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The Impact of Sequential Multilingualism on Self-Perceived Personality Shift: The Case of Master One EFL Students at M'sila University

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Linguistics

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DEDICATION

First and foremost, I would like to praise Allah the Almighty, the Most Gracious, and the Most Merciful for His blessings given to me during my study and in completing this thesis. All praise is due to Him, always and forever.

To my father, NIA Mohamed, thank you for your constant support and belief in me; your faith is what brought me here. This achievement is as much yours as it is mine.

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I dedicate this work to the memory of Mousa YAHI, whose spirit and love continue to guide me. May God bless his soul and grant him the highest ranks of Paradise.

"Indeed, you are gone but never forgotten."

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ABSTRACT

In the context of bilingualism and simultaneous multilingualism, many studies have examined the phenomenon of personality shift, but only a few were conducted on sequential multilinguals, and fewer investigated the impact of social context on the phenomenon. This study aims to explore whether sequential multilinguals perceive a shift in their personality traits when using a foreign language and the influence of different social contexts on these perceptions. The study adopted a mixed-method approach with an exploratory design in nature, and implemented descriptive method, using an embedded design questionnaire with both scaled and open-ended questions with an adaptation of the Big Five Inventory. The participants of the study (n=64) were Master One EFL students at M'sila University, and their answers were statistically analyzed and thematically coded concerning the open-ended responses. The findings of the study showed that participants perceived notable personality shifts in agreeableness and openness when using SL/FL compared to L1, while other traits, which are neuroticism and extraversion were moderately affected. Moreover, social contexts were found to play a role in how personality traits were expressed. This study supports the notion that personality traits are dynamic and provides insights on sequential multilinguals' percieved personality shift when they use SL/FL, and the impact of social contexts of traits manifestation.

Keywords: Language Acquisition, Sequential Multilingualism, Multilingual Personality, Language and Identity, Social Context, Personality Shift, The Big Five Personality Model.

List of Abbreviations

EFL: English as a Foreign Language.

L1: First language.

L2, SL: Second language.

L3: Third language.

L4: Fourth language.

FL: Foreign language.

SLA: Second Language Acquisition.

FFI: Five-Factor Inventory.

BFI: Big Five Inventory.

OCEAN: Openness, Consciousness, Extraversion, Agreeableness, Neuroticism.

SPSS: Statistical Package for the Social Sciences

N: Number of Participants.

M: Mean.

SD: Standard Deviation.

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General Introduction

1. Background

According to a Czech saying, "Learn a new language and get a new soul." Many people who speak more than one language say that switching between languages makes them feel different. This idea is supported by research that demonstrates that personalities can vary among bilinguals and multilinguals based on the language they use (Ramirez-Esparza et al., 2006). According to the Cultural Frame Switching Theory (Hong et al., 1997, 2000), people's values and behaviors change based on the linguistic and cultural context.

Language is more than just a means of communication. It influences our thoughts, emotions, and interactions with the outside world. Language and personality are linked by Sapir and Whorf's notion of linguistic relativity, which argues that language significantly influences our thoughts and worldview (Lucy, 1997). Another theory that supports this viewpoint is expressed by Vygotsky's sociocultural theory, which suggests that our language shapes our thoughts (Lantolf & Thorne, 2006). Correspondingly, Chen and Bond (2010) suggest that there may be distinct relationships between personality and language, meaning that different languages influence different personalities. While Dewaele & Nakano (2012) found that a lot of people who speak several languages claimed that speaking different languages makes them feel like different people.

In addition, one popular model for studying personality is the Big Five model, which includes openness, conscientiousness, extraversion, agreeableness, and neuroticism traits. These traits provide an accurate method to assess how people feel and behave across different languages. Research has shown that multilinguals may have higher levels of extraversion, openness, and agreeableness in a second or third language, while they might have low neuroticism levels (Ramirez-Esparza et al., 2006; Rezapour & Zanjirani, 2020).

The use of the Big Five model allows researchers to highlight which aspects of personality are more likely to shift when someone switches between languages.

However, these personality changes do not happen in isolation; rather, the context in which the language is used frequently influences them. Contextual factors like environment, culture, or social interactions may have an impact on how people perceive personality changes when they switch languages. According to scholars like Dewaele and Nakano (2012) and Koven (2007), these changes are related to the environment and interlocutors involved beyond the language itself. This emphasizes the importance of context in understanding multilingual personality.

2. The statement of the problem

Algeria's multilinguality presents a unique context where individuals acquire a number of languages sequentially, starting with Arabic or Berber, then French, and finally English. While the effects of bilingualism on cognitive and emotional functions have been extensively studied, the impact of sequential multilingualism on individuals' self-perceived personality shifts has received less attention. Furthermore, most of the previous research has been conducted in Western or Asian settings, with very little done on Algerian multilingual identity. The second significant gap is that many studies analyze personality shifts in isolation without considering how language use interacts with social contexts.

Additionally, most of the studies have focused on bilinguals, while sequential multilinguals, those who learn multiple languages sequentially, have received less attention. Moreover, while previous studies have explored personality shifts, only a few studies have focused on the context in which they occur. Because a person's personality might vary depending on whether they are interacting with friends, family, or in an academic setting, it is important to study personality shifts in relation to social context.

As Master One EFL students at M'Sila University deal with various languages in educational as well as social settings, they may experience shifts in personality depending on the language they deal with. However, the majority of the previous studies in Algeria were on language acquisition, learning, proficiency, and identity, but none of them have examined the psychological and sociolinguistic impact of multilingualism on personality perception. By investigating whether sequential multilingualism affects these students' self-perceived personality shifts, this study aims to provide deeper insights into the relationship between language and personality in a multilingual society.

Therefore, the study aims to explore how sequential multilingualism affects personality shifts among Master 1 EFL students at M'sila University. Specifically, it focuses on four Big Five traits. openness, extraversion, agreeableness, and neuroticism. Also, it examines whether the context influences personality shifts when students speak different languages in different social contexts, such as family, friendships, and academic settings. This study is important because it offers new insights into how social contexts mediate personality traits when using SL/FL.

3. Research Questions

1. Do Master 1 EFL students at M'sila University perceive shifts in specific personality traits when speaking a second or foreign language compared to L1?

Specifically, the following sub-questions are:

- What extraversion levels do Master One EFL learners self-report when speaking SL/FL compared to L1?
- What agreeableness levels do Master One EFL learners self-report when speaking SL/FL compared to L1?

- What openness levels do Master One EFL learners self-report when speaking SL/FL compared to L1?
- What neuroticism levels do Master One EFL learners self-report when speaking SL/FL compared to L1?

