

Konin Language Studies

Faculty of Humanities and Social Sciences, State University of Applied Sciences in Konin, Poland KSJ 8 (1). 2020. 31-52 http://ksj.pwsz.konin.edu.pl doi: 10.30438/ksj.2020.8.1.2

English speaking self-efficacy and its relations with personality traits

Haldun Vural

Independent Researcher, Turkey https://orcid.org/0000-0002-4638-4084 *bildirler@gmail.com*

Abstract

The lack of communicative competence of Turkish university students can be explained with shyness and insufficient self-efficacy. Therefore, it can be asserted that personality and self-efficacy are interrelated. If teachers are aware of students' personality types and can find out whether the reasons for their speaking self-efficacy are related to their personality traits, they may teach their classes better and decide on the most effective teaching techniques and methods. Speaking self-efficacy can be suggested as a common problem in foreign language learning. Since studies related to the big five factors have shown that these factors can be changed through education or intervention and positively contribute to personality traits, it is necessary to determine which and how many of the big five personality factors match foreign language speaking self-efficacy. The aims of the current study were: (1) to determine the personality traits of 4th-year students at English Language Teaching (ELT) and English Language and Literature (ELL) departments at Turkish universities, (2) to examine whether there are significant differences between personality traits of ELT-ELL departments' students, (3) to examine the relations between personality traits and English speaking self-efficacy of the participants. According to the results, there is a significant difference between personality traits' scores of both groups. All personality traits exist in ELT and ELL groups. The sequence of PTs is the same for both groups with lower ratios in ELL except neuroticism which is higher in ELL. The personality traits from the highest are agreeableness, openness, conscientiousness, extraversion and neuroticism respectively. There are significant relations between personality traits and foreign language speaking self-efficacy of the participants. While

there are negative and significant relations between agreeableness, openness, conscientiousness, extraversion and foreign language speaking self-efficacy, there is only one positive and significant relation between it and neuroticism.

Keywords: personality traits; foreign language speaking; foreign language speaking self-efficacy; English Language Teaching; foreign language teaching

1. Introduction

Lack of willingness to speak can be explained with feeling not self-efficient in speaking enough among Turkish people as well as students studying English at universities since the participants of a study described themselves as moderately talkative (Alishah, 2015). Therefore, it can be asserted that personality is related to self-efficacy.

In similar environments and groups, some prefer speaking freely and much, but some others abstain from speaking. 'Little knowers' may be more eager to speak English than "much knowers". While these preferences of speakers depend on their self-efficacy in foreign language speaking, this fact alone is not enough, because some other factors such as personality traits (PT) of persons may affect their preferences. Together with their knowledge of English, differences in personalities may affect people's self-efficacy in foreign language speaking. Since affect is highly related to foreign language speaking, the reasons for foreign language speaking self-efficacy may be understood better through personality.

Speaking in the target language is the main objective of studying a foreign language for many foreign language learners (MacIntyre, Dörnyei, Clément, & Noels, 1998; MacIntyre & MacKay, 2019), and therefore, speaking self-efficacy can be asserted to have an important place in efficient communication (Brown, 2003). Speaking self-efficacy means how people assess their own speaking competence and capability. Therefore, it can be suggested that foreign language speaking selfefficacy (FLSSE) is closely related to foreign language learning and learners.

However, personality traits should not be neglected in determining the reasons for FLSSE either. The effects of personality traits on self-efficacy in speaking a foreign language need to be investigated. As a result, it seems necessary to explore the reasons why English learners with good English knowledge remain silent and why the ones with poor English knowledge are willing to communicate. Here, PTs may interfere with and influence learners' FLSSE negatively or positively together with their competence and communication abilities in English.

2. Literature review

2.1. Personality, personality traits and foreign language learning

Personality can be defined as what a person will do in a given situation. Individual differences are believed to exist in languages and echoed as concrete words and this is the hypothesis to direct the investigations for classifications of personality. The basic understanding in personality investigations is the assumption that individual differences are encoded in all world languages and reflected as concrete words and this has been proven by research (Somer, 1998). People can be assembled around certain trait descriptors according to their similarities and inclinations. Therefore, with the help of science, personality traits began to use the words (adjectives) instead of ancient humors. Personality traits have been investigated for a long time. Investigations into personality have given a lot of information on origins, structures, consequences and nature of personality traits (Buss, 1989). This information can be used to explain a person's choice of character because one's character is connected to one's behaviors and as a result, one's character may preserve many clues about a person's behaviors. Actually, traits were thought pure cognitive fictions by many psychologists. For the last twenty-five years, experimental researchers have formulated the structure, consequences, nature and origins of personality traits. Nowadays, traits are assumed to explain most of human behavior (McCrae & Costa, 2003, 2020).

The five-factor model appeared in mid 1930s (Thurstone, 1934). And in the 1960s the first traces of five dimensions of personality were met and later, that is, in the 1980s and the 1990s the Big Five investigations were intensified. The Five Factor Personality model emerged from factor analysis of various personality tests and scales and a detailed analysis of the adjectives was used to describe the personality (Friedman & Schustack, 1999). The Big Five was the term used for this five-dimension approach. In the Big Five extraversion, agreeableness, conscientiousness, neuroticism and openness are the independent or orthogonal dimensions where individual differences of normal people can be clustered (McCrae & John, 1992).

Personality traits are important because it is proved that students' academic success (Etzel and Nagy, 2016; Lounsbury, Gibson, Sundstrom, Wilburn, & Loveland, 2004) and career success (Judge, Higgins, Thoresen, & Barrick, 1999; Spurk, Keller, & Hirschi, 2016) are related to personality traits. Development of knowledge is affected by cognitive and non-cognitive personal varieties (Furnham & Chamorro-Premuzic, 2004). Since personality traits are accepted among the non-cognitive individual differences, academic success is predicted better by the Big Five personality traits (O'Connor & Paunonen, 2007). In foreign language learning, especially when it comes to non-linguistic and affective dimensions, elements of personality traits can be met. For example, neuroticism and extraversion are strongly related to affect according to Eysenck and Eysenck (1985), Costa and McCrae (1992) and Lay, Gerstorf, Scott, Pauly and Hoppmann (2017). And similarly, agreeableness, openness and conscientiousness are to some extent related to affective factors such as confidence and self-esteem, which is in accordance with what is claimed by Watson and Clark (1992) and Niazi and Mehmood (2017). It is obvious that affect has a great influence on foreign language speaking. Therefore, it can be asserted that personality is crucial and has to be handled with care by FLL researchers in order to understand the reasons for FLSSE.

