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On the Relationship between Reflective Teaching and Personality Traits

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Abstract
During the last decade, the slogan of reflective teaching has been embraced by teachers, teachers' educators, and educational teachers worldwide. This international movement in teaching and teacher education that has developed under the banner of reflection can be seen as a reaction against the view of teachers as technicians who narrowly construe the nature of the problems confronting them and merely carry out what others, removed from classroom, want them to do. Drawing on John Dewey's ideas, there are three attitudes of reflective teachers, i.e., open-mindedness, wholeheartedness, and responsibility. Personality traits are tendencies that represent an individual's uniqueness that have a lasting and stable effect on an individual's behavior and thinking (Satchell et al., 2017). However, given the fact that all teachers are not of the same personality types, it is hypothesized that teachers with one personality type prefer to rely on one element of teaching reflection. This motivated us to investigate the relationship between the teachers' personality types and their teaching reflection elements. To this end, John and Srivastava's (1999) the Big Five Inventory Personality Test and Ryan (2014) the Reflective Teaching Instrument were drawn. One hundred Iranian EFL teachers were selected based on convenience sampling. They were from six different language institutes in Tehran, Iran. The results confirmed the hypothesis that each personality type correlated with elements of the teaching reflection. Extrovert teachers, for instance, were found to draw on the affective element in their teaching practices. The pedagogical implications of the findings are discussed.

Keywords:
Big Five, EFL teachers, reflection, teacher personality

INTRODUCTION

Teachers play a critical role in the modern world. Teachers can be a positive influence on a wide variety of their students' short- and long-term outcomes, including their grades, state assessment scores, health, extracurricular activities, college attendance, adult income, and retirement savings (Chamberlain, 2013; Chetty, Friedman, & Rockoff, 2014). Personality is one of the basic psychological mechanisms that manage individuals' cognitive system and behaviors (Halder, Roy, & Chakraborty, 2010). Individuals' personality traits are reported to reflect individuals' perceptions and beliefs (Terzis, Moridis, & Economides, 2012) and estimate their behaviors (Zweig & Webster, 2003). Research shows that personality traits do not exist in isolation within individuals but co-exist at different levels (Merz & Roesch, 2011). As such, a person-centered approach, permitting the identification of homogenous profiles of teachers presenting qualitatively and quantitatively distinct combinations of personality traits, may be required for a holistic understanding of the role of personality in teacher outcomes.

Since Cattell's seminal work, growing attention has currently been given in the research literature to find an answer to this question via hierarchical models that characterized the behavioral tendencies into higher-order clusters. Some studies have supported this assumption across different occupational groups, and argued that personality and cognitive and academic potentials are valid predictors of career success even in the long run (e.g., Richardson, et al., 2012; Spengler et al., 2015; Stanek, & Ones, 2018). One of the prominent models is the "Big Five" model of personality traits (Schleicher, 2016), which entails openness to experience, consciousness, extraversion, agreeableness, and neuroticism. The definition of Day, et al. (1998) "a common challenge with personality research, in general, and with predicting job-related criteria (effectiveness) in particular, is coping with the large diversity of accessible personality measures" (Douglas & Stacey, 2010). Gordon Allport (1937) defined personality as "the dynamic organization within the individual of those psychophysical traits that determine his unique adjustments to his environment." He is regarded as a forefather of current personality study. Traits are viewed as elements of emotional, motivational, and social behavior. They are hypothesized to define and explain individual variations in human behavior and experience, as well as to forecast them (Cohn et al., 2020; Fröhlich et al., 2022; McCrae & Costa, 2008). professional needs and development (Naemah, 2007).