2. Do social contexts (e.g., public, family, work, intimate) influence personality shifts in sequential multilinguals when they speak in SL or FL compared to L1?

4. Research hypotheses

1. Master one EFL learners perceive personality shifts in extraversion, agreeableness, openness, and neuroticism when speaking different languages compared to their first language
2. Social context (e.g., family, academic, workplace) influences the degree of personality shifts among sequential multilingual Master 1 EFL students when speaking SL or FL compared to L1.

5. Objectives of the Study

1. To investigate whether Master 1 EFL students at M'sila University perceive shifts in their personality traits of extraversion, agreeableness, openness, and neuroticism when speaking a second or foreign language (SL/FL) compared to their first language (L1).
2. To examine whether social context (family, academic, occupational, friendship, and public) influences personality shifts in sequential multilinguals when speaking SL or FL.

6. Significance of the Study

This study is important because it adds empirical data from a non-Western, Arabic-speaking context to the expanding fields of personality studies and multilingualism. Also, it is significant for researchers, educators, students, and professionals in the field of psychological and therapeutic practice for the light it sheds on how sequential multilingualism influences self-perceived personality shifts. In psycholinguistics and sociolinguistics, it provides insights into how different languages impact personality traits and how social contexts shape multilingual identity, offering a deeper understanding of multilingual identity and social adaptation. In educational contexts, the findings help language teachers value how personality changes affect classroom behaviors, class participation, and confidence of students.

This information helps them create better, facilitated, and emotionally intelligent classroom environments in which students feel comfortable speaking in different languages. For students, this research can help them recognize and understand why they feel different when switching languages, giving them greater self-awareness and confidence in multilingual interactions. For therapeutic and psychological practice, the study offers an understanding of the implications of the role of language in personality and emotional expression. This would be specifically useful for therapists working with multilingual clients.

7. Research Methodology and Tools

The present research investigated the impact of sequential multilingualism on self-perceived personality shift among Master One EFL students at M'sila University. A descriptive research method was adopted for its effectiveness in providing comprehensive data relevant to the topic of this study. In addition, a mixed methods approach, using both

quantitative and qualitative techniques, was used as the appropriate strategy to objectively and systematically describe, explain, and interpret the research findings. Data were collected through a questionnaire administered to 64 EFL Master One students. The questionnaire included different closed-ended questions, and they were analyzed quantitatively using statistical tools such as frequencies and percentages, and presented in tables and graphs. It also contained two open-ended questions, which were analyzed qualitatively through thematic analysis. This combination of methods ensures a comprehensive understanding of how sequential multilingualism influences personality perception.

8. Structure of the Dissertation

This Study consists of two chapters. Chapter one provides the theoretical framework for the research variables and sets the groundwork for the interpretation and discussion of the results, and Chapter two discusses the fieldwork of the study. Chapter one consists of four sections, where each section thoroughly discusses a variable in relation to the scope of the study. First, section one introduces the variable of multilingualism, providing different definitions, discussing the difference between multilinguals and monolinguals, and most importantly, reviews the difference between sequential and simultaneous multilingualism. The second sections delve into the variable of personality, starting with a definition from both classical and modern theories, then it discusses the effect of society and language on personality formation, and it concludes with the dynamicity of personality within social contexts. The third section introduces the Big Five Personality Model, discussing its evolution, traits, and validity within the fields of linguistics. The fourth and last section provides a review of the existing literature, highlighting previous findings and identifying the research gap that the research attempts to address. While the second chapter focuses on

the research methodology and practical analysis of data. It provides a detailed explanation of research methodology and design, data analysis and discussion, and implications, recommendations, and limitations.

9. Operational Definitions

- **Sequential multilingualism:** The process of acquiring several languages sequentially, rather than simultaneously, from birth. In this study, it refers to people who have acquired a second or third language after fully developing their first language.
- **Self-Perceived Personality Shift:** In this study, it refers to the changes that Master 1 EFL students believe occur in their personality traits. specifically, extraversion, agreeableness, openness, and neuroticism when speaking a second or foreign language (SL/FL) compared to their first language (L1).
- **Social Context:** The setting in which language use takes place, such as social interactions with family, friends, or academic settings. This study examines whether personality shifts occur differently in various social contexts.
- **Big Five Model Personality Traits:** It is a valid and reliable psychological framework that describes individuals' personality using five broad dimensions: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. It is used to describe patterns in behavior, thought, and emotion across individuals through self-answering 44 Likert-scaled statements.
- In the study, it was adapted and modified in the following way:
    - Conscientiousness was excluded.
    - Number of statements reduced to 5 per trait.

Chapter I: Theoretical Framework of Multilingualism and Personality

Introduction

The current chapter aims to define and elaborate on the variables related to this study (multilingualism, personality, the Big Five Model), laying the groundwork for the interpretation and discussion of the results. This chapter consists of three sections, which will be carefully discussed in relation to the research questions.

General Overview

The idea that personality is dynamic rather than fixed emerged gradually with the evolution of psychology. In the early 20th, Gordon Allport (1937) defined personality as "the dynamic organization within the individual of those psychophysical systems that determine his characteristic behaviour and thought" (p. 48). Although he used the word 'dynamic', Allport still emphasized that personality traits were relatively enduring characteristics. It was in the 1960s that the idea of changeability started to see light, thanks to the contributions of Walter Mischel (1968) who challenged trait theory in his book *Personality and Assessment*, and argued that behavior is more influenced by the situation than by stable traits. This pinpointed a turning point in psychology that promoted researchers to consider personality as variable across contexts.

In the 1980s-1990s social-cognitive and contextual views emerged, another notion supported the flexibility of personality traits. Researchers like Alburt Bandura, Seymour Epstein, and Walter Mischel introduced interactionist and social-cognitive models, proposing that personality includes both stable traits and context-sensitive responses. Mischel & Shoda (1995) argues that "personality in conceptualized as a stable system that mediates how the individual selects, construes, and processes social information and generates social behaviors…" (p. 247), indicating the role of social context in traits

activation, and laying the groundwork for modern multilingual and cultural studies on personality to appear.

By the 21st century, many studies on personality shift had been conducted, results of which had reinforced the previous findings that personality is not static, but negotiated and flexible depending on linguistic and sociocultural environments. Scholars such as Aneta Pavlenko, Jean-Marc Dewaele, and Benet-Martinez have shown that multilinguals and biculturals often report changes in personality based on language and cultural context.

The studies conducted by the aforementioned scholars on this intriguing topic and the findings shared have inspired many researchers from other disciplines to conduct similar studies in the hopes of understanding and filling the unanswered questions related to this phenomenon. One of these questions is whether or not the context affects personality shift in sequential multilinguals which will be investigated in this research.

