Investigating the Associations between the Big-Five Personality Factors and English Learning Motivation Categories

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Abstract

This study examined the relationships between the Big-Five personality factors (BFPFs) and English learning motivation (ELM) categories. English-major students (66 males and 49 females) completed the International Personality Item Pool Big Five inventory (IPIP) and the English-learning Motivation Scale. Two of the BFPFs, Neuroticism and Agreeableness, were significantly correlated with all ELM categories. Conscientiousness was significantly correlated with two ELM categories whereas Extraversion was significantly correlated with only one ELM category. Openness to Experience showed no significant correlation at all. Furthermore, Conscientiousness, Agreeableness, and Neuroticism were found to be the strongest significant predictors of instrumental orientations, integrated orientations, and travel orientations respectively. Limitations of the study and directions for future research were also discussed.

Key-terms: BFPFs, ELM categories, instrumental orientations, integrated orientations, travel orientations.

1. Introduction

Motivation is a crucial affective factor that is highly decisive in learning a foreign language in general and English language in particular. Individuals may decide to learn English language for instrumental or integrated or travel orientations. That is to say, the objective behind learning English differs from one person to another. Given that people differ also in their personalities and that personality factors were found to be associated with different life outcomes, the current study tends to investigate the relationships between personality factors and ELM categories.

2.The Big-Five personality factors

The BFPFs (it is also called Five-Factor Model of personality which will be used interchangeably in this thesis) descend from both the lexical-semantic hypothesis which suggests that each significant description of human differences is found in the natural language during the development and evolution of language (Bagby, Marshal & Georgiades, 2005b), and also from personality questionnaires (McCrae & John, 1992). That is to say, differences in personalities can be discovered by investigating known personality descriptors that became semantically encoded and used in our daily vocabulary (Cattell, 1946; Digman, 1990).

The BFPFsare comprehensive and widely replicated trait taxonomy (Goldberg, 1993; McCrae & Costa, 2003). This personality taxonomy has dominated the field of personality psychology since the 1980s. The labels given to those five traits still vary but they are often described as Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Each trait is composed of six facets. For example, the facets of Agreeableness are Trust, Morality, Altruism, Cooperation, Modesty, and Sympathy. Moreover, this model of personality was labeled by the Big-Five (Goldberg, 1981) not to indicate their intrinsic greatness but to imply that each factor is largely broad. Hence, the Big-five does not suggest that personality differences can be classified into only five traits.

Rather, personality is represented at the deepest level of abstraction by these five traits, and that each trait includes so many distinct and specific personality characteristics (John & Srivastava, 1999). The existence of the BFPFs has been proved by factor analytic methods, where researchers used data from both cross-sectional and longitudinal designs (Costa & McCrae, 1980). Furthermore, much research has confirmed the validity of the Big-Five (Caspi, Roberts, & Shiner, 2005; Ozer & Benet-Martinez, 2006), which was supported by behavioral genetics (Yamagata et al., 2006), universality across cultures (Allik, 2005), and neuroscience (DeYoung et al., 2010). A large number of scholars and researchers contributed to the development of the Big-Five including Allport (1937), Cattell (1943), Costa and McCrae (1992a), Eysenck (1960), Goldberg (1982), Norman (1963), and Tupes and Christal (1992). The Big-Five has shown to be a solid model as the same five personality traits appeared in studies of both self- and peer-ratings (McCrae & Costa, 1987), studies on children and adults (Digman, 1997), and several languages and cultures (Allik, 2005). It is also worth mentioning that the Big-Five is independent of race, age, sex, culture, and time (Costa & McCrae, 1992a; Samuel, Simms, Clark, Livesley, &Widiger, 2010).

3. Motivation and language learning

Much research has indicated that motivation is a major factor that contributed to the success of language learners. The concept of motivation was defined as "a combination of effort plus desire to achieve the goal of learning the language plus favorable attitudes towards learning the language" (Gardner, 1985). Foreign language teachers usually mention that learning a language is highly associated with the extent to which learners are motivated. This was reported by Dörnyei (2001a) who stated that motivation can help most of learners to learn a language. It was also pointed out that motivation had an impact on the proficiency level of language learners (Oxford &Shearin, 1994).

Due to their broad knowledge of the social and cultural effects on L2 learning, social psychologists were the first researchers to commence profound studies on motivation in language learning (Dörnyei, 2003). This led to the emergence of different models which put much emphasis on the affective aspect of language learning such as Monitor Model and Acculturation Model, which were respectively developed by Krahsen (1981) and Schumann (1986).

Nevertheless, the most influential model of language learning motivation was developed by Gardner and dominated research from the late 1950s till the 1990s. This model was labeled as the Socio educational Model (Gardner,1985). Second language motivation was defined by Gardner (1985) as "the extent to which the individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this study." This model made a clear distinction between two types of motivation, namely *Instrumental motivation* and *Integrated motivation.* Instrumental motivation refers to learning a language for functional purposes such as getting a job or passing a university entrance exam. As for integrated motivation, it refers to learning a language in order to communicate or integrate into the target language culture. For example, a person may be motivated to learn English in order to integrate into the American culture. Several studies showed that integrative motivation had more impact on learning a language than instrumental motivation (Gardner & MacIntyre, 1991; Liu, 2007).