Reflection is core to sustaining effective professional development in teacher education and teaching practices (Dewey, 1909; Feucht, 2010; Pall, 2022; Schoen, 1987). Teachers will often reflect on their teaching practices, evidenced by the ways they communicate with peers about current and critical issues, mindful introspection, and systematic research methodologies. Reflective teaching is an active educational activity. Reflective teaching practice in second/foreign language teaching education has grown in popularity over the last thirty years, attracting the attention of academics since the early 1990s (Richards, 1991). However, despite this progress, there is still a lack of study on the attitudes of reflective instructors as indicated in their reflections in the English language teaching setting (Farrell, 2012). Meanwhile, it is believed that acknowledging the advantages of being a reflective teacher might assist us in committing to our own professional development (Alsuhaibani, 2020). (Gordon et al., 2006), define teacher effectiveness as a measure of job performance in the teaching profession that can reflect the impact a teacher has had while completing their duties. Thus, we can hypothesis about the potential relationships each of the Big Five domains (conscientiousness, emotional

stability, extraversion, agreeableness, and openness) may have with teacher effectiveness using both organizational and educational psychology studies.

The big 5 personality traits are important getting a better picture of an effective teachers. Since reflection is an important factor for teachers to act as a responsible person and for professional development, reflection acts as the key activity. It can be claimed that we need to understand the connections and relationships between the personality traits and teacher reflection so that it can help in choosing better teachers, and also for teachers to have some things to focus on in their practices for professional growth. There is an apparent paucity of studies concerning the association between the Big Five personality traits and reflective teaching. Personality traits have a big influence on how teachers reflect on their teaching methods and strategies. This indicates that the personalities of teachers are important to their teaching perspectives and may even determine them. Thus, it is postulated here that each instructor with a unique personality trait favors specific components of teaching reflections. The Big Five Inventory was made up in the late 1980s as a very short instrument to measure personality. Tit was a short instrument at that time as it contained 44 short-phrase items which would be responded within the span of 5 minutes and were enough to assess the Big Five Dimension. (Rammstedt & John, 2007). The Big Five or the model of personality based on five personality explains the personalities completely and solid evidence is also available to support this. (Bose & Sgori,2022; Elaskary 2021) The big five has been used up in recent organizations and many applied research because it is widely accepted, and it is a valid technique of measuring personality traits. (Chiorri et al., 2015)

LITERATURE REVIEW

Personality traits include relatively stable patterns of cognitions, beliefs, and behaviors. The Big Five model has functioned as the powerful theoretical framework to synthesize most of the variation in these patterns (McCrae & Costa, 2008). The roots of this model lie in two research traditions: the psycho-lexical approach and the questionnaire approach (De Raad & Perugini, 2002; John & Srivastava, 1999). The Big Five model was discovered and originally verified within psycho-lexical studies founded on the lexical hypothesis, which states that all personality traits are encoded in every natural language (Cattell, 1943; Goldberg, 1981, 1990). The words invented and used to describe individual differences are exactly the same with how the trait terms have been used in the lexical approach. Identification of personality traits in the lexical approach is guided by two criteria: synonym frequency (i.e., the more important is a personality attribute, the more synonyms are used to describe it within the language) and cross-cultural universality (i.e., the most phenotypic attributes are typically codified in terms in the languages of different cultures). Factor analysis has often been applied in efforts to reduce a large set of words referring to personality attributes to a smaller set of basic personality dimensions (Strus et al., 2014). The questionnaire approach has made a significant contribution to the expansion of the Big Five, both conceptually and empirically. In this line of research, the five personality dimensions were operationalized in the questionnaires and their associations with other theoretical concepts have been studied (Farrukh, 2018; John & Srivastava, 1999). Although the conceptualizations of the five personality traits within the psycho-lexical and questionnaire approaches are slightly different (Saucier & Goldberg, 1996), strong convergence exists between the various five-factor models (De Raad & Perugini, 2002; Goldberg, 1990; John & Srivastava, 1999).

Effective language learning goes hand in hand with effective language teaching, which relies upon effective teachers (Alrefaee and Al-Ghamdi, 2019). According to Shishavan and Sadeghi (2009), the hallmark of an effective EFL teacher is their personality. With English language teaching worldwide, according to a study conducted by (Makovec, 2018) teachers' personality traits determine their professional identity and, as a result, their function, implying that personality traits are crucial in teachers' professional growth and identity and finally it has effects on their overall performance and judgments in the classroom. Personality traits are tendencies that represent an individual's uniqueness that have a lasting and stable effect on an individual's behavior and thinking (Satchell et al., 2017). One question that has been at the core of understanding personality trait as a multidimensional concept is trying to determine the number of basic dimensions that aid the understanding of difference in personality between individuals.