I. Multilingualism

Multilingualism has always existed in our lives, and among us, there have always been people who speak more than one language. From early life up to the 19th century, through the Roman Empire, Islamic Caliphates, to the Ottoman Empire, people used to acquire multiple languages to interact with others with different tongues, either for economic or military reasons. However, no formal academic interest in multilingualism existed at that time, for the acquisition of two languages or more had often been considered a negative phenomenon. As Blackledge and Creese (2010) demonstrate, "multilingualism was often viewed as a problem or impurity, something that disrupted the imagined unity of language, thought, and national identity" (p. 29).

By the early 20th century, the scientific study of multilingualism, specifically bilingualism, started in the 1920s to the 1940s. Major studies in that time were those by Ronjat (1913) and Leopard (1939-1949), which focused on child bilingualism in monographs and case studies. Still, bilingualism by that time was viewed as a deficit (interference, confusion, delayed development).

Multilingualism saw a shift in perception by the 1960s, when Peal and Lambert (1962) conducted their famous study in which they found that bilingual children outperformed monolinguals on cognitive tasks, helping reverse the "bilingualism is harmful" idea. Additionally, scholars like Uriel Weinreich (1953) and Joshua Fishman (1967) laid the sociolinguistic foundation for understanding multilingualism in society; and by the 1980s to 1990s, other fields, such as Psycholinguistics, sociolinguistics, education, neurolinguistics, language policy, and planning started to raise interest in multilingualism too.

Nowadays, because the focus is not just on competence, but also on identity, emotions, personality, social context, and language ideologies; research on multilingualism across interdisciplinary fields has grown considerably with some influential figures include: Francois Grosjean, who research the multicompetence and holistic view of bilinguals; Aneta Pavlenko, who has conducted a respected number of research on bilingual identity, emotion, personality; Jean-Marc Dewaele with his famous research on multilingual personality, emotion, context.

This section will discuss definitions of Multilingualism in the fields related to the current research, general linguistics, sociolinguistics, and psycholinguistics. Then, it will highlight the difference in formation and development of additional languages between sequential and simultaneous multilingualism in the different scopes of linguistics. Finally,

it will discuss the cognitive, emotional, and social development of monolingualism and multilingualism, respectively.

1.1 Definition

In general linguistics, multilingualism is defined primarily as the capacity of an individual's linguistic competence and performance. Hoffmann (1991) defines it concisely as "the presence and interaction of more than one language in the life of an individual or a community." (p. 1). He emphasizes that not all languages that one speaks need to be of the same proficiency level but rather forms an entity in his mind that makes a flexible, integrated system of linguistic resources. From that standpoint, researchers in the field of general linguistics focus on how different language grammars coexist in the mind, how code-switching occurs when speaking, and how multilinguals process multiple phonological, morphological, and syntactical systems across their repertoire.

By contrast, in applied linguistics, multilingualism is defined from a more functional and educational perspective. Cook (2002) argues that multilingual competence "is not the sum of monolingual competencies in separate languages, but an integrated skill set that users adapt to meet communicative needs." This perspective sheds light on some issues as language teaching, curriculum design and policy, investigating how learners acquire additional languages in formal settings, how they develop literacy across languages, and also how effective multilingual communication can be fostered through pedagogical approaches. Garcia and Kleifgen (2010) put more to the aforementioned description and add, "Multilingualism is a dynamic, context-driven practice in which individuals continually negotiate linguistic choices to accomplish real-world tasks.". From the definition they add, they made a clear link between the theoretical notion of language competence and classroom and community practices.

What general linguists and applied linguists define as multilingualism differs from how other linguistic disciplines do. The first two studies of multilingualism as the knowledge of languages that an intellectual can accumulate in their mind and how to use it, where socio-linguists and psycholinguists believe that multilingualism stretches far beyond the ability to possess more than one language and their usages. Moreover, they link it to society and the cognitive processes that occur in the mind.

In sociolinguistics, multilingualism is conceptualized differently from other disciplines, as a social practice that is shaped by history, power, and ideology. Colin Baker (2006) observes that "multilingualism is a complex and dynamic phenomenon that exists not only in the minds of individuals but also within the broader fabric of society and culture," highlighting that language doesn't only exist in the minds of those who use it, but it is a part of the society that he lives in. That gives new insights into the definition of multilingualism, as the language is preserved and evolves by the interaction within society and its culture. Jan Blommaert (2010) further argues that multilingualism must be studied in relation to social context (e.g., home, education, occupation, family, friends…) in which languages are used; and in relation to language ideologies that may indicate that some languages are prestigious or have certain stigma on certain tongues. Additionally, Joshua Fishman's domain analysis (1972) stresses how different languages are functionally allocated across roles: one language may serve administrative purposes, while another might be suitable for family settings. As an example, in postcolonial Algeria, Arabophone, Francophone, and Anglophone practices each show distinct cultural affiliations and social aspirations. This illustrates how multilingual repertoires are woven into the nation's sociopolitical picture (Benrabah, 2014).

In addition to the viewpoint of sociolinguistics on multilingualism, psycholinguistics studies multilingualism as a cognitive-affective phenomenon that influences thought, memory, and emotions. Ellen Bialystok (2001) demonstrates that bilinguals exhibit enhanced executive control than monolinguals. He believes “bilingual experiences confer advantages in attentional control and cognitive flexibility”. Moreover, Aneta Pavlenko (2014) extends this to other domains, such as the emotional domain, where she asserts that “language serves not only as a tool of communication but also as a marker of identity and emotion, such that each language evokes unique cognitive and effective responses.”; that is, multilinguals show different composition of emotional intelligence and identity when using different languages. To assess the authenticity of Pavlenko's research and findings, many linguists contributed to the field and invented tools to quantify the mentioned effects of multilingualism. One of the tools that measures the cognitive changes is the LEAP-Q, a self-report instrument developed by Marian, Blumenfeld, and Kaushanskaya (2007) that captures age of acquisition, proficiency, and usage patterns, which correlate reliably with behavioral measures of language processing and cognitive control. Such findings emphasize that multilingualism is not merely a linguistic skill but a multi-faceted cognitive system intertwined with personality and emotional regulation.

1.2 Simultaneous vs Sequential Multilingualism

Although both simultaneous multilinguals and sequential multilinguals are defined as individuals who use two or more languages, linguistically, what makes the two types different is the way and age at which they acquired the languages they speak. This difference in the acquisition method makes the two develop different systems of language,

which leads to dissimilar systems of accessing and retrieving language knowledge and two different cognitive functions.

