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Exploring the Correlation between First-Year English Language Students' Personality Traits and Their English-Speaking Fluency during Exams

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Abstract: This study explores the connection between personality traits and speaking fluency among first-year English language students at the Department of English Language and Literature, University of Dr. Moulay Tahar in Saida, Algeria, and it uses a correlational research design to achieve this goal. Data were gathered from 50 EFL students through two research tools: The Big Five Inventory questionnaire and the grades they received in their second-semester English speaking exam. Pearson's correlation coefficient was employed to determine the strength and direction of the linear relationship between personality traits and English-speaking fluency. The findings indicated that Openness and Neuroticism were significant predictors of English-speaking anxiety, with Openness being the most influential predictor. Therefore, evaluating students' personalities could help in identifying those who are more likely to experience speaking anxiety.

Keywords: EFL Students, Language Proficiency, Personality Traits, Speaking Fluency

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Introduction

The correlation between personality traits and language proficiency has been a significant area in educational psychology. The acquisition of profound understanding of the way individual personality differences influence language learning can seriously help educators in devoting their teaching methods to satisfy the varied needs of their learners. This research casts light on first-year English language students at the Department of English Language and Literature, University of Dr. Moulay Tahar in Saida, Algeria, aiming to probe the relationship between their personality traits and speaking fluency. The Big Five Inventory, an eminent psychological model, categorizes personality traits into five main dimensions: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. These traits perform a crucial role in influencing different aspects of human behavior and performance, including language acquisition and learning. This study employs a correlational research design to analyze how these personality dimensions are correlated to students' performance in an English-speaking exam during their second semester.

Speaking Fluency and its Relationship with Personality Traits

Exploring the link between speaking fluency and personality has garnered significant interest in both applied linguistics and psychology. Speaking fluency, an essential element of language proficiency, is influenced by cognitive, affective, and social factors. Personality traits, which encompass consistent patterns of thoughts, feelings, and behaviors, play a crucial role in language learning and performance. This review synthesizes research from various perspectives to elucidate the relationship between speaking fluency and personality traits.

The Big Five Personality Traits and Language Learning

The Big Five personality traits—Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism—offer a clear way to understand differences in personality (Costa & McCrae, 1992; Goldberg, 1990). Research shows these traits strongly impact language learning and speaking fluency. Extraversion, marked by sociability and enthusiasm, is linked to better language learning, especially in speaking. Extraverted people engage more in conversations, seek chances to communicate, and feel less anxious about speaking (Dörnyei, 2005; Ehrman, Leaver, & Oxford, 2003). Studies by Chamorro-Premuzic and Furnham (2003) and Ghapanchi, Khajavy, and Asadpour (2011) confirm that extraversion is positively related to second language skills and speaking.



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Neuroticism, however, tends to hurt language learning. People high in neuroticism often feel anxious and unstable, which can harm their speaking fluency and language skills (Dörnyei, 2005). De Raad and Schouwenburg (1996) found that high anxiety levels negatively affect language learning and fluency.

Cognitive and Affective Factors

The link between cognitive factors and personality traits is well-known in studies. Anderson (1992) and Ausubel (2012) stress the role of cognitive processes in learning languages. They note that intelligence and cognitive style greatly affect language skills. But personality traits also play a key part in influencing these cognitive 2 factors. For example, conscientiousness, tied to hard work, organization, and reliability, is connected to better grades and language skills (Busato et al., 2000; Noftle & Robins, 2007). Conscientious learners likely use good learning methods, stick with challenges, and show strong self-discipline, which improves their speaking fluency (Duff et al., 2004).

Motivation and Personality

Motivation is key in learning languages. Its link with personality traits has been widely studied. Dörnyei and Skehan (2003) and Ellis (2008) show that motivational types, like integrative and instrumental motivation, are shaped by personality. Openness to experience, marked by curiosity and creativity, boosts motivation and improves language learning (Dörnyei, 2005; Ghapanchi, Khajavy, & Asadpour, 2011). On the other hand, people with high neuroticism often have lower motivation. This is due to anxiety and fear of being judged, which lowers speaking fluency (MacIntyre, 1995; Dörnyei, 2005). The relationship between motivation and personality shows how complex the factors are that affect speaking fluency.