Studies on Reflective Teaching among EFL Teachers

Reflective teaching is an important component of the initial training program for student teachers. Many academics have also extensively recognized it as a method that can increase teachers' professional growth while also improving the quality of teaching and learning. According to Jacobs, Vakalisa, and Gawe (2011), reflective teaching provides teachers with the opportunity to renew their practice and comprehend the effects of their teaching. They went on to say that reflective teaching provides information on how teachers meaningfully engage with learners, hence encouraging good teaching and learning practice. According to Akbari (2007), reflective teaching will cause teachers to challenge clichés they learned during their formative years while also allowing them to build better informed practice.

Teachers' personality types have a big influence on how they reflect on their teaching techniques and strategies. This suggests that a teacher's personality type is important to their teaching reflections and may even determine their teaching reflections. As a result, it is suggested that each personality type of teacher favors different aspects of teaching reflections. Personality is defined by Lewis, Pervin & John (2001) as a person's attributes that account for consistent patterns of feeling, thinking, and behaving. Understanding and classifying personality types, according to Miller (1991) and Poropat (2009), is crucial to many academic practices. Teachers' personality types have a big influence on how they reflect on their teaching techniques and strategies. This suggests that a teacher's personality type is important to their teaching reflections and may even determine their teaching reflections. As a result, it is suggested that each personality type of teacher favors different aspects of teaching reflections. Personality is defined by Lewis, Pervin & John (2001) as a person's attributes that account for consistent patterns of feeling, thinking, and behaving. Understanding and classifying personality types, according to Miller (1991) and Poropat (2009), is crucial to many academic practices. Much study has been done on teacher recruitment and retention (An, Zhang & Ching 2021, Torsney, Lombardi, & Ponnock 2019, Richardson &Watt, 2018). Over the last decades the measurement of work-related personality traits has increasingly become important in the field of human resources to assist processes such as function in the context of employee selection (Levy, et al., 2011), however there are little empirical evidences for the predictive validity of these characteristics for the quality of teaching (Klassen & Kim, (2019); Rimm- Kaufman & Hamre, 2010). The five-factor model of personality, which has become "the most widely accepted personality structure in our

time" (Judge & Ilies, 2002, p. 799), has sparked interest in the link between personality and career choice. Indeed, the field of personnel evaluation which used to focus on knowledge, skills and abilities related to job has been broadened into personal characteristics such as personality traits (Levy, et al., 2011). The assessment of personality can increase the likelihood of a person to succeed in his career provided that his personality traits correspond to them

Recently, many research studies have been carried out concerning the correlation between reflective teaching and teachers' individual differences. For example, Rashtchi and Sanayi Mashhoor (2019) explored reflective teaching and burnout among 100 EFL teachers from different language institutes in Tehran. They were divided into introvert and extraverts based on the Meyers-Briggs Traits Inventory (MBTI) at the onset of the study. Other data was collected using Reflective Teaching Questionnaire and the Maslach Burnout Inventory. The results revealed that, regardless of the personality of teachers, reflective teaching and burnout were negatively correlated. Also, the introverted teachers were much more reflective than those identified as extraverted, while the former group of teachers were less prone to burnout compared to the latter.

Monabbati and Faravani (2020) investigated the interrelationship among professional identity, perfectionism, and reflective teaching practice with159 English language teachers of different schools and institutes in Mashhad, data were gathered using English Language Teaching Reflection Inventory, Multidimensional Perfectionism Scale, and Teachers' Professional Identity Questionnaire. The results showed a significant relationship between the variables, suggesting that, in order for a perfectionist teacher to become a reflective teacher, they must recognize their professional identity.

Studies on Personality Traits of Teachers

Fadaee, Marzban, and Najafi Karimi (2021) examined the association between autonomy and education style with personality traits. Data was collected using Pearson and Moomaw Teacher Autonomy Scale, the Grasha Teaching Style Inventory, and the Costa and McCrae NEO Personality Inventory online distribution. The findings suggested that four subcategories of teaching style and four subcategories of personality traits were significant predictors of autonomy.