Simultaneous and sequential multilingualism describe two principal methods by which individuals acquire multiple languages. Each of the two has distinct implications for linguistic development, cognitive processing, and social identity. In simultaneous multilingualism, children exposed to two or more languages from birth develop parallel linguistic systems, which demonstrates smooth code-switching and balanced proficiency across their languages. In contrast, sequential multilingualism involves learning additional languages after one's full development of the first language, that is, beyond the early critical period, which can lead to dominance effect and varied proficiency outcomes. Distinguishing these two methods is crucial for tailoring educational approaches, understanding the cognitive process of the two minds, and interpreting sociocultural identity formation among multilingual speakers.

Simultaneous multilingualism is the acquisition of two or more languages from early childhood, typically from birth or before the age of three. This method of language development is studied under the discipline of simultaneous bilingualism, where each language that the child acquires is acquired naturally without formal instruction, and through regular exposure in meaningful communicative contexts. According to Paradis, Genesee, and Crago (2011), "simultaneous bilinguals are those who are exposed to two languages before the age of three and acquire them in a naturalistic setting before the onset of formal schooling." (p. 215) This early exposure to the two languages results in the parallel development of multiple linguistic systems, which are processed similarly as native-like and often become deeply engraved in the speaker's cognitive scheme. De Houwer (2009) adds that "simultaneous bilingual acquisition occurs when children are

regularly and meaningfully exposed to two languages from birth," (p. 4). That emphasizes that the quality and consistency of exposure are crucial to full development in both languages. Linguists also point to the fact that simultaneous multilinguals may display cross-linguistic interaction, including transfer and mixed utterances. However, over time, the children develop distinct phonological and grammatical systems for each language (Genesee, 2006). Therefore, simultaneous multilingualism is treated as a natural and internally differentiated acquisition process from sequential multilinguals.

In contrast to simultaneous multilingualism, where two languages are acquired simultaneously in early childhood, sequential multilingualism is the acquisition of a second or additional language after the first language's full development within the child's language system, typically beyond early childhood. What makes sequential acquisition different from simultaneous acquisition is that the former occurs in sequence and not concurrently. As Paradis et al. (2011) explain, "sequential bilinguals are children who have had significant exposure to one language (typically the home language) before being exposed to a second language, usually when they enter a new language environment such as school" (p. 223) This sequential process sometimes involves the influence of the first language on the second, where some phonological, syntactic, or lexical features of L1 appear in the production of L2. The influence of L1 language system on L2 production correlates with the age and context of acquisition. The younger the child starts acquiring a second language, the more proficiency they develop in that language. Also, the age of onset is highly related to interference between L1 and L2; those who start acquiring L2 at a late age often show lower levels of fluency than those who started earlier. In addition, the context of acquisition is crucial in determining how proficient the learner will be. Learning L2 from social interactions has been proven to develop better proficiency than learning it simply in the classroom (De Houwer, 2009). Sequential multilingualism is studied through

the second language acquisition (SLA) theory, in which such factors as input quality, motivation, affective filter, and the potential constraints of the critical period hypothesis are highly considered.

To summarize the difference between the two types of multilinguals in the scope of general linguistics, sequential learners exhibit asymmetries in fluency and grammaticality depending on the age and intensity of exposure, unlike simultaneous multilinguals, who tend to acquire native-like intuitions in both languages. Besides, the two types are also considered distinctively different in the disciplines of psycho- and sociolinguistics.

In the field of psycholinguistics, studies have shown that multilinguals have superior cognitive functions to monolinguals. Interestingly, by conducting further studies, it has been found that the two different types of multilinguals acquire different cognitive processes, emotional intelligence, and self-perception when learning additional languages. Because they learn multiple languages from an early age, simultaneous multilinguals tend to develop parallel cognitive structures where each language is deeply integrated into their early mental schemas (Paradis, 2001). Studies suggest that they often exhibit greater cognitive flexibility, superior executive control, and more balanced emotional regulation across languages (Bialystok, 2001; Kroll & Bialystok, 2013). Their emotional intelligence across the languages they speak tends to be equally distributed because emotional experiences are encoded simultaneously across multiple linguistic frameworks. In contrast, sequential multilinguals, because they learn additional languages after establishing a dominant L1, may experience asymmetries in emotional expression and personality projection across languages (Pavlenko, 2006). They tend to resonate more with situations processed in their L1; whereas, they show “coldness” and more logical than emotional feelings when using a foreign language (Dewaele, 2010). Sequential multilinguals are also

more prone to the L1 transfer effect, that is, emotional and personality expressions in L2 or L3 can be filtered through the structures of L1. In the end, while both groups may develop high emotional intelligence, simultaneous multilinguals often demonstrate a more harmonized emotional personality across languages, whereas sequential learners may display distinct emotional profiles depending on the language they are using. This distinction has important implications for understanding personality shifts and self-perceived emotional identity in multilingual individuals.

In sociolinguistics, it was discovered that the time at which a learner acquires a language critically influences the development of cultural affiliation, social identity, and community integration. According to that, the two types of multilinguals acquire their identities differently. Simultaneous multilinguals who were exposed to multiple languages and cultures from birth often construct mixed or fluid identities that seamlessly incorporate elements from each cultural framework (Grosjean, 2010; Garcia, 2009). The way they use languages reflects multiple cultural memberships, allowing them to shift styles, norms, and behavior across different communities without perceiving alienation. In contrast, sequential multilinguals typically experience layered or additive identity formation, where new languages and cultures are added to an already-established first-culture identity, which explains the dominance of their L1 culture (Pavlenko, 2006; Wei, 2000). For them, learning a second or third language often involves the need for repositioning their selves within new social hierarchies and value systems; therefore, whenever they are faced with a context where L2 or L3 is used, they have to adapt to the context by activating the required language's culture in their minds. As a result, sequential learners may exhibit more compartmentalized identities, associating particular languages with distinct roles, such as home, education, or work; and may experience greater identity negotiation and even identity conflict during language use (Benrabah, 2014). Furthermore, while simultaneous

multilinguals might be perceived (and perceive themselves) as culturally native members of different groups, sequential multilinguals often feel like cultural outsiders between different communities. Thus, sociolinguistically, simultaneous and sequential multilingualism produce different pathways for how individuals construct, express, and negotiate their cultural and social identities in multi-cultural settings.