Extroversion has a direct relationship with foreign language speaking selfefficacy. Extroverted students are generally more engaged and active in tasks and, consequently, this may increase their speaking self-efficacy. Openness may lead to more speaking self-efficacy (Apple, 2011; MacIntyre & Charos, 1996; Piechurska-Kuciel, 2018). However, this fact is just the opposite for neurotic learners; they do not want to participate in the activities in classes and their negative emotional states of being nervous and anxious affect their self-efficacy. Therefore, if learners have lower neuroticism, they may have higher speaking self-efficacy in the classes. And together with agreeableness, neuroticism has positive relations with academic self-regulation and self-efficacy (Mostowik, Cyranka, Mielimąka, Ostrowski, & Rutkowski, 2018; Senler, 2011).

Since disciplined and responsible learners with high conscientiousness trait are better prepared and have good study habits, they are more successful in their English classes; so it can be suggested that conscientiousness has a weak direct influence on foreign language speaking self-efficacy (Apple, 2011). And agreeableness is firmly related with FLSSE. People with high degree of agreeableness are more biased for sympathizing and cooperation with other people (Hilbig, Thielmann, Klein, & Henninger, 2016: John, Naumann, & Soto, 2008). When foreign language learning is considered, this trait might make people use the target language more and, consequently, might help increase their speaking self-efficacy. In summary, it can be inferred that high levels of agreeableness, conscientiousness, openness and extroversion may improve FLSSE (Apple, 2011; Vural, 2019).

During the personality traits history the studies have shown that extraversion is related to foreign language speaking anxiety (MacIntyre and Charos, 1996; Vural, 2019), openness (Kashiwagi, 2002), English learning (Homayouni, 2011), motivation of engagement (Komarraju & Karau, 2005), with strongest learning goal orientation (Payne, Youngcourt, & Beaubien, 2007), personality and affect (Yik, Russell, Ahn, Dols, & Suzuki, 2002). In Turkey students are found fairly extraverted (Alishah, 2015) and extraverted teachers and extraverted participants are more lively in their foreign language classes. Again among university students in Turkey, the first personality trait is agreeableness and the second is openness (Yanardöner, 2010).

Openness personality trait is positively related to English speaking (Apple, 2011; Mac-Intyre and Charos, 1996) and learning (Homayouni, 2011). Openness is also related to communicative competence (Verhoeven & Vermeer, 2002), academic achievement (Laidra, Pullmann, & Allik, 2007), strong learning goal orientation (Payne et al., 2007), classroom performance and Grade Point Average (GPA) (Rothstein, Paunonen, Rush, & King, 1994) and formation ability (King, Walker, & Broyles, 1996). Besides, openness has a negative correlation with neuroticism but a positive correlation with agreeableness (Rubinstein, 2005). However, openness was negatively related to academic self-regulation and self-efficacy (Senler, 2011). As for conscientiousness, it is related to grades, GPA and individual score (Laidra et al., 2007), academic success and academic achievement (Barchard, 2003), feeling towards learning and motivation of achievement (Komarraju & Karau, 2005), various features of communicative competence (Verhoeven & Vermeer, 2002) and neuroticism (Rubinstein, 2005). And agreeableness is related to English learning (Homayouni, 2011), conscientiousness, openness and neuroticism (Rubinstein, 2005) and formative capabilities (King et al., 1996). Neuroticism has relations with many negative items and personality problems of people (Digman, 1990), agreeableness and conscientiousness (Rubinstein, 2005), self-esteem (Marlar & Joubert, 2002), affect and personality (Yik et al., 2002).

2.2. Self-efficacy and foreign language learning and speaking

Beliefs of capability or self-perceptions of people about themselves to perform tasks or learn new things at certain levels comprise self-efficacy (Bandura, 1997). Self-efficacy is also in close relations with perceptions of oneself. According to Hoy and Spero (2005), self-efficacy is not just related to the actual level of competence but rather it refers to perceptions of competence in a judgment of the future. Self-efficacy has a relationship with some points such as outcome expectations, efforts and feedback (Bandura, 1997). According to Bandura (1997), effort has a great influence on selfefficacy. Self-efficacy is also known to be closely associated with some constructs such as self-esteem. Besides, confidence is closely connected with self-efficacy. It is the strength of belief without specifying the certainty (Bandura, 1997).

It has been observed in studies that student learning is increased by high self-efficacy and success is more probable for learners having high self-efficacy (Pajares, 1996; Roick & Ringeisen, 2017). Research has also confirmed that self-efficacy affects motivation (Pajares, 1996; Roick & Ringeisen, 2017). It was determined that using more Responsive Classroom (RC) practices may increase self-efficacy

beliefs (Rimm-Kaufman & Sawyer, 2004). Besides, there are significant relations between openness and conscientiousness and classroom management efficacy of teachers (Burkett, 2011). There are positive relations between self-efficacy, academic performance, student persistence at different levels, subsequent performances (Honicke and Broadbent, 2016; Multon, Brown, & Lent, 1991) and language learners' success (Cotterall, 1999; Talsma, Schüz, Schwarzer, & Norris, 2018).