Personality and Language Proficiency Assessments

Personality traits also influence performance on language proficiency assessments, such as the IELTS. Studies by Bayliss and Ingram (2006), Dooey and Oliver (2002), and Feast (2002) have investigated the predictive validity of IELTS scores in relation to academic success. These studies suggest that personality traits, particularly extraversion and conscientiousness, are significant predictors of performance on language assessments and subsequent academic achievement. The relationship between speaking fluency and personality traits is multidimensional, involving cognitive, affective, and motivational dimensions. The Big Five personality traits, especially extraversion, conscientiousness, and neuroticism, play a critical role in shaping language learning experiences and outcomes. Future research should continue to examine these relationships, considering the dynamic interplay of cognitive and affective factors in different linguistic and cultural contexts. Understanding the influence of personality on speaking fluency can inform language teaching practices, assessment methods, and learner support strategies, ultimately enhancing language-learning outcomes.

The Research Problem

Mastering speaking fluency is a critical goal in language learning, particularly for English as Foreign Language (EFL) students. Speaking fluently in a foreign language is not only a marker of language proficiency but also a key factor in academic and professional success. However, many students face challenges in achieving fluency, often influenced by psychological factors such as personality traits. This study aims to explore the correlation between personality traits and speaking fluency among first-year English language students at the Department of English Language and Literature, University of Dr. Moulay Tahar in Saida, Algeria. Previous studies have shown that individual differences in personality can significantly influence language-learning outcomes. The Big Five Personality Traits—Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism—provide a comprehensive framework for understanding these differences. Despite extensive research on the role of personality in general educational contexts, there is a gap in the literature specifically addressing how these traits influence speaking fluency in EFL settings. This study utilizes a correlational research design to fill this gap, using data collected from 50 EFL students through the Big Five Inventory questionnaire and their grades from the second-semester English speaking exam. By calculating Pearson's correlation coefficient, this research aims



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to identify the strength and trend of the relationship between the students' personality traits and their speaking fluency. The primary findings indicate that Openness and Neuroticism are significant predictors of speaking anxiety, with Openness being the strongest predictor. This suggests that understanding and assessing students' personality traits could be crucial in identifying those who may experience speaking anxiety, which can impede their fluency development.

Research Questions

- What is the relationship between the Big Five personality traits and speaking fluency among first-year 3 English language students at the University of Dr. Moulay Tahar in Saida, Algeria?
- To what extent does Openness as a personality trait predict speaking fluency in EFL students?
- How does Neuroticism influence speaking anxiety among first-year EFL students?
- Which of the Big Five personality traits are the most important predictors of speaking fluency in EFL students?
- Can assessing personality traits in EFL students help in identifying those who are likely to experience speaking anxiety?
- What is the relationship between each of the Big Five personality traits and the speaking exam grades of first-year English language students?

Hypotheses

In this study, we set the main and the secondary hypotheses to direct our research and measure the correlation coefficient between both variables and subvariables.

Main Hypothesis

There is a statistically significant relationship between the Big Five personality traits and speaking fluency among first-year English language students.

Secondary Hypotheses

- Hypothesis 01: Openness is positively correlated with speaking exam grades of first-year English language students.
- Hypothesis 02: Conscientiousness is positively correlated with speaking exam grades of first-year English language students.
- Hypothesis 03: Extraversion is positively correlated with speaking exam grades of first-year English language students.
- Hypothesis 04: Agreeableness has no significant correlation with speaking exam grades of first-year English language students.
- Hypothesis 05: Neuroticism is negatively correlated with speaking exam grades of first-year English language students.