4. Purpose of the study

This study aimed to investigate the relationship between personality traits and ELM categories, namely instrumental orientations, integrated orientations, and travel orientations. It also tends to examine which personality traits can predict ELM categories. To achieve this purpose, two research questions were addressed:

1. Are there any significant correlations between personality traits and ELM categories?
2. Which personality factors do predict ELM categories?

5. Methodology

5.1.Subjects

The study includes 115English major students at Moulay Ismail University, Morocco. They were divided into 66 males and 49 females with age ranging from 18 to 28. This department gives more focus to accuracy and fluency in English language along with mastering some skills such as Teaching English as a Foreign Language (TEFL) and translation.

5.2.Instruments

IPIP: this study adopted the 50-item version of the International Personality Item Pool Big Five inventory (IPIP) which was developed by Goldberg (1999). This scale was used to assess the Big-Five factors of personality: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. This scale allots10 items for each of the personality traits. The items are answered on a 5-point Likert scale ranging from *Very Inaccurate* (1) to *Very Accurate* (5). Each of the personality traits has a score with a range between 10 and 50, and it is calculated by summing all the items' scores. This means that higher scores indicate a higher level of the personality traits. Items 2, 6, 8, 9, 10, 12, 16, 18, 19, 20, 22, 26, 28, 30, 32, 36, 38, and 46 are inversely coded. IPIP showed a high internal consistency (Cronbach's α=.91) in this study.

ELM Scale: it is a 36-item survey which was developed by Clément, Dornyei, and Noels (1994). It was used to measure the extent to which learners were motivated to learn English language. Items 1 to 15 dealt with integrative orientations, items 16 to 30 dealt with instrumental orientations, and items 31 to 36 dealt with travel orientations. The items were answered on a 5-point Likert scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). This means that higher scores indicate a higher level of ELM. This scale displayed a high internal consistency (Cronbach's α=.93) in the current study.

5.3. Data collection

The researchers had access to the English department at Moulay Ismail University, Morocco. The two questionnaires took around 10 minutes and were administered to the students during class sessions. The participants were told that their participation would have no effect on their final evaluation and that they were not required to write their names on the questionnaires. Furthermore, they were also informed that there was no right or wrong answer to the items. Nevertheless, to receive more accurate answers from the participants, they were told in advance that their opinions would be of great significance to the study.

5.4. Data analyses

After collecting responses from the subjects, data were first coded into the Statistical Package for the Social Sciences (SPSS, Version 21).Before any analysis, data were checked if they were entered correctly so as to avoid errors in entry and conformity. Then, data were analyzed through partial correlation analyses and stepwise multiple regression analyses (MRAs).

6. Results and discussion

To the best of the researchers' knowledge, the current study is the only one of its kind taking into consideration that it is the first where BFPFs are related to ELM categories. This study adds in various significant ways to the understanding of the relationship between personality factors and ELM categories controlling for age and gender. Accordingly, two research questions were addressed.

Descriptive statistics of the BFPFs and ELM categories are introduced in Table1. With regard to research question 1, which examined if there were any significant correlations between personality traits and ELM categories, partial correlational analyses showed different associations between the variables (Table 2). Among the personality traits, Neuroticism and

Table 1. Means and Standard Deviations of BFPFs Measures and ELM categories Measures.

Big-Five Personality Factors	M	SD	Cronbach's α
Openness to Experience	34.64	4.74	.75
Conscientiousness	33.93	6.28	.76
Extraversion	30.07	4.08	.69
Agreeableness	36.93	3.82	.73
Neuroticism	28.00	5.99	.81
ELM categories	M	SD	Cronbach's α
Instrumental orientation	58.86	6.36	.72
Integrated orientation	58.57	4.29	.87
Travel orientation	22.86	2.60	.77

Table 2. Partial correlations between the BFPFs and ELM categories.

	Big-Five Personality Factors				
ELM categories	Openness to Experience	Conscientiousness	Extraversion	Agreeableness	Neuroticism
Instrumental orientations	**.17**	-.41***	**-.12**	.24*	.34***
Integrated orientations	**.07**	**.03**	.37***	.49***	-.27**
Travel orientations	**.10**	-.34***	**-.12**	-.32**	.56***

*p<.05. **p<.01. ***p<.001. Coefficients in **Boldface** are not significant at p<.05.

Agreeableness displayed the most consistent pattern of relationships with significant correlations to all ELM categories. The strongest significant association with Neuroticism was found for travel orientations. This result indicates that anxious, nervous, and moody individuals are more likely to learn English language for travel purposes. The next strongest association was for instrumental orientations. That is to say, people with high level in Neuroticism tend also to learn English language in order to get some functional goals such as a job or promotion. A weaker correlation (negative) suggested that neurotic individuals are unlikely to learn English language for integrated orientations.