In the field of FLL, a few studies were dedicated to self-efficacy theory, especially in the late 1990s. In a study, reading and writing were investigated. The participants were from a university English program. At the end of the investigation, students' self-efficacy was found to be significantly related to their grades in writing and reading parts of their TOEFL exam (Huang and Chang, 1996). Another study was conducted with two groups of EFL students in Japan; one group consisted of highefficacious students and the other consisted of low-efficacious students. After the t-test, an important difference was determined between the scores of two groups (Templin, 1999). Another study was conducted again in Japan to determine the effects of self-efficacy on students' English ability. Participants received SE instruction for one semester and a self-efficacy questionnaire and an English test were applied before and after the instruction. The findings proved the benefits of self-efficacy instruction (Templin, Guile, & Okuma 2001). The next study was dedicated to SE rating and the language learning strategy usage (Chamot, Barnhart, El-Dinary, & Robbins, 1996). It was held in Australia among 135 high school students learning different foreign languages. The findings proved that self-efficacy and strategy use were significantly and positively correlated. Yet another study was conducted in Malaysia on the relationship between students' English language achievement and self-efficacy (Mahyuddin, Elias, Muhamad, Noordin, & Abdullah, 2006). The proportion of students having low self-efficacy and high self-efficacy was almost the same. Some dimensions of self-efficacy such as self-assertiveness, several other expectancy beliefs and academic achievement efficacy showed positive correlations after the analysis. According to the results, having high self-efficacy increases success in English language learning. The next research project was a single case study which included the freshmen's self-efficacy beliefs about learning English with different tasks at home and school. It was found out that self-efficacy beliefs of learners were flexible and depending on tasks and their self-efficacy beliefs were related to their self-perceptions, difficulty level of tasks, their interests, social and cultural context, and their attitudes toward English (Wang & Pape, 2007). Another study was conducted by Gahungu (2007) about the strategy use, SE, and language ability of English students. The findings showed these three variables had positive and significant relations. Although the learners did not have definite motivation to study a foreign language, they did not oppose the requirements of the program, and this influenced their strategic behavior. Lastly, the study was conducted in Botswana for three years

on relations between self-efficacy beliefs, proficiency, preferred language strategies and age (Magogwe and Oliver, 2007). According to findings, although many language learning strategies are used by students, they prefer specific types of them. Also these four variables had dynamic correlations among one another. Also a negative and strong relation with English self-efficacy and English class anxiety was found in the research by Tsai (2013).

2.3. Research questions

Therefore, it seems necessary to test the effects of PTs on FLSSE and to understand the influence of PTs on FLSSE in Turkey. Hence, the current study aims to answer the following research questions:

- 1. Are there any significant relationships between the scores of English Language Teaching (ELT) students' personality traits (PTs) and their foreign language speaking self-efficacy (FLSSE)?
- 2. Are there any significant relationships between the scores of English Language and Literature (ELL) students' personality traits (PTs) and their foreign language speaking self-efficacy (FLSSE)?

3. Method

A description of research processes (Smith & Albaum, 2012) and solutions to problems and transformation of the situation to a better condition (Friedman, 2003) constitute the research model. The current study has the features of quantitative research design which is comparative and correlational by nature. Quantitative research is a form of research using empirical methods and statements while collecting data (Cohen, Manion, & Morrison, 2013). In quantitative research, it is important to gather numerical data and generalize it to groups of people for a particular phenomenon (Babbie, 2015). Therefore, quantitative research was used in the current study to determine the personality traits and FLSSE levels of participants.

The current study is also descriptive since it elaborates on what exists and may show new facts and meaning beyond what is supposed to exist. It includes the observation, description and documentation of a situation while it is normally happening and the data of a descriptive study give a description or account of groups, situations or individuals and these data are collected through questionnaires (Polit & Hungler, 1999). In order to obtain data about the characteristics of the sample being investigated descriptive research was used (Burns & Bush, 2003). Fundamentally, descriptive research has closed-ended

questions and these questions limit the unique insight. In the current study, descriptive research was applied to have demographic information of participants.

In this study, correlation between personality traits and FLSSE was also investigated. In a correlational study, the nature of the relationship between variables in real world is systematically investigated and explained. The data obtained from descriptive research in this study were quantifiable data which could be quantified and counted. Therefore, they were analyzed in a correlational way. A correlational study does not just describe what exists but makes a detailed investigation into relationships between two or more variables (Porter & Carter, 2000). Moreover, a correlational study investigates relations among two or more quantitative variables and tries to make predictions according to an understanding of those relationships (Johnson & Christensen, 2004). Therefore, this study can be accepted as primarily a correlational study.

3.1. Participants

The participants were from 31 universities in Turkey, totally around 2000 students. The investigation was conducted in Spring 2015, from February till July without any intervention. Students were asked to answer all questions in the questionnaires. And, any missing responses were assumed as false and eliminated. After all eliminations the final n-size was 1845; 923 of them were fourthyear students of English Language Teaching departments and 922 of them were fourth-year students of English Language and Literature departments.

3.2. Instruments

The instruments for data collection in this study were

- The Big Five Inventory: The Big Five Inventory is a questionnaire consisting of 44 short-phrase items and it assesses personality traits (John, Donahue, & Kentle, 1991). For the current study, Cronbach's Alpha coefficient was found .62 for extraversion; .69 for openness; .62 for neuroticism; .61 for agreeableness and .68 for conscientiousness, with an average of .65. Therefore, it may be suggested that the questionnaire items used in the current study have a fairly good internal consistency.
- 2. The Questionnaire of English Self-Efficacy (QESE): Wang (2004) developed the Questionnaire of English Self-Efficacy (QESE) scale with young Chinese English language learners in the USA and their verbal protocols, observations and interviews. Since the present study is investigating foreign language speaking self-efficacy, only the items about self-efficacy

for speaking (Items 4, 6, 8, 17, 19, 20, 23, and 30) are used with permission of Mr. Wang. For the internal reliability, internal consistency of 8 items was tested through Cronbach's Alpha coefficient. It was found to be .93. Accordingly, it may be suggested that the questionnaire items used in the current study have a good internal consistency.

3.3. Data collection procedures

The participants were not chosen according to any criteria except their existence at the time of application of questionnaires; so convenience sampling was applied for the current study.

3.4. Data analysis

In the current study interval scales were used based on two questionnaires. The Statistic Package for Social Sciences (SPSS) was used to analyze the data through descriptive (means, percentages and standard deviations) and inferential statistics (correlation) in order to identify the features of the data and the relations between the variables.

4. Results

Research question 1: Are there any significant relationships between the scores of ELT personality traits (PTs) and their foreign language speaking self-efficacy (FLSSE)?

A Pearson product-moment correlation coefficient was computed to assess the relationship between the scores of ELT PTs and their FLSSE. All the Sig. (2-tailed) values for the current research question results are significant. Since this value is less than .05, there are statistically significant correlations between ELT PTs and FLSSE. In Table 1, Pearson product-moment correlation coefficients between the scores of ELT PTs and their FLSSE are given.