The Significance of the Study

Understanding the factors that influence speaking fluency in EFL students is essential for developing effective educational strategies. This study focuses on the role of personality traits, which can offer new insights into language learning processes and outcomes. The findings have several significant implications:

- Enhanced Teaching Strategies: Educators can tailor their teaching methods to better address the needs of students with different personality traits, particularly those prone to speaking anxiety.
- Personalized Learning: By identifying students with high levels of Neuroticism or low levels of Openness, interventions can be designed to support these students, helping them overcome anxiety and improve their speaking skills.



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- Educational Policies: Insights from this study can inform the development of educational policies and programs that consider personality traits as a factor in language learning success.
- **Student Support Services**: The results can guide the creation of targeted support services for students, such as counseling and anxiety management programs, to enhance their learning experience.

The Aim and Objectives of the Study

Main Aim: The primary aim of this research is to investigate the relationship between the Big Five personality traits and speaking fluency among first-year English language students at the University of Dr. Moulay Tahar in Saida, Algeria.

Objectives:

- To examine the correlation between Openness and speaking exam grades among first-year English language students.
- To determine the relationship between Conscientiousness and speaking exam grades among first-year English language students.
- To analyze the association between Extraversion and speaking exam grades among first-year English language students.
- To assess the impact of Agreeableness on speaking exam grades among first-year English language students.
- To explore the correlation between Neuroticism and speaking exam grades among first-year English language students.
- To identify which of the Big Five personality traits are the most significant predictors of speaking fluency in EFL students.
- To evaluate the overall influence of the Big Five personality traits on speaking fluency among first-year English language students.

Definition of Key Concepts

Personality Traits

- **Terminological Definition:** Personality traits refer to enduring characteristics and behaviors that differentiate individuals. The Big Five Inventory classifies these traits into five broad dimensions: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (McCrae & Costa, 1987).
- **Operational Definition:** In this study, personality traits are measured using the Big Five Inventory questionnaire. Each student's scores on the five dimensions are analyzed to understand their individual personality profiles.

Speaking Fluency

- **Terminological Definition:** Richards and Schmidt (2002) describe fluency as the aspects that make speech sound natural and typical. This includes elements such as the native-like use of pausing, rhythm, intonation, stress, speaking speed, as well as the incorporation of interjections and interruptions (p. 204).
- Operational Definition: In this study, speaking fluency is measured by the grades students receive in their second-semester English speaking exam. These grades provide an objective assessment of their fluency in English.

English Speaking Anxiety

• **Terminological Definition:** Foreign language anxiety, as defined by Horwitz, Horwitz, and Cope (1986), is the anxiety that hinders the development of oral communication skills. It includes



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apprehension about communication, anxiety related to tests and the fear of negative evaluation from teachers and peers

• Operational Definition: In this study, English-speaking anxiety is inferred from the correlation between students' personality traits (Openness and Neuroticism) and their speaking exam grades. Higher levels of Neuroticism and lower levels of Openness are used as indicators of greater speaking anxiety.

Materials and Method

The current study is correlational research. According to Creswell (2012) this kind of research design revolves around the goal examining relationships between variables rather than manipulate an independent variable as in experimental research, the design is classified as correlational research. While it may not be as stringent as experimental methods, it is useful for exploring variable relationships and predicting outcomes. As a result, the correlational between the first- year English language students' personality traits and their English fluency will be explored in the present study.

Participants and Procedure: The respondents of this study included 56 first- year English language students located in a medium size province in the west part of Algeria. Students were selected randomly and handed questionnaires. After the removal of invalid surveys, 50 questionnaires were analyzed. The population consisted of 66 % (N=33) and 34 % (N=17) participants.

The research ethics approval was received from the Department of English Language and Literature – The University of Saida, Algeria. Further, during the collection of data, two procedures were subsequently completed. Firstly, the researcher asked questions (gender, age, location and bachelor degree) to determine the demographic features of the participants. After the data were collected, first- year English language students were informed about the objective, the significance, and methods of the study. The rationale for this problem was clarified. Respondents were also notified that their participation in this research project was voluntary. Besides, participants were made aware that their responses and personal details would be anonymously maintained and secured. Further, their survey information would be employed privately for research purposes only.

