 (Agreeableness), and 0.81 (Conscientiousness).

### ***Teachers' Sense of Efficacy Scale***

The Teachers' Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001) was used to measure teachers' self-efficacy beliefs. TSES consists of 24 items, assessed along a 9 point Likert scale from 1 to 9, ranging from "Nothing" to "Great Deal". Each of the three subscales of teacher efficacy, i.e. efficacy for instructional strategies, efficacy for classroom management, and efficacy for students' engagement is assessed by eight statements. The reported reliabilities for the three facets of teacher efficacy were: 0.91 for efficacy for instructional strategies, 0.90 for efficacy for classroom management, and 0.87 for efficacy for students' engagement (Tschannen-Moran & Hoy, 2001). Moreover, in order to test the validity of the scale, Tschannen-Moran and Hoy (2001) correlated it with the earlier measures of teacher efficacy. The total scores on the 24-item scale were positively correlated with both Rand items, and an abbreviated version of the Gibson and Dembo (1984) Teacher Efficacy Scale. The reliability index of the instrument for the present study using Cronbach Alpha came out to be 0.875.

### **Procedure**

Data collection was conducted during a period of eight weeks. Two sources of data were compiled and reviewed in this study: results of TSES and NEO



Five Factor for the 168 participants of the study who were high school teachers. The TSES and NEO Five Factor were administered to each participant after receiving voluntary consent. Participants were asked to rate themselves on a five-point Likert scale of NEO Five Factor Inventory items from 0 to 4, and on nine-point Likert scale of TSES from 1 to 9.

## Results

Scores from each of the instruments were computed and analyzed. Data were examined to ensure that they met assumptions for multivariate analysis. First descriptive statistics was used to analyze the data. The mean and standard deviations were compiled and skewness was computed. Distributions were also examined using Kolmogorov-Smirnov test. Linearity and multicollinearity which are referred to by Hatch and Lazarton (1991) as important assumptions of regression analysis were checked. To answer the research questions, four stepwise multiple regression analyses were run.

### Descriptive Statistics

The descriptive statistics for NEO-FFM variables are shown in Table 1. The means in the five personality dimensions show that teachers rated themselves highest in conscientiousness (46.8), then openness to experience (43.2), extroversion (42.54), agreeableness (42.50), and emotional stability (40.9). The interesting point is that conscientiousness (the highest mean obtained in this study) has proved to be the main predictor of job performance across different occupations (Ones et al., 2007).

**Table 1 – Descriptive statistics for NEO-FFM variables**

		Emotional stability	Extroversion	Openness to experience	Agreeableness	Conscientiousness
N	Valid	168	168	168	168	168
	Missing	0	0	0	0	0
Mean		40.958	42.542	43.250	42.50	46.83
Std. Deviation		6.0003	4.5595	4.6977	3.674	5.045
Minimum		32.00	32.00	32.00	35.0	33.0
Maximum		56.00	50.00	51.00	50.0	54.0
Sum		6881.00	7147.0	7266.0	7140	7868
Percentiles	100	56.0	50.0	51.0	50.0	54.0

The descriptive statistics for self-report efficacy are shown in Table 2. The means in the three subscales indicate that participants judged themselves to be more efficacious for instructional strategies (59.8) than for classroom management (57.7) and student engagement (56.8). In other words, they perceived themselves more efficacious and capable in designing instructional strategies, and managing the classroom than engaging the students in classroom activities.

**Table 2 – Descriptive statistics for three facets of teacher efficacy**

Facets of Teacher Efficacy		Instructional strategies	Classroom management	Students engagement
N	Valid	168	168	168
	Missing	0	0	0
Mean		59.8333	57.7917	56.8333
Std. Deviation		5.54423	6.53214	7.29422
Minimum		49.00	44.00	40.00
Maximum		72.00	71.00	70.00
Sum		10052.00	9709.00	9548.00
Percentiles	100	72.0000	71.0000	70.0000

## Multiple Regression Analyses

The first stepwise multiple regression analysis was conducted to examine if teachers' personality based on Five Factor Model (FFM) and as measured by NEO-FFM could significantly predict their efficacy as measured by Teacher Efficacy scale. The scores on NEO-FFI (conscientiousness, extroversion, emotional stability/ neuroticism, agreeableness, and openness to experience) were taken as the predictor variables and the scores on teacher efficacy scale were considered as the predicted or criterion variable.

In the first step of the stepwise regression analysis, the model entered NEO-FFM extroversion which accounted for 12% of the variance. Step two entered the NEO-FFM variable, that is conscientiousness which accounted for 9% of the variance. The results are demonstrated in Table 3.