Table 1 Correlations between the scores of ELT personality traits and their foreign language speaking self-efficacy (N = 923)

Variables	М	SD	1	2	3	4	5	6	7
1. Agreeableness a	3.70	.55	13**	-					
2. Openness a	3.70	.54	30**	.26**	-				
3. Conscientiousness ^a	3.52	.58	21**	.44**	.32**	-			
4. Extraversion a	3.32	.63	41**	.26**	.42**	.33**	-		
5. Neuroticism a	2.84	.64	.38**	22**	26**	31**	42**	-	
6. FLSSE b	6.20	.86	49**	.15**	.27**	.17**	.27**	13**	-

Note. a = 5-point Likert scale, b = 7-point Likert scale; ** p < .01

According to Table 1, both the mean scores of agreeableness (M = 3.70) and openness (M = 3.70) are the same and highest among the personality traits. Moreover, the score of conscientiousness (M = 3.52) is higher than both extraversion (M = 3.32) and neuroticism (M = 2.84). Besides, the lowest mean score belongs to neuroticism (M = 2.84). And the mean score of FLSSE (M = 6.20) is the highest.

When the correlation coefficients are taken into consideration, all the relations between the variables are significant. While there are positive and significant relations between FLSSE and agreeableness (r = .15, p < .01), openness (r = .27, p < .01), conscientiousness (r = .17, p < .01), extraversion (r = .27, p < .01), there are negative and significant relations between FLSSE and neuroticism (r = .13, p < .01). All the relations between neuroticism and other variables are negative as well.

Research question 2: Are there any significant relationships between the scores of ELL personality traits (PTs) and their foreign language speaking self-efficacy (FLSSE)?

A Pearson product-moment correlation coefficient was computed to assess the relationship between the scores of ELL PTs and their FLSSE. All the Sig. (2-Tailed) values for the current research question results are significant. Since this value is less than .05, there are statistically significant correlations between ELL PTs and their FLSSE. In Table 2, Pearson product-moment correlation coefficients between the scores of ELL PTs and their FLSSE are given.

Table 2 Correlations between the scores of ELL personality traits and their foreign language speaking self-efficacy (N = 922)

Variables	М	SD	1	2	3	4	5	6	7
1. Agreeableness a	3.54	.56	11**	-					
2. Openness a	3.47	.60	22**	.32**	-				
3. Conscientiousness a	3.33	.60	25**	.42**	.45**	-			
4. Extraversion a	3.17	.58	35**	.20**	.36**	.32**	-		
5. Neuroticism a	2.97	.60	.30**	28**	18**	28**	26**	-	
6. FLSSE b	5.90	.78	35**	.10**	.18**	.16**	.17**	04**	-

Note. a = 5-point Likert scale, b = 7-point Likert scale; ** p < .01

According to Table 2, the mean scores of agreeableness (M = 3.54) and openness (M = 3.47) are quite similar to each other and they are the highest among the personality traits. Moreover, the score of conscientiousness (M = 3.33) is higher than both extraversion (M = 3.17) and neuroticism (M = 2.97). Besides, the lowest mean score belongs to neuroticism (M = 2.97). And the mean score of FLSSE (M = 5.90) is the highest.

When the correlation coefficients are taken into consideration, all the relations between the variables are significant. While there are positive and significant relations between FLSSE and agreeableness (r = .10, p < .01), openness (r = .18, p

< .01), conscientiousness (r = .16, p < .01), extraversion (r = .17, p < .01), there are negative and significant relations between FLSSE and neuroticism (r = ..04, p < .01). All the relationships of neuroticism with other variables are negative as well.

To sum up, the majority of the participants have agreeableness and the participants with neuroticism are in minority. There are significant differences between the mean scores of ELT and ELL students' personality traits and their FLSSE scores. Also significant relationships between the scores of FLSSE and the scores of personality traits of the participants are detected. According to the results, high extraversion means high FLSSE and high neuroticism means low FLSSE. These results can be asserted as the same for both ELT and ELL groups.

5. Discussion

The first issue investigated in the current study is about significant relationships between the scores of ELT PTs and their FLSSE. When the mean scores of the PTs are considered, agreeableness and openness have the same and the highest scores among the personality traits for ELT group. Moreover, neuroticism has the lowest mean score. And conscientiousness is higher than both extraversion and neuroticism. And FLSSE has the highest mean scores among the variables.

According to the correlation coefficients of ELT group, the relation of each variable with the others is significant. Regarding the FLSSE, the results indicate the existence of five PTs for the participants. From the highest, respectively extraversion, openness, conscientiousness and agreeableness have positive and significant relations with FLSSE. Although its score is very close to the score of conscientiousness, agreeableness personality trait is the last one which correlates positively with FLSSE. Therefore, agreeable students are only more self-efficient foreign language speakers than the neurotic ones. And among the PTs, only neuroticism has a negative and significant relation with FLSSE. This result means that the least self-efficient English speakers are the neurotic students. Therefore, according to these findings it can be suggested that the more extraverted, open to new experiences, conscientious and agreeable people are, the more self-efficient English speakers they are; and the more neurotic people are, the less self-efficient English speakers they are.

The second issue investigated in the current study is about significant relationships between the scores of ELL PTs and FLSSE. The mean scores of the PTs show that agreeableness and openness have almost the same and the highest scores among the personality traits for the ELL group. Moreover, neuroticism has the lowest mean score. And conscientiousness is higher than both extraversion and neuroticism. And FLSSE has the highest mean scores among the variables. These results overlap with the results of the ELT group as well. According to the correlation coefficients of ELL group, all the relations between the variables are significant. Openness, extraversion, conscientiousness and agreeableness have positive and significant relations with FLSSE. However, the mean scores of three PTs, openness, extraversion, conscientiousness are very close to each other. And agreeableness personality trait is the last one which correlates positively to FLSSE. Therefore, agreeable students are only more selfefficient foreign language speakers than the neurotic ones. And among the PTs, only neuroticism has a negative and significant relation with FLSSE. Actually, neuroticism has negative relations with all variables. This result means that the least self-efficient English speakers are the neurotic students.