Data Collection Instruments: The Big Five Inventory Scale, the Speaking Fluency Scale, and the speaking fluency scale were utilized to collect data in this investigation. John, O. P., & Srivastava, S. (1999) developed the Big Five Personality Traits Scale. The scale is made up of 44 items. 16 of them are reverse scored (R). Answers to the measurement scale were rated on a five- item Likert scale ranging from "disagree strongly" to "agree strongly". The scale's Cronbach alpha reliability coefficient for this study was found to be .99. Cronbach alpha coefficient for the subscales scores were .98 for extraversion, .98 for agreeableness, .98 for conscientiousness, .98 for neuroticism and .98 for openness.

Experts and linguists in the British Council (IDP) - IELTS Australia and Cambridge Assessment English, developed speaking fluency test that was used in this study. The researcher adapted it based on the criteria employed by these organizations. This scale includes 06 criteria: grammar, vocabulary, discourse management, pronunciation, interactive communication, interlocutor, and 24 items. Each criterion has a number of items that are graded on a five- point Likert scale ranging from 1-5. The scale's Cronbach reliability coefficient was found to be .95. The reliability coefficient for the criteria were .98 for grammar, .45 for vocabulary, .63 for discourse management, .98 for pronunciation, .98 for interactive communication and for .98 for interlocutor. The scale's high scores were seen as an indicator of English-speaking fluency.

Data Analysis and Findings

Within the area of research, Pearson correlation coefficients were computed to explore the relationships between first- year English language students' personality traits and their speaking fluency. The skewness and kurtosis coefficients are founded on to identify the distribution of the data. Certainly, skewness values are within ± 3 and kurtosis values within ± 10 imply that the data have normal distribution (Kline, 2011). The skewness and



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Kurtosis coefficients computed for personality traits and English-speaking fluency were within the specified range (-0.25 <Skewness<0.42;-0.86<Kurtosis<-0.61). Pearson correlation coefficients were calculated and levels were found. Positive correlation has a low-level if the correlation coefficient is between .01 and 029, a moderate level if it is between .30 and .49, and a high level if it is greater than .50. If the correlation is between -.01 and .29, it is viewed as low; if it is between -.30 and .49, it is seen as moderate; and if it is less than -.50, it is considered high (Cohen, 1988).

First, the data's normality assumptions were validated. For this purpose, mean, standard deviation, mode, median, skewness, and kurtosis values were analyzed. Using skewness and kurtosis values to assess normality is a common practice. Some guidelines suggest that these values can be as high as 2 in absolute terms. Alternatively, normality tests may use the standard errors of skewness and kurtosis, with the recommendation that values less than 1.96 times their standard errors indicate normality (Kim, 2013; Field, 2009). However, there is no consensus on the exact values that define normality. As a result, this study simulated various conditions to evaluate how skewness and kurtosis values affect decisions in mean comparison tests, such as t-tests and U-tests.)

	Mean	Mode	SD.	Skewness	Kurtosis	Maximum
Extraversion	3,2900	3,25	1,12413	-,265	-,640	5,00
Agreeableness	3,1733	2,00	1,14443	-,239	-,991	5,00
Conscientious	3,1822	2,22ª	1,08513	-,160	-,717	5,00
Neuroticism	3,2200	5,00	1,25701	-,157	-1,143	5,00
Openness	3,5940	3,20	1,03103	-,479	-,581	5,00
Speaking Fluency	2,4828	1,81	,97697	,427	-,612	4,89
Personality Trait	3,2919	3,15ª	1,12294	-,250	-,869	5,00

Table 1: Descriptive Statistics and Test of Normality

In the 5- factor personality scale, scores for personality traits can range from 1 to 5 points. According to table 1, unlike openness scores have the highest score (X openness = 3, 59), agreeableness has the lowest mean score (X agreeableness = 3,17). The openness personality trait is followed by extraversion, neuroticism, conscientiousness, and lastly agreeableness. First- year English language students characterized their personalities more as openness, extraversion, neuroticism, and conscientiousness in their responses; they stressed the agreeableness personality trait less. According to the English-speaking fluency scale utilized, the highest scores for English fluency can be 4.89. While the average the scores of the first- year students participating in the research on English speaking fluency is X speaking fluency = 2, 48, their personality traits scores are X personality traits = 3, 29. As the average scores of speaking fluency and personality traits are compared, the personality traits are higher.