Ayyildiz and Yilmaz (2021) explored the effectiveness of personality traits on creative thinking dispositions by creative learning environments and teacher behavior that reinforces creativity. Gender, faculty, and grade were considered other variables. 30 EFL teachers were selected through purposive sampling. The results showed that the creative personality trait had a significant predictor power on the tendency toward creative thinking. Also, creative learning environment and teacher support behavior had positive impact in this regard.

Cattell (1957) seminal work on personality factors still has its influence on current studies on this ground (e.g., Boag 2018, Messick 2021, Naseer, Mussarat & Malik 2022). His 16 factors or dimensions of personality are identified: warmth, reasoning, emotional stability, dominance, liveliness, rule-consciousness, social boldness, sensitivity, vigilance, abstractedness, privateness, apprehension, openness to change, self-reliance, perfectionism, and tension. The 16PF Questionnaire is broadly used in career development planning, counseling, and coaching, both within and outside organizations, to help clients understand their strengths and limitations, as well as plan self-development goals and effective career choices (Carson, 1998; Cattell, R.B. et al., 1970; H.E.P. Cattell and Schuerger, & Sfiligoj 1998; Conn and Rieke, 1994; Krug and Johns, 1990; Lowman,

1991; Schuerger, 1995; Schuerger and The questionnaire has been beneficial because of its long history of predicting the six Holland RIASEC occupational dimensions, in addition to employing the various 16PF occupational profiles to establish person–job match (Schuerger and Watterson, 1998; Schuerger and Sfiligoj, 1998). There's also evidence that there's a link between 16PF scores and crucial professional outcomes including job satisfaction (Lounsbury et al., 2004) and job-training performance (Tango and Kolodinsky, 2004).

Statement of The Problem:

Teachers are important drivers of student success in the immediate term, such as academic success (Hattie 2009), as well as in the future, such as college attendance and labor market earnings (Chetty et al. 2014). Additionally, it is important to retain teachers given that there is a shortage of teachers in many countries, such as the USA (Sutcher et al. 2016), Australia (Buchanan et al., 2013), the UK (White et al. 2006), India (Datta & Kingdon, 2021) and Iran (Tabatabaei et al. 2012). However, two questions still remain among practitioners, policymakers, and researchers: what are the personal characteristics of effective teachers and what are the personal characteristics of teachers' reflection? More specifically, what are the relationships between teacher personality and the reflectivity of teachers in the classrooms? No previous study has examined the meta-analytic association between teacher personality using a Big Five framework and teacher reflection. In this light, the current study aims to examine the extent to which each of the Big Five personality domains is associated with measures of teacher reflection.

Research Questions

RQ1. What are the characteristics of teacher reflectivity regarding big five personality traits?

RQ2: Are there any relationships between Big Five Personality traits and reflective teaching among Iranian EFL teachers?

METHOD

Participants

The participants of this study were 100 Iranian EFL teachers selected based on convenience sampling from six different language institutes in Tehran namely, Kian Language Academy, Mehrdad Language Academy, Iran Language institute, Time Language School, Silver Line institute and Payam Diplomat Language School. Of those reporting gender, 56% (n = 56) were males and 44 % (n = 44) were females. These Teachers were in different year of experience (Avg. of experience= 11.3 years). The ages of the participants were from 20 to 40 years old, but all met Iranian teacher qualifications. They were chosen by convenient random sampling among the English language institutes in Tehran.

Instrumentation

This 44-item questionnaire, developed and validated by John and Sirvastava (1999), was employed to measure the participants' personality traits. In this measure the items are based on 5-point Likert scale (ranging from strongly disagree=1 to strongly agree=5). The reliability of the final version of this questionnaire, as estimated through Cronbach Alpha, was 0.55. Reflective Teaching Questionnaire contains 29 self-reported items using on 5-point Likert Scale ranging (from 1= never to 5= always) (Ryan, 2014). The questionnaire

covers five categories: Practical, Cognitive, Learner, Meta-Cognitive, and Critical reflection. Ryan, 2014 validated the questionnaire with a sample of 300 teachers using exploratory and confirmatory factor analyses.