Regarding the issues in research questions, all personality traits have significant relations with FLSSE for both ELT and ELL groups. There are positive significant relations between all personality traits except neuroticism. So, except neuroticism, the other four personality traits affect FLSSE positively.

Extraversion has a positive relation with FLSSE, although it is the fourth personality trait according to mean scores of all PTs. And neuroticism is the fifth personality trait according to mean scores of all PTs. This means that neurotic participants are in minority and they are the least self-efficient foreign language speakers. This finding of the current study also proves the close relation between extraversion and neuroticism (Eysenck, 1992).

This also indicates that highly extraverted university students have higher levels of self-efficacy in foreign language speaking than less extraverted students in Turkey. Therefore, all these factors may affect learners' speaking self-efficacy in a positive way and increase their speaking self-efficacy as well. These results are in line with results of MacIntyre and Charos, (1996), Apple (2011) and Piechurska-Kuciel, (2018) that extraversion is directly related to FLSSE and extraverted learners are the most self-efficient foreign language speakers. The result of the current study also aligns with the results of Alishah (2015) that the majority of the students are moderately extraverted in Turkey. This finding also supports the fact that for the participants extraversion and openness are the most significant predictors of FLSSE and a positive contribution for speaking self-efficacy and high level of extroversion may improve FLSSE (Apple, 2011; Vural, 2019).

Openness has also a positive relation with FLSSE in the current study, as it is the second personality trait according to mean scores of all PTs as well. This finding is also in accordance with Yanardöner's (2010) study where openness is the second personality trait among university students in Turkey. This result agrees with Kashiwagi's (2002) result that openness is correlated with extraversion. According to MacIntyre and Charos (1996), Apple (2011) and Piechurska-Kuciel, (2018), openness may increase speaking self-efficacy and high openness level may result in high speaking self-efficacy. This high openness result of the current study can be accepted as very normal since openness is closely related to affective factors like confidence, self-esteem and experience (Niazi and Mehmood, 2017; Watson & Clark, 1992). Besides, similar to the current study, openness is the highest among personality traits in some investigations and it is positively correlated with speaking (Apple, 2011; MacIntyre & Charos, 1996; Vural, 2019) and learning English (Homayouni, 2011). These findings are in accordance with the majority of previous findings since openness has significant relations with academic achievement (Laidra et al., 2007), strong learning goal orientation (Payne et al., 2007) and GPA of the students (Rothstein et al., 1994).

Moreover, the high correlation of openness with FLSSE in the current study may be explained with the fact that there is a positive contribution of openness for motivation of engagement and there is a negative relation between openness with FLSSE for feeling towards learning (Komarraju & Karau, 2005). Moreover, this finding of the current study agrees with Homayouni's (2011) finding that there is a positive correlation between English learning and openness.

After openness, conscientiousness is another personality trait which has a positive relation with FLSSE in the current study, as it is the third personality trait according to mean scores of all PTs. This finding on conscientiousness in the current study is in accordance with another investigation in that conscientiousness has a strong indirect impact on foreign language speaking (Apple, 2011; Vural, 2019). Also the finding of current study is in accordance with some other studies that there is also a positive correlation between it and agreeableness but a negative correlation between it and neuroticism (Rubinstein, 2005).

In the present study, there is a moderate level of positive significant correlation of conscientiousness with FLSSE among the Turkish university students. This finding suggests that self-disciplined, well-organized and reliable Turkish university students are biased to be more self-efficient in speaking English than those negligent, undependable and disorganized ones. This result agrees with the definition which describes the conscientiousness as socially control of oneself promoting target and duty directed attitude (John & Srivastava, 1999).

Similarly, these findings can also prove that highly conscientious Turkish students may be better in their academic studies than those whose conscientiousness levels are low. Moreover, the significant correlation between conscientiousness and FLSSE may be obtained because conscientiousness contributes positively to motivation of achievement; it has a negative relation with feeling towards learning (Komarraju & Karau, 2005); and there are significant correlations between conscientiousness and different features of communicative competence (Verhoeven & Vermeer, 2002).

The findings of the current study on goals and tasks are also in accordance with the findings that highly conscientious students are the strongest learning

Haldun Vural

goal-oriented ones (Payne et al., 2007), because it is determined that the majority of the conscientious participants are highly dedicated to their tasks, goals and duties and they make plans before acting to do their tasks precisely. This result also agrees with the investigation where a positive correlation between conscientiousness and self-esteem has been detected (Marlar & Joubert, 2002).

Agreeableness is another personality trait after conscientiousness which has a positive relation with FLSSE in the current study, although it is the first personality trait according to mean scores of all PTs. There is a significant correlation between agreeableness and FLSSE in the current study. This finding can be interpreted that Turkish university students give importance to other individuals; they are humanitarian and ready to help people and cooperate with them. This fact is in accordance with John et al., (2008) and Hilbig et al., (2016) that people with high degree of agreeableness are more biased for sympathizing and cooperation with other people. This result is in line with the fact that agreeableness is highly related to confidence, self-esteem and experience (Niazi & Mehmood, 2017; Watson & Clark, 1992). Moreover, this result is in accordance with previous studies that agreeableness is negatively related to classroom performance and has a negative relationship with GPA (Rothstein et al., 1994).

Similarly, there is a positive correlation between agreeableness with conscientiousness and openness but a negative correlation with neuroticism (Rubinstein, 2005) as there is in the current study and again a negative correlation between agreeableness and formative capabilities (King et al., 1996). This finding of the current study is in accordance with the finding of Homayouni (2011) that there is a positive correlation between English learning and agreeableness.

Neuroticism is the only personality trait which has a negative relation with FLSSE and it is the fifth personality trait according to mean scores of all PTs. This means that neurotic participants are in minority and they are the least self-efficient foreign language speakers. Thus, the more neurotic a person is, the less self-efficient s/he is in speaking a foreign language and neurotic students are the least self-efficient English speakers in the current study.

Neuroticism is related to nervousness, depression, being timid and uneasy accompanied by low self-confidence (Eysenck & Eysenck, 1975). And such an anxious and nervous state can prevent neurotic learners from language activities and tasks in foreign language classrooms and this may negatively affect their FLSSE. Accordingly, lower neuroticism may lead to higher speaking self-efficacy in language classes. This result agrees with the finding of investigation by Apple (2011) that foreign language speaking self-efficacy is influenced by neuroticism moderately.