1.3 Multilingualism vs Monolingualism

1.3.1 Cognitive Differences between Multilinguals and Monolinguals

Monolinguals and Multilinguals differ in their mind structure, allowing the latter better cognitive functioning. It has been proven in many research studies that multilingual individuals exhibit advantages in executive control, cognitive flexibility, and metalinguistic awareness compared to monolinguals (Bialystok, 2001; Bialystok, Craik, & Luk, 2012). Executive control refers to the set of cognitive processes responsible for managing attention, monitoring language output, and switching between tasks. All the mentioned functions are part of a Multilinguals daily routine in dealing with multiple languages' systems. As Bialystok (2001) explains, "the experience of using two languages reorganizes specific brain networks, strengthening the executive control system" (p. 132). Because multilinguals have these enhanced cognitive controls, they outperform monolinguals on tasks that require attentional shifting, conflict resolution, and working memory.

Moreover, multilinguals, besides showing better executive control than monolinguals, demonstrate superior cognitive flexibility, which is the ability to adapt quickly to changing rules or environments. Costa et al. (2009) found that bilinguals showed faster reaction times and better error monitoring in complex problem-solving tasks than monolinguals. That suggests a generalized cognitive benefit stemming from linguistic

multitasking. Similarly, studies on metalinguistic awareness reveal that multilinguals often outperform monolinguals in understanding grammatical rules, recognizing ambiguities, and detecting errors in language use (Cummins, 1978; Bialystok, 2001).

Nevertheless, it is important to mention that some scholars believe the cognitive advantages associated with multilingualism are not universal. Paap and Greenberg (2013) argue that findings on executive function benefits are sometimes inconsistent across studies, as they suggest that individual differences such as socio-economic status, education, and frequency of language switching may mediate the effects. Despite these debates, a significant number of studies still see that multilingualism contributes positively to the development of flexible and resilient cognitive processing systems, especially when practiced from an early age.

In addition to the previously mentioned cognitive advantages, multilinguals outperform monolinguals in another domain, which is metalinguistic awareness. Metalinguistic awareness is the ability to reflect on and manipulate the structural features of language consciously. Bialystok (2001) defines metalinguistic awareness as "the capacity to treat language itself as an object of thought, rather than simply as a medium for conveying meaning". Multilingual individuals frequently develop a sensitivity to the arbitrariness of linguistic signs, the difference in syntactic structures, and the variability of semantic interpretations across languages through their exposure to multiple linguistic systems. Research by Cummins (1978) demonstrated that bilingual children scored higher than monolinguals on tasks that required identifying grammatical errors, recognizing ambiguity, and understanding the arbitrary relationship between words and their meanings. Their daily use of languages through monitoring, separating, and comparing different linguistic systems made them foster a deeper and more analytical understanding of how

languages function. In contrast, monolinguals, who operate within a single linguistic system, are often less attuned to these structures unless formally taught. Thus, metalinguistic awareness represents another important cognitive dimension where multilingualism appears to confer significant developmental benefits.

In summary, multilinguals generally exhibit cognitive strengths in areas where monolinguals show less agility, highlighting one of the fundamental cognitive distinctions between the two populations. This difference is crucial when considering broader psychological outcomes, such as emotional regulation and personality shifts, topics which are directly relevant to the present study on sequential multilingualism.

1.3.2 Emotional and Personality Differences between Multilinguals and Monolinguals

Beyond cognitive processing, multilinguals also influence how individuals experience, regulate, and express emotions, which can shape their self-perception and personality development. Emotional experiences in multilingual individuals are often tied to the specific languages in which those emotions were first learned or regularly expressed; this results in language-dependent emotional tone and behavioral responses (Pavlenko, 2006; Dewaele, 2010). Multilinguals frequently report feeling like “different people” when speaking different languages; such a feeling is rarely described by monolinguals. As Dewaele and Nakano (2013) found in their large-scale study, multilinguals often associate specific personality traits (e.g., extraversion, assertiveness, shyness) with particular languages depending on the social and cultural context in which those languages are used. This ability to shift emotional register and personality style across languages suggests a level of emotional adaptability that is often less visible in monolingual individuals, whose emotional identity is typically linked to a single language and cultural frame.

Multilinguals may also demonstrate greater emotional intelligence in intercultural or multilingual environments. Because they navigate multiple emotional codes and social expectations across languages, they often become more attuned to nonverbal cues, contextual meanings, and emotion-laden language choices (Pavlenko, 2014). Also, their heightened sensitivity grants them stronger emotional self-regulation and interpersonal communication skills, which are associated with emotional intelligence. In contrast, monolinguals struggle to achieve the same nuance or flexibility in cross-cultural interactions despite their ability to develop emotional depth and expressivity within their own language (Altarriba & Heredia, 2008).

Additionally, as Grosjean (2010) noted, personality development may be influenced by multilingualism. Multilinguals often exhibit what he called "composite personalities"; personalities shaped by the cultural norms, emotional expectations, and behavioral tendencies associated with each language they speak. In this perspective, personality is not static but rather dynamic and context-dependent, and those with this personality can draw on different aspects of their identity depending on the linguistic and cultural situation. On the other hand, monolinguals tend to develop personality traits within a single cultural and linguistic environment, which may lead to more stable but less flexible identity expression.

In short, multilinguals appear to possess more flexible emotional and personality profiles, not because they have multiple personalities, but because their linguistic diversity enables them to express different aspects of the self in a distinct way. This psychological fluidity is one of the most striking contrasts with monolinguals and serves as a central foundation for research into language-related personality shifts, such as the one explored in this study.

1.3.3 Social and Identity Development in Multilinguals vs Monolinguals

The development of social and cultural identity is deeply shaped by language. In multilingual individuals, the process of identity development is usually fluid and has many different aspects than in monolinguals due to exposure to multiple linguistic and cultural systems. Sociolinguists believe that language is not a mere tool of communication but a medium through which individuals internalize social norms, negotiate belongings, and construct their sense of self. Moreover, they suggest that multilingualism does not merely expand communicative ability but also diversifies the individual's sociocultural repertoire, which enables them to interact within multiple social worlds. This diversity in sociocultural identity is the opposite of monolingual speakers' culturally uniform identity, whose sense of self is shaped within a single language and cultural environment (Byram, 1997; Grosjean, 2010).