**Table 3 – Stepwise multiple regression analysis for predictor variables predicting teacher efficacy**

Mode I		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Beta	Std. Error	Beta		
1	(Constant)	123.246	11.045		11.158	.000
	Extroversion	1.204	.258	.340	4.663	.000
2	(Constant)	90.525	13.676		6.619	.000
	Extroversion	1.016	.253	.287	4.013	.000
	Conscientiousness	.869	.229	.272	3.799	.000

As depicted in Table 3, the model for extroversion became significant (Beta = 0.34,  $t = 4.66$ ,  $\rho = 0.000 < 0.05$ ). The model also became significant when both extroversion and conscientiousness were entered: (Beta = 0.287,  $t = 4.013$ ,  $\rho = 0.000 < 0.05$ ) for extroversion and (Beta = 0.272,  $t = 3.799$ ,  $\rho = 0.000 < 0.05$ ) for conscientiousness. Other factors of personality proved to be insignificant and were thus, excluded from the model. Table 4 demonstrates the summary of the regression model.

**Table 4 – Summary of the regression model 1**

Predicted variable: Mean scores on teacher efficacy

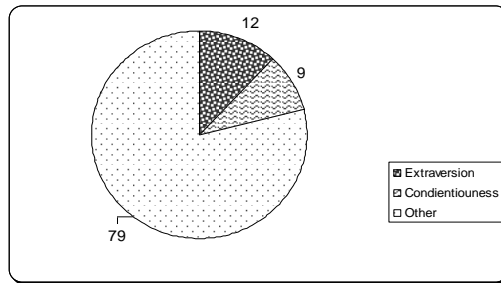
Adjusted  $R^2 = .177$ ;  $F_{(2,165)} = 18.96$ ,  $\rho = .000$  (using the stepwise method).  
The significant variables are shown below.

Predictor Variable	Beta	$\rho$
Extroversion	<b>.287</b>	<b><math>\rho &lt; .05</math></b>
Conscientiousness	<b>.272</b>	

*Neuroticism, agreeableness, and openness to experience were not significant predictors in this model and were thus, excluded.*

Figure 1 shows the percent of variance in teacher efficacy accounted for by extroversion and conscientiousness.

**Figure 1 – Percent of variance in teacher efficacy accounted for by two FFM variables, extroversion and conscientiousness.**



Then, in the second phase of the regression analysis, FFM variables, namely: conscientiousness, extroversion, emotional stability (neuroticism), agreeableness, and openness to experience were examined with each facet of teacher efficacy, that is, classroom management, instructional strategies, and students' engagement, separately.

Therefore, the second regression analysis took the five factors as predictor variables and classroom management as predicted variable. The results are demonstrated in Table 5. As depicted in Table 5, the model proved that extroversion significantly predicted the classroom management facet of teacher efficacy (Beta = 0.472,  $t = 6.907$ ,  $\rho = 0.000 < 0.05$ ). The model also became significant when extroversion and emotional stability/neuroticism were entered: (Beta = 0.398,  $t = 5.648$ ,  $\rho = 0.000 < 0.05$ ) for extroversion, and (Beta = 0.229,  $t = 3.254$ ,  $\rho = 0.001 < 0.05$ ) for emotional stability and/or neuroticism. Other factors of personality proved to be insignificant and were thus, excluded from the model. Table 6 demonstrates the summary of the regression model.

**Table 5 – Stepwise multiple regression analysis for predictor variables predicting classroom management facet of teacher efficacy**

Model		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.996	4.193		6.915	.000
	Extroversion	.677	.098	.472	6.907	.000
2	(Constant)	23.350	4.431		5.270	.000
	Extroversion	.570	.101	.398	5.648	.000
	Emotional stability	.249	.077	.229	3.254	.001

Table 6 demonstrates the summary of the second regression model.

**Table 6 – Summary of the regression model 2**

Predicted variable: Mean scores on classroom management facet of teacher efficacy

Adjusted R<sup>2</sup> = .26; F<sub>(2,165)</sub> = 30.52, ρ = .001 (using the stepwise method).

The significant variables are shown below.

Predictor Variable	Beta	ρ
Extroversion	.398	ρ < .05
Emtnl stability/Neuroticism	.229	

*conscientiousness, agreeableness, and openness to experience were not significant predictors in this model and were thus, excluded.*

The third regression analysis was used to check which FFM variables could predict instructional strategies facet of teacher efficacy significantly. The results are demonstrated in Table 7. The model indicated that only conscientiousness significantly predicted this facet of teacher efficacy (Beta = 0.162, t = 2.120, ρ = 0.036 < 0.05).