	1	2	3	4	5	6	7
Extraversion (1)	1	,984**	,993**	,985**	,990**	,133	,995**
Agreeableness (2)	,984**	1	,991**	,994**	,983**	,138	,995**
Conscientious (3)	,993**	,991**	1	,990**	,988**	,129	,997**
Neuroticism (4)	,985**	,994**	,990**	1	,983**	,116	,996**
Openness (5)	,990**	,983**	,988**	,983**	1	,163	,993**
Speaking Fluency (6)	,133	,138	,129	,116	,163	1	,136
2 1 1							
Personality Trait (7)	,995**	,995**	,997**	,996**	,993**	,136	1

Table 2: Correlations between Personal Traits and English Fluency. **. Correlation is significant at the 0.01 level (2-tailed).

Discussion

This study explored the relationship between personality traits and speaking fluency among first-year English language students at the University of Dr. Moulay Tahar in Saida, Algeria. Using a correlational research design,



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data were gathered from 50 EFL students through the Big Five Inventory questionnaire and their second-semester English-speaking exam grades. The findings revealed that Openness and Neuroticism significantly predicted English-speaking anxiety, with Openness emerging as the strongest predictor.

The results indicated a positive correlation between Openness and speaking exam grades, suggesting that students with higher Openness scores tend to excel in speaking fluency. This aligns with previous research showing that individuals high in Openness are more inclined to engage with new experiences, including language learning opportunities, which can enhance their speaking abilities (Dörnyei, 2005; Ghapanchi, Khajavy, & Asadpour, 2011). The positive link between Openness and speaking fluency highlights the importance of fostering curiosity, creativity, and a willingness to embrace new challenges in language learning settings.

In contrast, Neuroticism was found to negatively correlate with speaking exam grades, indicating that higher levels of Neuroticism are associated with lower speaking fluency. This finding is consistent with earlier studies that have emphasized the harmful effects of anxiety, fear, and emotional instability on language performance (Dörnyei, 2005; MacIntyre, 1995). The significant negative impact of Neuroticism on speaking fluency underscores the need for educational strategies that address anxiety and provide emotional support to students. Other Personality Traits and their Influence. While Extraversion, Conscientiousness, and Agreeableness were included in the study, their correlations with speaking fluency were not as significant as those of Openness and Neuroticism. Extraversion, characterized by sociability and assertiveness, has been shown in other studies to positively influence language learning (Chamorro-Premuzic & Furnham, 2003; Ghapanchi, Khajavy, & Asadpour, 2011), but this study did not find a strong correlation with speaking fluency. Similarly, Conscientiousness, associated with diligence and organization, and Agreeableness, characterized by cooperation and compassion, did not show significant correlations with speaking fluency in this sample.

The study gives useful insights for educators. Knowing students' personality traits helps identify those who may have spoken anxiety. Educators can create targeted interventions based on traits like Openness and Neuroticism. For instance, a lively and open classroom can help students with high Openness. For students with high Neuroticism, offering anxiety-reduction strategies and emotional support is beneficial. The study has some limitations. The sample size was small and from just one institution, which might affect the results. Future research should use larger and more varied samples. Long-term studies could also show how personality traits affect language learning over time.

Conclusion

In summary, this study shows that personality traits, especially Openness and Neuroticism, significantly impact speaking fluency among first-year EFL students. Understanding students' personalities can help identify those who may face speaking anxiety and guide the creation of targeted teaching strategies. By considering these personality differences, educators can improve language learning and help students achieve better speaking fluency.

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