From a sociolinguistic perspective, the difference between multilinguals and monolinguals in social identity construction is significant. Monolinguals usually develop within one dominant cultural and linguistic framework, where the relationship between language and identity is stable and continuous. In contrast, multilinguals often grow in intersecting linguistic and cultural spheres with each one of the two offering distinct norms, roles, and identity markers. As stated by Wei (2000), individuals who speak multiple languages must manage "various identities and societal expectations" depending on the language and context they are in. This management often leads to the development of a more adaptable and context-sensitive identity, which is especially beneficial in multicultural or transnational environments. However, it can also lead to conflicts or negotiations regarding identity, particularly when one of the languages spoken is linked to a lower social standing, as illustrated in postcolonial Algeria (Benrabah, 2014)

A key feature of multilingual identity is the ability to engage various cultural perspectives based on the language being utilized. This occurrence, commonly known as cultural frame switching, takes place when each spoken language is associated with distinct cultural principles, actions, and social norms (Pavlenko, 2006) Multilingual in many studies reports shift in behavior, emotional expression, and even moral reasoning when switching from one language to another. This implies that language serves a purpose beyond merely conveying meaning, as it also activates various cultural identities (Dewaele, 2010; Grosjean, 2010). For instance, a person may appear more formal and reserved while speaking French, more expressive and familial when using Arabic, and more open or assertive in English; each language engaging different socio-emotional identities that are linked to their cultural backgrounds. This capacity to transition between different cultural frameworks is typically absent in monolingual individuals, who often possess a singular cultural reference system that is closely tied to their language.

In summary, multilingualism enriches the complexity, adaptability, and diversity of social identity development. It enables people to navigate across linguistic and cultural divides, while monolingualism often solidifies a cohesive and culturally consistent identity, shaped by a solitary sociolinguistic setting.

II. Personality

The mind was always such an entity of interest. It is the stem of human behavior. Many experiments and studies have been conducted throughout time by scientists and philosophers for the sake of understanding human nature, way of thinking, and behavior. Ancient philosophers sought to understand why people acted differently, as they had noticed that they showed different traits. They labelled the differentiating qualities of human behavior as ‘personality’, which is a Latin word that means persona (which referred

to a theatrical mask worn by performers). “The term represented the social roles or characters portrayed, and eventually, the psychological meaning of the internal and external traits of the individual” (Feist et al., 2017). The roots of personality theory go back to Ancient Greece, by the time of 460 BCE to 200 CE. Hippocrates believed that human behavior was governed by four bodily fluids or “humors”, then Galen further expanded his model and linked the “humors” to behavioral traits, which had been considered the early foundation of personality categorization. Although Galen’s theory is not scientific by modern standards, it was the first attempt to categorize personality types systematically.

The formal study of personality began with the rise of psychology as a science. Wilhelm Wundt (1832-1920) and William James (1842-1910) were among the first to contribute to the field and introduce two main theories at that time. The first suggested a two-dimensional model of personality based on emotional stability and changeability, while the latter introduced the idea of the “self” in ‘The Principles of Psychology’ (1890). These two paved the way to the emergence of psychoanalysis.

The emergence of psychoanalysis was in the early 1900s with the contributions of the founding figure of personality theory, Sigmund Freud, who developed the psychodynamic theory: ego, superego, and emphasized unconscious motivations, internal conflicts, and early childhood experiences. Freud’s work sparked a series of alternative and competing personality theories (e.g., Jung, Adler, Erikson), which all led to the development of the trait theory movement in the early 20th Century.

The trait-based and scientific approaches were introduced by Gordon Allport (1897-1967) and Raymond Cattell (1905-1998). Allport is considered one of the first psychologists to define personality traits scientifically. In Personality: A Psychological

Interpretation (1937), he defined personality as: “The dynamic organization within the individual of those psychophysical systems that determine his characteristics behavior and thought.”. Cattell, on the other hand, used factor analysis to identify 16 basic Personality traits, creating the 16PF questionnaire, which is a foundational tool in personality assessment.

All these scholars and their contributions to the field lead the groundwork for Personality different definitions of personality between classical and modern views, personality formation in relation to language and society, and the dynamicity of personality, which all will be further discussed in this section.

2.1 Defining Personality: Classical and Contemporary Views

The study of personality is one of the important fields in psychology because of the variety of the human mind. Psychologists study personality under its own discipline, “personality psychology”, which is concerned with understanding the enduring patterns of thoughts, feelings, and behaviors that distinguish individuals from one another and guide their interaction with the world. The study of personality emerged in the early 20th century with the foundational contributions of major scholars in the same field, such as Gordon Allport, Raymond Cattell, Carl Jung, and Hans Eysenck. Each of these scholars offered unique theoretical frameworks. Despite some theoretical disagreement, these early theorists laid the groundwork for how psychologists define and measure individual differences. All agreed that personality is seen as a relatively stable set of characteristics that explain consistent patterns in behavior across time and contexts.

Classical definitions of personality often emphasize the consistency of personality throughout different situations because they mainly consider its internal organization and dynamic structure, taking into account biological and psychological elements. One known

cited definition comes from Gordon Allport (1937), who described personality as "the dynamic organization within the individual of those psychophysical systems that determine his characteristic behavior and thought" (p. 48). This conceptualization underscores the internal consistency of personality traits while acknowledging their basis in both biological predispositions and psychological mechanisms. In addition to Gordon's definition, Cattell (1950) viewed personality as "that which permits a prediction of what a person will do in a given situation," emphasizing personality's predictive power. These early perspectives were foundational in shaping both clinical and theoretical approaches to personality, giving the image of a structured and largely enduring entity within the individual.

In contrast to the classical views, contemporary psychology views personality as a multi-dimensional construct that comprises a set of traits that can be measured and analyzed to understand individual differences. Pervin and John (1997) describe personality as "the complex organization of cognitions, affects, behaviors that gives direction and pattern to a person's life." Similarly, Larsen and Buss (2014) define it as "the set of psychological traits and mechanisms within the individual that are organized and relatively enduring and that influence interactions with, and adaptations to, the intrapsychic, physical, and social environments" (p. 4). Similar to the classical views, these definitions emphasize stability; however, they also acknowledge that internal processing systems and external contexts influence personality.

Modern perspectives on personality also recognize the interaction between innate tendencies and environmental influences, and reject deterministic or fixed models. This dynamic view allowed the development of trait-based theories (e.g., the Big Five), situational models, and interactionist approaches, arguing that personality is best

understood as the product of dispositional traits and situational factors (Mischel, 2004). Relevant to this study is the understanding that personality can manifest differently depending on linguistic, social, or cultural contexts, especially in multilingual individuals who switch between language systems that carry distinct emotional, social, and identity-related functions (Pavlenko, 2006; Dewaele, 2010)

Therefore, this study approaches personality as a flexible, self-perceived set of traits that may shift in response to language use and social context. Moreover, this understanding sets the groundwork for the next sections, which explore personality formation through social interactions and language practices.