**Table 7 – Stepwise multiple regression analysis for predictor variables predicting instructional strategy facet of teacher efficacy**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	51.479	3.964		12.987	.000
	Conscientiousness	.178	.084	.162	2.120	.036

The summary of the model is presented in Table 8.

**Table 8 – Summary of the regression model 3**

Predicted variable: Mean scores on instructional strategy facet of teacher efficacy

Adjusted R<sup>2</sup> = .02; F<sub>(1,166)</sub> = 4.49, ρ = .036 (using the stepwise method). The significant variables are shown below.

Predictor Variable	Beta	ρ
Conscientiousness	.162	ρ < .05

*extroversion, neuroticism, agreeableness, and openness to experience were not significant predictors in this model and were thus, excluded.*

However, the low R<sup>2</sup> value as shown in Table 8 indicates that personality characteristics (even conscientiousness) did not have much predictive ability

for the instructional strategies facet of teacher efficacy compared with other facets of this construct. The reason may be the fact that instructional strategies are more related to teachers' knowledge base, degree, and experience rather than their personality characteristics.

In the final regression analysis, the FFM variables as predictor variables were examined with the student engagement facet of teacher efficacy as the predicted variable. Table 9 represents the results.

The analysis indicated that three of the FFM variables, i.e. conscientiousness, emotional stability (neuroticism), and extroversion significantly predicted student engagement facet of teacher efficacy. The model entered conscientiousness as the most significant predictor (Beta = 0.345,  $t = 4.743$ ,  $\rho = 0.000 < 0.05$ ). However, when the two personality variables were entered into the model as the two most significant predictors, the results for conscientiousness came out to be: Beta = 0.436,  $t = 5.44$ ,  $\rho = 0.000 < 0.05$ , and for emotional stability/neuroticism: Beta = -0.202,  $t = -2.524$ ,  $\rho = 0.013 < 0.05$ ).

Finally after the model entered extroversion, the results came out to be: conscientiousness (Beta = 0.422,  $t = 5.391$ ,  $\rho = 0.000 < 0.05$ ), emotional stability/neuroticism (Beta = -0.27,  $t = -3.325$ ,  $\rho = 0.001 < 0.05$ ), and extroversion (Beta = 0.227,  $t = 3.059$ ,  $\rho = 0.003 < 0.05$ ).

**Table 9 – Stepwise multiple regression analysis for predictor variables predicting student engagement facet of teacher efficacy**

Model		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
		B	Std. Error	Beta		
1	(Constant)	33.442	4.960		6.743	.000
	Conscientiousness	.499	.105	.345	4.743	.000
2	(Constant)	37.377	5.124		7.294	.000
	Conscientiousness	.631	.116	.436	5.440	.000
	Emotional stability (neuroticism)	-.246	.097	-.202	-2.524	.013
3	(Constant)	26.263	6.180		4.250	.000
	Conscientiousness	.611	.113	.422	5.391	.000
	Emotional stability (neuroticism)	-.329	.099	-.270	-3.325	.001
	Extroversion	.363	.119	.227	3.059	.003

Table 10 demonstrates the model summary for the final regression analysis which predicted the student engagement facet of teacher efficacy.

**Table 10 – Summary of the regression model 4**

Predicted variable: Student engagement facet of teacher efficacy

Adjusted R<sup>2</sup> = .20; F<sub>(3,164)</sub> = 13.48,  $\rho$  = .003 (using the stepwise method).

The significant variables are shown below.

Predictor Variable	Beta	P
Conscientiousness	.422	
Emtnl stability/Neuroticism	-.270	$\rho < .05$
Extroversion	.227	

*agreeableness and openness to experience were not significant predictors in this model and were thus, excluded.*

## Conclusion

The result of the first stepwise multiple regression analysis revealed that the NEO-FFI variables of extroversion and conscientiousness were significant predictors of teacher efficacy. That is, the significant prediction model included positive NEO-FFI extroversion, and conscientiousness. These variables, which are listed in the order of importance in the multiple regression equation, together accounted for approximately 21% of the total variance of teacher efficacy. Emotional stability (reverse of neuroticism) was also a significant predictor when the FFM variables were examined with each facet of teacher efficacy.

Since no identified previous study could be found investigating the relationship between NEO-FFI and English language teacher efficacy, the results are discussed in comparison with other studies dealing with the relationship between personality and job performance. The discussion is based on the assumption that a higher level of teacher efficacy will result in a better performance. The results of many studies in the literature have proved the positive effects of teacher efficacy on different aspects of teacher performance (Ross, 1992; Ghaith & Shaaban, 1999; Brouwers & Tomic, 2000; Somech & Drach-Zahavy, 2000; Ross, 2004; Di Fabio, Majer, & Taralla, 2006; Caprara, Barbaranelli, Steca, & Malone, 2006).