It is found out that neuroticism and extraversion have a strong relation with affect and are in close relation with each other (Eysenck, 1992). This result

also agrees with John and Srivastava's (1999) results on different personality questionnaires scales which support neuroticism and extraversion, with Yoon, Schmidt and Ilies' (2002) study which detects high neuroticism, and Yik et al.'s (2002) study which reveals the biggest correlation between affect and personality. Besides, neuroticism is positively related to motivation of avoidance and this may cause negative feeling towards learning (Komarraju & Karau, 2005) and this may mean low self-efficacy in English speaking as well.

These results show that most of the neurotic Turkish university students have a bad temper and they are nervous. This result is in accordance with the idea that there is a relation among illogical, affective behaviors and low selfrespect (Eysenck & Eysenck, 1975) and there is a negative relation between neuroticism and self-esteem (Marlar & Joubert, 2002). Moreover, most of the neurotic participants can worry easily and they can easily be upset, and this result complies with previous findings that there is a high correlation between affect and personality (Yik et al., 2002) and neuroticism explains this. A lot of negative items and personality problems of people echo in neuroticism (Digman, 1990). These previous findings may explain the low self-efficacy in English speaking for the current study as well. Neuroticism has also a negative relation with FLSSE. This means that high neuroticism hinders self-efficacy and the participants who feel themselves self-efficient English speakers are fewer than the participants with other personalities. This finding on high neuroticism is in accordance with a study where high neuroticism is defined in Korea (Yoon et al., 2002).

Therefore, according to these results, it can be suggested that the more open to new experiences, extravert, conscientious and agreeable people are, the more self-efficient English speakers they are; and the more neurotic people are, the less self-efficient English speakers they are. Also, this finding is in accordance with Tsai (2013) who has found a negative and strong relation with English self-efficacy and English class anxiety.

6. Conclusions

The findings show that all personality traits exist in ELT and ELL groups. The sequence of PTs is the same for both groups with lower ratios in ELL except neuroticism which is higher in ELL. The personality traits from the highest are agreeableness, openness, conscientiousness, extraversion and neuroticism respectively.

In the fields of foreign and second language learning, many investigations have been dedicated to self-efficacy and the current study is about the relation between personality traits and foreign language speaking self-efficacy as well. The correlation coefficients of the participants also indicated that FLSSE had positively significant relations with extraversion, openness, conscientiousness and agreeableness from the highest respectively. According to these findings, high results in extraversion, openness and conscientiousness mean high self-efficacy in English speaking. Among the personality traits, agreeableness is the last one which has a positive correlation with FLSSE. This finding may indicate that agreeable students have the least self-efficacy in speaking English among the students with other three positively correlated PTs (openness, extraversion and conscientiousness). Therefore, students with high agreeableness are only more self-efficient English speakers than the neurotic students. Moreover, neuroticism is the only personality trait which has a negatively significant relation with FLSSE. According to this finding, it can be suggested that students with high neuroticism feel the least self-efficacy in English speaking.

References

- Alishah, R. A. (2015). A study of factors affecting Turkish EFL learners' willingness to speak in English. (Doctoral dissertation) Ankara, Turkey: Gazi University.
- Apple, M. T. (2011). *The Big Five personality traits and foreign language speaking confidence among Japanese EFL students*. (Doctoral dissertation) Philadelphia, PA: Temple University. http://digital.library.temple.edu/cdm/ref/ collection/p245801coll10/id/127286/
- Babbie, E. R. (2015). *The practice of social research*. Toronto: Nelson Education.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Barchard, K. A. (2003). Does emotional intelligence assist in the prediction of academic success?. *Educational and Psychological Measurement*, 63(5), 840-858. http://doi.org/10.1177/0013164403251333
- Brown, J. D. (2003). Promoting fluency in EFL classrooms. In *Proceedings of the 2nd annual JALT Pan-SIG conference* (pp. 1-12). Kyoto, Japan: Kyoto institute of Technology.
- Burkett, M.C. (2011). *Relationships among teachers' personality, leadership style, and efficacy of classroom management.* (Doctoral dissertation), Minneapolis, MN: Walden University.
- Burns, A. C., & Bush, R. F. (2003). Research design. London: Pearson/Prentice-Hall.
- Buss, A. H. (1989). Personality as traits. *American Psychologist*, 44(11), 1378-1388. http://doi.org/10.1037/0003-066X.44.11.1378
- Chamot, A. U., Barnhart, S., El-Dinary, P., & Robbins, J. (1996). *High school foreign language students' perceptions of language learning strategy use and selfefficacy.* Unpublished report. Washington, D. C.: National Foreign Language Resource Centre, Georgetown University.
- Cohen, L., Manion, L., & Morrison, K. (2013). *Research methods in education*. New York: Routledge.
- Costa, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, *13*(6), 653-665. http://doi.org/10.1016/0191-8869(9 2)90236-I
- Cotterall, S. (1999). Key variables in language learning: What do learners believe about them? *System*, *27(4)*,493-513. http://doi.org/10.1016/S0346-251X(9 9)00047-0
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology, 41*(1), 417-440. http://doi.org/10.1146/annurev. ps.41.020190.002221
- Etzel, J. M., & Nagy, G. (2016). Students' perceptions of person–environment fit: Do fit perceptions predict academic success beyond personality traits?. *Journal of Career Assessment*, 24(2), 270-288.

- Eysenck, H. J. (1992). Four ways five factors are not basic. *Personality and Individual Differences, 13*(6), 667-673. http://doi.org/10.1016/0191-8869(92)90237-J
- Eysenck, H. J., & Eysenck, S. B. G. (1975). *Manual of the Eysenck Personality Questionnaire*. London: Hodder and Stoughton.
- Friedman, H., S., & Schustack, M. W. (1999). *Personality: Classic theories and modern research.* Boston, MA: Allyn & Bacon.
- Friedman, K. (2003). Theory construction in design research: Criteria, approaches, and methods. *Design Studies*, 24(6), 507-522. http://doi.org/ 10.1016/S0142-694X(03)00039-5

Furnham, A., & Chamorro-Premuzic, T. (2004). Personality and intelligence as predictors of statistics examination grades. *Personality and Individual Differences*, 37(5), 943-955. http://doi.org/10.1016/j.paid.2003.10.016

Gahungu, O. N. (2007). *The relationships among strategy use, self-efficacy, and language ability in foreign language learners*. (Doctoral dissertation), Flagstaff, AZ: Northern Arizona University.