2.2 Personality Formation

While it has traditionally been considered that personality has been based on stable traits, according to newer psychological theories, personality is also constituted through an ongoing interaction with the social, linguistic, and cultural environment. Personality is not genetically or internally shaped any more but, throughout the timeline, it takes shape through socialization, language, and culture. As people interact with their families, peers, communities, and wider societies, they internalize social behaviorism norms, expression of feelings, and value systems that together define their concepts of self and interpersonal style (Bandura, 1986; McAdams, 2001). In this sense, it is apparent that personality is socially constructed and is not merely biologically determined; they have learned and situated themselves within the world according to the context within which personality formation takes place.

A particularly significant aspect of the personality formation process is the role of language, which acts as both a tool for expressing personality and a medium through which it is developed. Vygotsky (1978) argued that cognitive and emotional development,

including aspects of personality, is mediated by language and social interaction, especially during early childhood. Through language, individuals learn to regulate emotion, construct narratives about the self, and interpret the intentions of others. In multilingualism, individuals can develop multiple behavioral patterns and emotional registers in the presence of multiple linguistic codes, each associated with a different language environment. This idea aligns with sociocultural and interactionist approaches that see personality not as a fixed essence but as a flexible, evolving construct shaped by context, discourse, and social relationships (Markus & Kitayama, 1991).

The exploration of personality formation by social and linguistic mechanisms is attempted in this section. Past and present theories of socialization and language-mediated identity formation are examined, hence, establishing the conceptual groundwork for notions relating to how the multinational, specifically sequential multilinguals, may identify contrasting selves depending on the language they are speaking and on the social context in which they are using it.

2.2.1 The Role of Socialization in Personality Development

Personality is not developed in isolation but is shaped through a lifelong process of socialization, in which individuals internalize the norms, behaviors, beliefs, and emotional patterns of the societies in which they are raised. Socialization begins in early childhood through interaction with primary caregivers and continues through school, peer groups, and broader cultural contexts. As Bandura (1986) explains in his social cognitive theory, personality traits are learned in part through observational learning, where individuals imitate the behaviors and emotional responses of significant others. These behaviors become integrated into one's personality structure when reinforced and repeated across contexts. For instance, children who are consistently rewarded for being quiet and obedient

may develop personality traits such as agreeableness and conscientiousness, while those encouraged to speak up and compete may become more assertive or extraverted.

Moreover, socialization is not a neutral or universal process. It is deeply embedded in cultural values and social expectations, which are different from a society to another. For instance, in collectivist cultures, individuals may be socialized to prioritize group harmony, interdependence, and emotional restraint, these traits influence the development of personality dimensions such as modesty and self-control (Triandis, 1995). In contrast, individualist cultures often foster autonomy, self-expression, and assertiveness, which may contribute to personality traits such as openness and extraversion. Thereby, from that view, personality cannot be fully understood without considering the cultural lens through which socialization occurs. In addition, the shaping of personality through social interaction is not simply a passive process, but an active process of negotiation, internalization, and sometimes resistance of the norms of the surrounding environment (McAdams, 2001).

For multilingual individuals, those exposed to more than one cultural and linguistic environments in particular, the process of socialization can occur through multiple cultural frameworks simultaneously or successively. This process of accumulating social experiences across different languages and communities introduces a greater degree of flexibility and complexity in personality development. As the individual navigates different social rules, communicative norms, and emotional expectations tied to each language, they may develop context-sensitive personality patterns that respond to the unique requirements of each environment they interact with. This idea is relevant to the case of sequential multilinguals, whose early personality may be formed within one cultural-linguistic system, but later reshaped or expanded through additional languages and the social worlds they interact with.

2.2.2 Language and Personality: How the linguistic Environment Shapes the Self

In personality development and expression, language is acting as an influential factor. It is not just a means of communication; instead, it is also a cognitive tool along with being a social tool that goes into the formation of thought, emotion regulation, and representation of the self. According to Vygotsky (1978), in the process of early childhood, language becomes internalized, and this internalization is a critical factor for the development of higher psychological functions: self-awareness and self-control. Language constructs individuals' conceptualization of the world and knowing how to express feelings and understand themselves. Hence, the linguistic setting in which one is socialized is equally instrumental for the psychological unfolding and personality formation.

Linguistic relativity, or the Sapir-Whorf Hypothesis, would also suggest that a language's vocabulary and structure will dictate one's thought and perception (Whorf, 1956). While this theory has been disputed, recent research has supported the idea that language can influence people's categorization of experiences, such as emotions and social relations (Boroditsky, 2011). For example, some languages may have more words for emotions or grammatical distinctions that affect speakers' experience of time or emotions. These language differences partially shape people's presentation of themselves and how they interact with others, reinforcing specific behavioral norms and identity markers. In sequential multilinguals, each language may then become associated with a distinct set of emotional tones, social behavior, and personality traits.

As Dewaele (2010) and Pavlenko (2006) have shown, many multilinguals feel like different people when speaking different languages, attributing differences in assertiveness, emotional expressiveness, humor, or formality to the language spoken. This occurs when each language is learned in a distinct cultural or social environment; for example, a home

language learned at home and a foreign language learned through cinema and social media. These contexts also give language use behavioral and emotional signatures over time that are some of what some researchers have called language-mediated identity change. The suggestion that personality is context and language-dependent contradicts traditional trait theories and is consistent with dynamic, sociocultural theories of personality.

2.2.3 Multilingual Socialization and Personality Flexibility

In sequential multilingualism, personality is not formed within a single cultural-linguistic framework, but rather across multiple language-specific social environments. Each language is learned in different contexts, with its own values, emotional norms, and interactional expectations; that lead to the development of context-bound facets of the self. In this way, multilingual socialization provides speakers with access to multiple cultural repertoires that they refer to depending on the language in use. Grosjean (2010) refers to this phenomenon as the composite nature of bilingual or multilingual identity, where individuals integrate their linguistic and cultural experiences into a fluid but unified self.

Furthermore, research has shown that multilingual often experience a form of personality flexibility, where specific traits (e.g., extraversion, assertiveness, emotional restraint) become more or less saliant depending on the language being used and the context of interaction (Dewaele & Nakano, 2013; Pavlenko, 2006). For example, a person may feel more open and spontaneous when using a second language associated with an academic or global context (like English), while feeling more emotionally reserved when using a native language tied to familial or traditional roles. This flexibility is not evidence of instability, however, of an adaptive identity management, which is a skill that enables multilinguals to navigate and respond to different social environments with cultural sensitivity and emotional nuance.

Such personality shifts are often self-perceived, meaning that individuals are consciously aware of changes in their behavior, confidence, or emotional tone when switching between languages. These perceptions are supported by growing psycholinguistic evidence that language use can trigger shifts in memory retrieval, emotion, and self-concept (Pavlenko, 2014). Importantly, this flexibility is shaped not only by language proficiency but also by the age of acquisition, the frequency of language use, and the sociocultural weight each language carries. In sequential multilinguals, where the L1 is typically tied to early emotional development and other languages to educational or professional domains, these shifts can be easily noticed. As such, multilingual socialization provides a framework for understanding personality as malleable and context-responsive, rather than fixed.