Procedure

Data for this study was collected using two questionnaires: Big Five Personality Traits and Reflexive Learning Inventory. After selecting and modifying the data collection tool, the researcher distributed the questionnaires among the participants. The responses were then analyzed using SPSS (the Statistical Package for Social Sciences) software.

Data Analysis

Data analysis in this study came in two steps. First, the questionnaires were validated through exploratory and confirmatory factor analyses. After ensuring the validity of the questionnaires, correlational analyses were conducted to test the research hypotheses. The validation process had two stages. First, several exploratory factor analyses were run. Necessary corrections were made to questionnaires based on these results. Then, factor analysis was run to confirm the results of the exploratory factor analyses. The results of the analyses are discussed in the next sections.

RESULTS

Psychometric Properties of the Questionnaires

Before using the selected questionnaires in the Iranian EFL context, their psychometric characteristics were investigated to make the obtained results more reliable. The exploratory and confirmatory factor analyses were conducted for the questionnaires, and the results are presented in the following section.

Exploratory Factor Analysis

To examine the factorial structure of the two questionnaires, Exploratory Factor Analysis (EFA) was run.

The Big Five Inventory Personality Test

The inspection of the factor ability indices revealed that the Bartlett's sphericity test was significant at $p<.001$, and the KMO index was 0.65. Hence, both indices support the suitability of the data for factor analysis. PAF analyses along with Promax rotation showed that five factors can best describe the factorial structure of the questionnaire.

The rotated factor loadings are demonstrated in Table 1. All the factor loadings are found to be higher than 0.30 (Pallant, 2020). According to the proposed pattern for factor loadings, the factors can be named as: Factor 1: Neuroticism; Factor 2: Extraversion; Factor 3: Openness; Factor 4: Conscientiousness; Factor 5: Agreeableness

Table 1. BFI Rotated Factor Loadings

	Factors				
	1	**2**	**3**	**4**	**5**
Item 24	.682				
Item 39	.680				
Item 19	.653				
Item 9	.583				
Item 34	.559				
Item 6		.747			
Item 21		.669			
Item 1		.521			
Item 11		.464			
Item 36		.449			
Item 41			.883		
Item 44			.805		
Item 5			.366		
Item 25			.314		
Item 23				.831	
Item 18				.523	
Item 38				.489	
Item 8				.464	
Item 28				.410	
Item 22					.764
Item 32					.706
Item 27					.480

The reliability of the final version of the questionnaire, as estimated through Cronbach Alpha, was 0.75.

Teacher Reflectivity Questionnaire

Evaluation of the suitability of the correlation matrix for the Teacher reflectivity questionnaire revealed that the Bartlett's sphericity test was significant at $p<.001$, and the KMO index was 0.76., these two indices indicate the factorability of the correlation matrix. PAF along with promax rotation were applied several times. After the deletion of several items, a five-factor structure seemed to best explain the factorial structure of the questionnaire. The factors explained 50 percent of the variance in the data. The factor loadings are displayed in Table 2. All factor loadings are clearly favorable. Based on the pattern of factor loadings, the factors may be named as: factor 1(Critical), factor 2(Practical), factor 3(Cognitive), factor 4(Learner), factor 5(Metacognitive). The reliability of the final version of the questionnaire, as estimated through Cronbach Alpha, was 0.85.

Table 2 TRI Rotated Factor Loadings

	Factor[1]				
	1	**2**	**3**	**4**	**5**
Item23	.833				
Item24	.762				
Item27	.723				
Item26	.709				
Item25	.624				
Item28	.328				
Item6		.860			
Item5		.745			
Item4		.625			
Item2		.592			
Item3		.398			
Item10			.915		
Item11			.478		
Item8			.419		
Item9			.400		
Item13				.589	
Item15				.433	
Item17					.815
Item16					.540
Item18					.449

Factor 1: Critical ,Factor 2: Practical, Factor 3: Cognitive, Factor 4: Learner, Factor 5: Metacognitive

Confirmatory Factor Analysis

The Big Five Inventory Personality Test

Several CFA analyses were conducted to revise the model based on the parameter estimates and modification indices. The path diagram for the final model is presented in Figure 1; the scaling of the latent factors was accomplished by fixing all factor variances at 1 to standardize the parameter estimates. Note that all loadings are higher than the minimum 0.30 level, The final model has 19 items.