- Hilbig, B. E., Thielmann, I., Klein, S. A., & Henninger, F. (2016). The two faces of cooperation: On the unique role of HEXACO Agreeableness for forgiveness versus retaliation. *Journal of Research in Personality*, 64, 69-78. http://doi.org/ 10.1016/j.jrp.2016.08.004
- Homayouni, A. (2011). Personality traits and emotional intelligence as predictors of learning English and Math. *Procedia-Social and Behavioral Sciences*, 30, 839-843. http://doi.org/10.1016/j.sbspro.2011.10.163
- Honicke, T., & Broadbent, J. (2016). The influence of academic self-efficacy on academic performance: A systematic review. *Educational Research Review*, 17, 63-84. http://doi.org/10.1016/j.edurev.2015.11.002
- Hoy, A. W., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, 21(4), 343-356.
- Huang, S. C., & Chang, S. F. (1996). Self-efficacy of English as a second language learner: An example of four learners. *ERIC Document Reproduction Service No. ED 396536.* http://files.eric.ed.gov/fulltext/ED396536.pdf
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of Personality: Theory and Research*, *2*(1999), 102-138.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). The Big Five inventory-versions 4a and 54. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research. [Google Scholar]
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook* of *Personality: Theory and research* (pp.114-158). London: Guilford Press.

- Johnson, B., & Christensen, L. (2004). *Educational research: Quantitative and qualitative approaches* (2nd ed.). Boston, MA: Ally & Bacon.
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel psychology*, 52(3), 621-652. http://doi.org/10.1111/j.1744-6570. 1999.tb00174.x
- Kashiwagi, S. (2002). Japanese adjective list for the Big Five. In B. de Raad & M. Perugini (Eds.), *Big five assessment* (pp. 305-324). Cambridge, MA: Hogrefe & Huber Publishers.
- King, L. A., Walker, L. M., & Broyles, S. J. (1996). Creativity and the five-factor model. *Journal of Research in Personality*, 30(2), 189-203. http://doi.org/ 10.1006/jrpe.1996.0013
- Komarraju, M., & Karau, S. J. (2005). The relationship between the Big Five personality traits and academic motivation. *Personality and Individual Differences*, *39*(3), 557-567. http://doi.org/10.1016/j.paid.2005.02.013
- Laidra, K., Pullmann, H., & Allik, J. (2007). Personality and intelligence as predictors of academic achievement: A cross-sectional study from elementary to secondary school. *Personality and Individual Differences*, 42(3), 441-451. http://doi.org/10.1016/j.paid.2006.08.001
- Lay, J. C., Gerstorf, D., Scott, S. B., Pauly, T., & Hoppmann, C. A. (2017). Neuroticism and extraversion magnify discrepancies between retrospective and concurrent affect reports. *Journal of Personality*, *85*(6), 817-829.
- Lounsbury, J. W., Gibson, L. W., Sundstrom, E., Wilburn, D., & Loveland, J.M. (2004). An empirical investigation of the proposition that 'school is work': A comparison of personality-performance correlations in school and work settings. *Journal of Education and Work*, *17*, 119-131. http://doi.org/10.1080/1363908042000174228
- MacIntyre, P. D., & Charos, C. (1996). Personality, attitudes, and affect as predictors of second language communication. *Journal of Language and Social Psychology*, 15(1), 3-26. http://doi.org/10.1177/0261927X960151001
- MacIntyre, P. D., Dörnyei, Z., Clément, R., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, *82*(4), 545-562. http://doi.org/10.1111/ j.1540-4781.1998.tb05543.x
- MacIntyre, P. D., & MacKay, E. (2019). Desire for control and personality as predictors of three communication traits in a public speaking context. *Current Issues in Personality Psychology*, 7(3), 212–219. http://doi.org/10.5114/cipp.2019.89167
- Magogwe, J. M., & Oliver, R. (2007). The relationship between language learning strategies, proficiency, age and self-efficacy beliefs: A study of language learners in Botswana. *System*, *35*(3), 338-352. http://doi.org/10.1016/j.sy stem.2007.01.003

- Mahyuddin, R., Elias, H., Cheong, L. S., Muhamad, M. F., Noordin, N., & Abdullah, M. C. (2006). The relationship between students' self-efficacy and their English language achievement. *Jurnal Pendidik dan Pendidikan*, 21, 61-71.
- Marlar, M. R., & Joubert, C. E. (2002). Liking of personal names, self-esteem and the Big Five inventory. *Psychological Reports*, *91*(2), 407-410. http://doi.org/ 10.2466/PR0.91.6.407-410
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, *60*(2), 175-215. http://doi.org/10. 1111/j.1467-6494.1992.tb00970.x
- McCrae, R. R., & Costa, Jr, P. T., (2003). *Personality in adulthood: A five factor theory perspective* (2nd ed.). New York: Guilford Press.
- McCrae, R. R., & Costa Jr, P. T. (2020). Understanding persons: From Stern's personalistics to Five-Factor Theory. *Personality and Individual Differences*, http://doi.org/10.1016/j.paid.2020.109816.
- Mostowik, J., Cyranka, K., Mielimąka, M., Ostrowski, T., & Rutkowski, K. (2018). The intensity of anxiety, neurotic symptoms and perceived control among patients with neurotic and personality disorders. *Archives of Psychiatry and Psychotherapy* 20 (1), 33-44. http://doi.org/10.12740/APP/80756.
- Multon, K. D., Brown, S. D., & Lent, R. W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology, 18,* 30-38. http://doi.org/10.1037/0022-0167.38.1.30
- Niazi, S., & Mehmood, B. (2017). Personality traits as predictor of self-esteem of university students: Moderating role of openness to experience. *Journal* of Behavioral Sciences, 27(2), 102-119.
- O'Connor, M. C., & Paunonen, S. V. (2007). Big Five personality predictors of post-secondary academic performance. *Personality and Individual differences*, *43*(5), 971-990. http://doi.org/10.1016/j.paid.2007.03.017
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, *66*(4), 543-578. http://doi.org/10.2307/1170653
- Payne, S. C., Youngcourt, S. S., & Beaubien, J. M. (2007). A meta-analytic examination of the goal orientation nomological net. *Journal of Applied Psychology*, *92*(1), 128-150. http://doi.org/10.1037/0021-9010.92.1.128
- Piechurska-Kuciel, E. (2018). Openness to experience as a predictor of L2 WTC. System, 72, 190-200. http://doi.org/10.1016/j.system.2018.01.001
- Porter, S., & Carter, D. E. (2000) Common terms and concepts in research. In D. Cormack (Ed.), *The research process in nursing* (4th Ed.) (pp. 17-28). Oxford: Blackwell Publishing.
- Rimm-Kaufman, S. E., & Sawyer, B. E. (2004). Primary-grade teachers' self-efficacy beliefs, attitudes toward teaching, and discipline and teaching practice