As for Agreeableness, the strongest significant correlation was seen for integrated orientations indicating that kind and warm individuals tend to adopt more integrated orientations when they learn English language. The next strongest relationship with Agreeableness was found for travel orientations and was negative. This implies that individuals high in this personality trait do not learn English language for travel purposes. A somewhat weaker association was found between Agreeableness and instrumental motivation indicating that agreeable people may also learn English language to achieve instrumental goals. The next strongest relationships between personality factors and ELM categories were seen for Conscientiousness. It was significantly negatively correlated with two ELM categories, namely instrumental orientations and travel purposes. This implies that individuals who are organized and diligent are more unlikely to learn English language for instrumental or travel goals. Among personality traits, Extraversion showed the weakest association with ELM categories as it significantly correlated with only one category, namely integrated orientations. This finding indicates that extravert individuals are more likely to study English language just to be a part of the English culture group or community.

Unexpectedly, Openness to Experience was the only personality factor that displayed no significant correlation with ELM categories. In other words, individuals high in this personality trait did not show, in this study, which ELM category that may drive them to learn English language.

Overall, partial correlation analyses depicted different associations between personality traits and ELM categories, with the strongest relationships found respectively for Neuroticism, Agreeableness, Conscientiousness, and Extraversion. Openness to Experience showed no significant correlation at all. As for research question 2, which investigated the predictive relationships of the personality traits with ELM categories, stepwise MRAs were conducted. Table 3 shows that four of the personality traits were significant predictors of instrumental orientations. Conscientiousness was the strongest significant predictor and explained 25% of the variance, followed by Agreeableness, Openness and then Extraversion. Together, the four personality traits explained 48% of the variance. Besides, the findings also indicate that those four personality factors received significant betas (Table 3). As an illustration, the model shows that with every increase of one standard deviation in Conscientiousness, instrumental orientations decrease by .71 standard deviation. Based on these findings, Conscientiousness had more impact in the model and, hence, was the strongest significant predictor of instrumental orientations.

Furthermore, all the BFPFs were found to be significant predictors of integrated orientations (Table 4). Agreeableness showed the highest variance by explaining 32%, followed by Extraversion, Openness to Experience, Neuroticism, and then Conscientiousness. Clearly, the personality traits collectively explained 62% of the variance in integrated orientations. Additionally, the BFPFs revealed significant betas. For instance, the model displays that with every increase of one standard deviation in Agreeableness, integrated orientations increase by .99 standard deviation (Table 4). Consequently, Agreeableness was found to be the strongest predictor of integrated orientations.

The BFPFs also significantly predicted travel orientations (Table 5). Neuroticism was the strongest predictor by accounting for 31% of the variance, followed by Agreeableness, Openness to Experience, Conscientiousness, and Extraversion. The personality traits together accounted for 57% of the variance in travel orientations. Besides, each of the BFPFs exhibited significant beta (Table 5). For instance, when Neuroticism increases by one standard deviation, travel orientations increase by . 87 standard deviation. Accordingly, Neuroticism was revealed to be the strongest predictor of travel orientations.

Table 3. Regressing the BFPFs on Instrumental orientations

Predictors	R^2	ΔR^2	β
Conscientiousness	.25	.25***	-.71***
Agreeableness	.40	.15***	.32**
Openness to Exp	.44	.04**	.26**
Extraversion	.48	.04**	.20**

*p<.05. **p<.01. ***p<.00.

Table 4. Regressing the BFPFs on Integrated orientations

Predictors	R^2	ΔR^2	β
Agreeableness	.32	.32***	.99***
Extraversion	.43	.11***	.21**
Openness to Exp	.51	.08***	-.39***
Neuroticism	.54	.03**	-.50***
Conscientiousness	.62	.08***	-.47***

*p<.05. **p<.01. ***p<.001.

Table 5. Regressing the BFPFs on Travel orientations

Predictors	R^2	ΔR^2	β
Neuroticism	.31	.31***	.87***
Agreeableness	.40	.09***	-.67***
Openness to Exp	.46	.06**	.38***
Conscientiousness	.52	.06**	.41***
Extraversion	.57	.05**	.25**

*p<.05. **p<.01. ***p<.001.

7. Conclusion

The aim of this study was to investigate the relationship between personality traits and ELM categories. Overall, the findings of this study show that there were several significant correlations between personality traits and ELM categories meaning that the motivation orientations behind learning English language differ from one person to another depending on his/her personality trait. Furthermore, the strongest significant predictors differed from one ELM category to another indicating that individuals with a high level of a particular personality trait are more likely to learn English for a certain ELM category. Hence, this is the first attempt to pave the road for more future studies to be conducted on this topic in order to broadly understand the relationship between the BFPFs and ELM categories.

8. Limitations of the study

Despite the fact that this study broadened the understanding of the relationship between personality traits and ELM categories, it must be acknowledged that it included some limitations. Most notably, future research may recruit a higher number of participants from different universities. Future research may also control for more variables that may influence the relationships between personality traits and ELM categories. Finally, investigating this relationship among different levels of English language learners may provide more explanations of this topic.

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