The relevant fit indices for this model were as follows: RMSEA = 0.058, CFI = 0.92, TLI = 89, SRMR = 0.07. Although the TLI index denotes marginal fit, all other fit indices indicate adequate model fit.

Teacher Reflectivity Questionnaire

The same procedure was followed in the CFA analysis of the teacher reflectivity questionnaire. After a number of CFA analyses were completed, and the relevant revisions were applied to the initial model, the final CFA model converged to an acceptable fit. The path diagram along with the standardized parameter estimates are reported in Figure 2. It is evident that all parameter estimates are plausible.

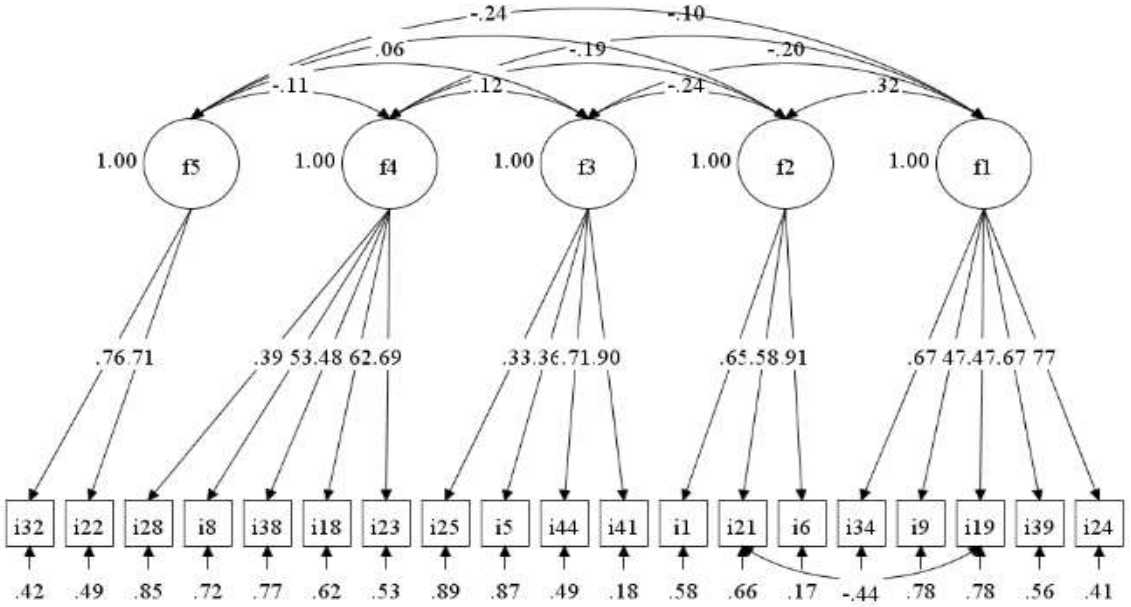

Figure 1. The CFA Model and the Standardized Parameter Estimates for BFI

The fit indices for this model were as follows: RMSEA = 0.06, CFI = 0.91, TLI = 90, SRMR = 0.07. All fit indices indicate adequate fit. The findings concerning the psychometric characteristics of the two questionnaires suggested that both scales fit the Iranian context and can be considered reliable and practicable instruments for measuring the intended variables.