priorities in relation to the "responsive classroom" approach. *The Elementary School Journal*, 104, 321-341. http://doi.org/10.1086/499756

- Polit D. F., & Hungler B. P. (1999) *Nursing research: Principles and methods* (6th ed.) Philadelphia, Lippincott.
- Roick, J., & Ringeisen, T. (2017). Self-efficacy, test anxiety, and academic success: A longitudinal validation. *International Journal of Educational Research*, *83*, 84-93. http://doi.org/10.1016/j.ijer.2016.12.006
- Rothstein, M. G., Paunonen, S. V., Rush, J. C., & King, G. A. (1994). Personality and cognitive ability predictors of performance in graduate business school. *Journal of Educational Psychology*, *86*(4), 516-530. http://doi.org/ 10.1037/0022-0663.86.4.516
- Rubinstein, G. (2005). The Big Five among male and female students of different faculties. *Personality and Individual Differences, 38*(7), 1495-1503. http://doi.org/ 10.1016/j.paid.2004.09.012
- Smith, S. M., & Albaum, G. S. (2012). *Basic marketing research: Handbook for Research Professionals.* Provo: Qualtrics Labs Inc.
- Somer, O. (1998). Türkçe'de kişilik özelliği tanımlayan sıfatların yapısı ve Beş Faktör Modeli. Türk Psikoloji Dergisi, 13(42), 17-32. http://psikiyatridizini.net/ viewarticle.aspx?articleid=21677&tammetinvar=yes
- Spurk, D., Keller, A. C., & Hirschi, A. (2016). Do bad guys get ahead or fall behind? Relationships of the dark triad of personality with objective and subjective career success. *Social Psychological and Personality Science*, 7(2), 113-121.
- Şenler, B. (2011). Pre-service science teachers' self-efficacy in relation to personality traits and academic self-regulation. (Doctoral dissertation), Ankara, Turkey: Gazi University.
- Talsma, K., Schüz, B., Schwarzer, R., & Norris, K. (2018). I believe, therefore I achieve (and vice versa): A meta-analytic cross-lagged panel analysis of self-efficacy and academic performance. *Learning and Individual Differences*, 61, 136-150. http://doi.org/10.1016/j.lindif.2017.11.015
- Templin, S. A. (1999). The relationship between self-efficacy and language learners' grades. *JALT Journal*, *21*(1), 112-124. https://jalt-publications.org/files/ pdf-article/jj-21.1-art7.pdf
- Templin, S. A., Guile, T. C., & Okuma, T. (2001). *Creating a reliable and valid self-efficacy questionnaire and English test to raise learners L2 achievement via raising their self-efficacy*. Paper presented at the Annual Meeting of the Japanese Association for Language Teaching, Shizouka, Japan.
- Thurstone, L. L. (1934). The vectors of the mind. *Psychological Review, 41*(1), 1-32. http://doi.org/10.1037/h0075959
- Tsai, C. C. (2013). The impact of foreign language anxiety, test anxiety, and selfefficacy among senior high school students in Taiwan. *International Journal*

of English Language and Linguistics Research, 1(2), 31-47. http://www.eajour nals.org/wp-content/uploads/The-Impact-of-Foreign-Language-Anxiety-Test-A nxiety-and-Self-Efficacy-among-Senior-High-School-Students-in-Taiwan.pdf

- Verhoeven, L., & Vermeer, A. (2002). Communicative competence and personality dimensions in first and second language learners. *Applied Psycholinguistics, 23*(3), 361-374. http://doi.org/10.1017/S014271640200303X
- Vural, H. (2019). The Relationship of Personality Traits with English Speaking Anxiety. *Research in Educational Policy and Management*, 1(1), 55-74. http://doi.org/10.46303/repam.01.01.5
- Wang, C. (2004). Self-regulated learning strategies and self-efficacy beliefs of children learning English as a second language. Doctoral Dissertation, Columbus, OH: Ohio State University.
- Wang, C., & Pape, S. J. (2007). A probe into three Chinese boys' self-efficacy beliefs learning English as a second language. *Journal of Research in Childhood Education*, 21(4), 364-377. http://doi.org/10.1080/02568540709594601
- Watson, D., & Clark, L. A. (1992). Affects separable and inseparable: On the hierarchical arrangement of the negative effects. *Journal of Personality and Social Psychology*, 62(3), 489-505. http://doi.org/10.1037//0022-3514.62.3.489
- Yanardöner, E. (2010). The relationship between learning styles and personality traits of students from Boğaziçi university faculty of education. (Master's thesis).
- Yik, M. S. M., Russell, J. A., Ahn, C. K., Dols, J. M. F., & Suzuki, N. (2002). Relating the five-factor model of personality to a circumflex model of affect. In R. R. McCrae & J. Allik (Eds.), *The five-factor model of personality across cultures* (pp. 74-104). New York: Springer US.
- Yoon, K., Schmidt, F., & Ilies, R. (2002). Cross-cultural construct validity of the five-factor model of personality among Korean employees. *Journal of Cross-Cultural Psychology*, 33(3), 217-235. http://doi.org/10.1177/002202210203300300101