According to Ones et al. (2007), hundreds of the primary studies and many of the meta-analyses conducted since the mid-1980s have indicated high support for using personality measures in staffing decision. Further, they maintained that personality constructs can predict and explain attitudes,

behaviors, performance, and other outcomes in organizational settings. Additionally, personality testing can improve employee fit and reduce turnover (Rothstein & Goffin, 2006). Therefore, while personality characteristics affect performance in many fields, it seems logical to claim that the teaching profession is not an exception.

In this study, extroversion was the main predictor of teacher efficacy. This is in line with the results of the study by Rushton et al. (2007). In order to identify the effective teacher personality traits, Rushton et al., administered the Myers-Briggs Type Inventory (MBTI) and Beiderman Risk Taking (BRT) scale to 58 teachers who were considered to be part of prestigious group of educators nominated into the Florida League of Teachers by superintendents/directors. In their results, they maintained that “adaptation and acceptance of change are becoming common factors necessary for success in public education”, and ENFP (extroversion, intuition, feeling, perceiving), and ENTP (extroversion, intuition, thinking, perceiving) personality traits “accept these factors more readily and are, therefore, an asset to the field of education” (p. 440). Finally, they suggest that the ENFP types are the best teachers in the State of Florida.

There are other potential explanations for why extroversion may be the main predictor of teacher efficacy. English language classroom is by its nature a place which demands a lot of interactions, oral communications, and group work activities. In a sense, it seems that an English class is like a team and teacher is the facilitator.

Reviewing the results of the studies conducted on the relationship between FFM of personality and team performance, Rothstein and Goffin (2005, p. 165) maintained that, extroversion is the best predictor of team-related behavior. In their review, 11 of the 15 published studies reported significant correlations between extroversion and various measures including team performance.

Furthermore, the results of a meta-analysis conducted by Barrick and Mount (1991) on the relationship between Big Five personality dimensions and job performance criteria for five occupational groups indicated that extroversion was the most important FFM variable for two occupations involving social interaction. Since the nature of English language classroom is based on interaction, the result of this study may be a potential explanation for why extroversion was the main predictor in this model as well.

Conscientiousness was the second important predictor of teacher efficacy. This factor has been proved to be the main predictor of job



performance across different occupations. According to Ones et al. (2007), “evidence suggests that conscientiousness is the single best, generalizable Big Five predictor of job performance” (p. 1002). Furthermore, while they confirmed that for different occupations, different combinations of Big Five yield the best level of validity, they maintained that apart from conscientiousness, there seems to be no other personality traits that predict overall job performance with similarly consistent validities across different jobs.

Surprisingly, however, the third significant predictor of teacher efficacy, i.e. emotional stability (when the FFM variables were examined with each facet of teacher efficacy) although positively predicted classroom management, it negatively predicted the student engagement facets of teacher efficacy. The reason may be that when teachers’ self-confidence about their abilities and their emotional stability exceed certain level, they may turn into rigidity or monotony. So, these teachers may inadvertently favor more teacher centered classes which result in better classroom management and students’ control, providing less scope for students’ maneuvering and engagement. In this sense, it seems that a certain level of stress (facilitative) or sense of ‘*disequilibrium*’ may be facilitative and conducive to students’ engagement in classroom activities.

The notions of personality and efficacy influence different aspects of our life and teaching is not an exception. The results of this study indicated that extroversion, conscientiousness, and emotional stability are the main predictors of teacher efficacy beliefs. These findings are mostly consistent with the previous research findings concerning the relationship between NEO-FFM and job performance.

Considering the dearth of studies in ELT contexts, this study provides new information about the relationship of English language teachers’ personality and efficacy. It has also various implications for teacher recruitment policies, the study of teacher burnout, and the development of effective in-service and mentoring programs for teachers, as well as helping administrators to cooperate and communicate with teachers more effectively. Further, as Rushton et al. (2007) put it, although a person may not have the exact combinations of personality traits which are illustrative of a quality teacher “the knowledge and understanding of ones type is pertinent to success in public education” (p. 440).

The current study takes the important step of documenting that some dimensions of teachers’ personality are related to their efficacy. The

researcher hopes that this research stimulates additional exploration of the relationship between teacher personality and efficacy.

### The Author

**Hossein Navidnia** is a PhD candidate in Applied Linguistics at Tarbiat Modares University. He has presented papers in different national conferences and his research interests include L2 teacher education and personality factors in L2 contexts.

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