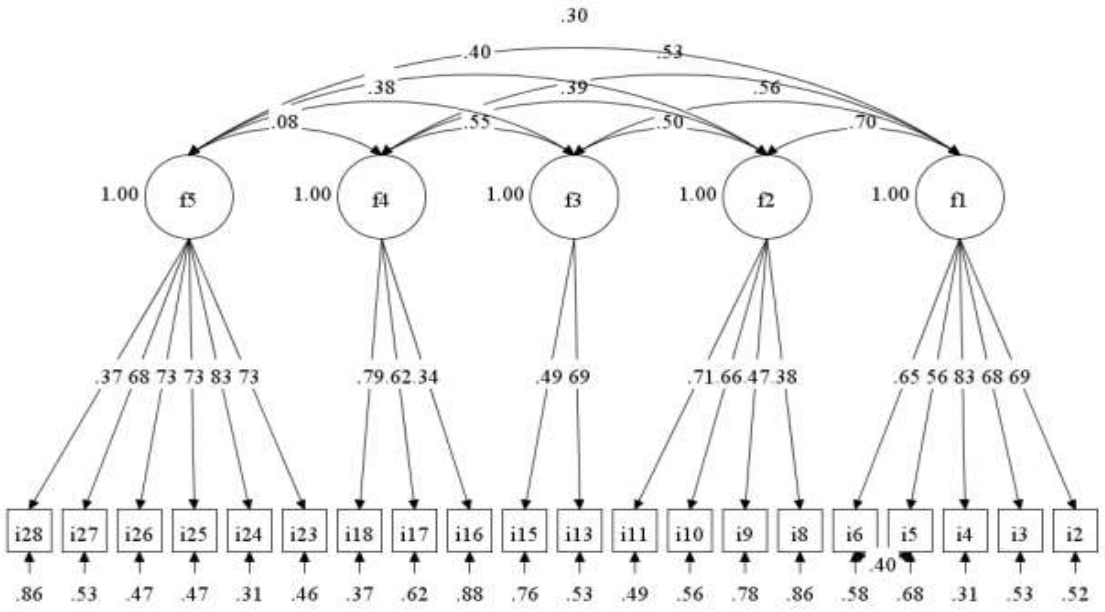

Figure 2. The CFA Model and the Standardized Parameter Estimates for TRI

After ensuring the reliability and psychometric properties of the questionnaires to measure the participants' personality traits and reflective teaching, the correlation between the two variables was examined to answer the main research question of this study.

Relationship between Personality Traits and Reflective Teaching

To investigate the association between the participants' personality traits and reflective teaching, Pearson correlations were run among the BFI and TRI factors. The results are reported in Table 3.

Table 3. Pearson Correlations among the Factors

		Critical	Practical	Cognitive	Learner	Metacognitive	Reflectivity
Neuroticism	Pearson Correlation	-.118	-.185	-.208*	-.218*	-.141	-.220*
	Sig.	.245	.067	.039	.030	.168	.029
Extraversion	Pearson Correlation	-.108	-.125	-.173	-.083	-.098	-.166
	Sig.	.291	.221	.088	.417	.338	.101
Openness	Pearson Correlation	-.027	.317**	.212*	.247*	.312**	.282**
	Sig.	.789	.001	.036	.014	.002	.005
Conscientiousness	Pearson Correlation	.129	.274**	.353**	.019	.081	.168
	Sig.	.208	.006	.000	.854	.432	.098
Agreeableness	Pearson Correlation	.109	.007	.039	-.113	.006	.038
	Sig.	.286	.948	.703	.268	.954	.708

*Correlation is significant at the 0.05 level (2-tailed).

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

As illustrated in Table 3, Neuroticism, Openness, and Conscientiousness were found to be significantly correlated with elements of reflective teaching. Specifically, Neuroticism was positively correlated with three subcategories of reflective teaching: Cognitive element ($r = .20$, $p < 0.05$); Learner's element ($r = .21$, $p < 0.05$); and Reflectivity element ($r = .22$, $p < 0.05$). Openness was positively correlated with all elements of reflective teaching except the Critical element. Moreover, Conscientiousness was correlated with only Practical ($r = .27$, $p < 0.05$) and Critical ($r = .35$, $p < 0.05$) elements., Agreeableness and Extraversion did not correlate with elements of reflective teaching.

DISCUSSION

This study was an attempt to investigate the relationship between personality traits and reflective teaching among Iranian EFL teachers. The major finding of this study suggested that only neuroticism, openness, and conscientiousness correlated with elements of teacher reflectivity. The positive correlation between openness with the elements of reflectivity might be explained by the fact that the people open to experience have to engage in various intellectual activities and seek new experiences and ideas (Coan, 2019).

The negative correlation between neuroticism and reflective teaching may be explained through the characteristics attributed to people with high neuroticism (Zhao & Seibert, 2006). as neurotic people usually possess low levels of self-confidence, reflexivity, and relaxation while anxiety, hostility, depression, self-consciousness,

impulsiveness, insecurity, and vulnerability are associated directly with neuroticism (Patrick, 2011). Renn, Allen, and Huning (2011) stated that such people may dwell on their thoughts and become self-absorbed emotionally due to not being able to adjust their beliefs or thoughts. Taking all these attributes into account, it can be concluded that the neurotic teachers will not be able to achieve high quality teaching and will not possess the of reflective teaching. In contrast, persons who are conscientious are often described as competent, ordered, and dutiful, achievement-oriented self-disciplined, and deliberate in their actions. They are more commonly efficient, organized, determined and highly productive as well efficient, thorough, and tidy (Ahmetoglu & Chamorro-Premuzic, 2013). The latter features might be behind the correlation of Conscientiousness with more elements of reflective teaching. In fact, teachers can be certainly considered qualified who do their best to adopt all possible strategies, employ all potential facilities, as well as take advantage of all teacher training opportunities to reinforce the quality of their teaching.

The obtained results are consistent with the findings of Rashtchi and Sanayi Mashhoor (2019), who reported a negative correlation between reflective teaching and teachers' burnout. Moreover, the results seem in line with the findings of Monabbati and Faravani (2020), that perfectionist teachers should be aware of their professional identity in order to become reflective teachers. The findings of Mohammadi (2015) also found a positive relationship between reflective teaching, self-efficacy and professional success. The current findings are also in line with studies finding a relationship between personality and teaching quality. E.g., these results corroborate a part of Aydın et al. (2013) study that consciousness and neuroticism are correlated with teaching competence. However, they do not support Aydın et al. (2013) and other findings that agreeableness and extraversion traits are correlated with teaching quality. The results are also closely related to Lee and Kemple (2014) finding that prospective teachers with higher openness were more likely to engage in creative experiences and nurture teaching styles to retain creativity, which in turn could improve teaching quality and make them more reflexive in the learning process.

Conclusion

The results of the study indicated the importance of personality factors amongst Iranian teachers. The current study showed that each of the Big Five personality traits (except for Extraversion and Agreeableness) had an impact on teacher reflectivity. Openness and Conscientiousness had positive relationships with reflectivity, and neuroticism had a negative relationship with reflectivity. In fact, the teachers who showed openness and conscientiousness showed better reactions and workplace behavior while neuroticism had an adverse impact on behavior. Subsequently, the study showed that Agreeableness and Extraversion did not correlate with reflectivity.

The results of the study inform the language teachers and trainers about the role of personality in teaching-related issues like reflectivity. Educational institutes could obtain data about the personality of new teachers by suitable screening tests and determining strategies for neurotic teachers to modify their behavior. Based on such information, teachers may seek ways to better understand themselves and learn how they react to teaching issues to enhance their teaching performance. The findings of the study also inform administrators in language teaching and training courses to consider the role of personality in teacher's decisions making processes. Finally, teachers need to be trained to become reflective teachers. Teaching reflection not only enhances teaching quality; it can also help teachers better cope with teaching challenges; however, reflective teachers

may make better evaluations and find better solutions to take care of themselves and their teaching quality.

Finally, replications of the current study should be carried out to illuminate the role of personality in teacher reflectivity. Secondly, it is suggested that future studies examine teachers with different personalities and teaching experiences. Likewise, similar studies might take other personality factors, individual attributes, and language skills or components into account. Qualitative investigations should also be employed in studies on teacher reflection and personalities. The qualitative investigations could be part of a study with the purpose of finding solutions for the results. For instance, after the main study, teachers can think aloud about ways they respond to teaching stressors and how they reflect on their teaching performance. Such information could be used to find out why teachers with different personalities are different in terms of reflectivity.

Statement of Conflict of Interest:
Seyed Mojtaba Marashi developed the theoretical formalism, performed the analytic calculations and performed the numerical simulations. Also, the author contributed to the final version of the manuscript and supervised the project.

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