2.3 Personality and context: Dynamic or fixed?

There is controversy in personality psychology regarding whether personality is an internal fixed structure or an external context-sensitive process. Traditional trait theorists provide a fixed view of personality on the basis of biologically and psychologically rational factors. Personality was by Gordon Allport (1937) "the dynamic organization within the individual of those psychological systems that determine his characteristic behavior and thought". This viewpoint is in accordance with Five-Factor theory developed by McCrae and Costa (1999), who thought personality traits are "basic tendencies" that are "largely stable across time and across situations". This viewpoint is centred upon intra-individual consistency, implying the inherent personality traits of the individual do not change regardless of what happens to surround them.

However, this has increasingly been put into question by studies that suggest personality may not always manifest in the same way in every situation. Walter Mischel

(1968) found in his classic critique, Personality and Assessment, that "cross-situational consistency is generally low," suggesting that behavior is better predicted by situational factors rather than general traits. This became the perspective from which the classic person-situation debate began, which challenges the cross-situational consistency of personality traits to predict behavior. In addition, Mischel proposed that human beings possess a repertoire of responses that are activated on the basis of specific situational cues and not based on stable traits; eventually, that concept led to the development of interactionist models of personality theory.

Contemporary researchers, unlike traditional ones, do consider the importance of context and how it affects the prediction of the individual's behavior. For instance, Funder (2006) suggests that personality is the product of “an interaction between the person and the environment," and that "behavior is the product not just of internal traits, but of traits interacting with specific situations" Moreover, Roberts and Mroczek (2008) acknowledge that "while personality traits show stability, they also demonstrate the potential for systematic change across the lifespan". This dynamic approach recognizes that whilst underlying tendencies can be reliable, personality expression might vary as a function of linguistic, cultural, or environmental setting, as in the case of multilinguals who have to navigate contrasting social norms contained within different languages.

The latter view emerged based on the work of psycholinguistic and sociolinguistic research. Dewaele (2010) discovers that multilinguals experience that they "feel like different people when switching languages," and indicates that "language serves as a powerful contextual cue that can moderate emotion, behavior, and self-perception". In addition, Pavlenko (2006) argues that "language choice and use are not neutral acts; they can activate specific facets of the speaker’s identity and influence their personality

expressions". These results support the view that personality is not solely decided by internal persistent structures but also by external linguistic and cultural structures.

In conclusion, personality is fixed, a set of unique properties that the individual obtains from his/her life cycle, and dynamic in the way the properties express differently in regard to social context, cultural standards, and use of language. This study adopts the contextual view, under which sequential multilingual speakers are able to act and report different aspects of their personality depending on the context and the language they are in.

III. The Big Five Personality Model

Among all personality trait models, the most widely accepted framework in modern psychology is the Big Five Personality Model, which is also known as the Five-Factor model or FFM. It gained credibility for its empirical base, cross cultural validity, and the ease of use in both academic and applied contexts as McCrea & Costa (1987) noted, “The five-factor model represents a consensus among personality researchers that five broad dimensions suffice to describe the major aspects of personality.”. The Big Five Model allows for assessing traits on a spectrum, providing scores for each of the five traits unlike other models which emphasize fixed personality types. Furthermore, the Big Five has been extensively validated across cultures, ages, and languages as it demonstrates strong reliability, internal consistency, and predictive validity for behavior, mental health, work performance, and interpersonal outcomes, allowing it to be used in multiple settings. The evolution, traits, and the use of the Big Five in multilingual personality shift, which are the criteria of selecting this tool for this research, will be discussed in-depth in this section.

3.1 The Big Five: Origins and Evolution

The Big Five Personality Model, also referred to as the Five-Factor Model (FFM), is generally considered one of the soundest and most widely accepted frameworks in the field of personality psychology. It was refinement of the lexical hypothesis which predicts that the most socially salient and universal dispositions become encoded in language over time (Allport & Odbert, 1936). This theory set the stage for researchers to find similar terms to describe personality traits in other languages and cultures.

Early efforts to classify personality traits included Allport and Odbert's (1936) listing of more than 4,500 English-language trait-descriptive words. This lexical approach was subsequently organized using factor analysis by scholars including Raymond Cattell (1946), who in turn completed the first analysis reducing the list to what he surmised were a small number of long lists of basic dimensions. It was, however, the 1980s, when the five-factor model started to become widely accepted, mostly thanks to the effort of Robert McCrae and Paul Costa.

As McCrae and John (1992) noted, “the Five-Factor Model proposes a descriptive taxonomy of personality structure and does not attempt to provide a causal account of behavior” (p. 180). The authors found empirical support for such a five-factor structure and developed the NEO Personality Inventory (NEO-PI), a reliable assessment tool that measures Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (acronym OCEAN) and has been widely used as a measure of generalized dispositional characteristics.

The model’s credibility was additionally confirmed by cross-cultural studies, including that of McCrae and Terracciano (2005), who investigated personality structures in 50 different cultures, concluding that “The five-factor model is a universal model of

personality structure" (p. 547). This universality has contributed to making the Big Five a widely used instrument for comparative, clinical, educational, and multilingual studies of personality.

Appropriately, the Big Five consists of a dimensional trait-based model, as opposed to earlier typological models, such as Jungian and the Myers-Briggs Type Indicator introduced models. So instead of dividing people into fixed personality types, the Big Five dimensions are computed based on how much people are like one another on those spectrums. As John and Srivastava (1999) describe, "the Big Five system offers an integrative structure that covers the primary spheres of individual differences in adult personality" (p. 104).

To conclude, the Big Five model evolved through decades of lexical, statistical, and cross-cultural research. Its emergence made a significant advancement in personality psychology, offering a theoretically grounded and empirically validated tool for describing personality across different populations and contexts.

3.2 The Big Traits

The Five-Factor Model defines personality through five principal dimensions, Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism, with each dimension containing various specific traits. The dimensions overlap with each other, and people show different levels across each dimension. Research and applied psychology find the Big Five traits valuable because they demonstrate strong empirical reliability and are applicable across different cultures (McCrae & Costa, 1999).

Openness to Experience describes how much people possess intellectual curiosity and aesthetic sensitivity along with their imagination and their preference for new and

varied experiences. People with high openness exhibit greater creativity alongside curiosity for new ideas while those with low openness scores choose routine and traditional values. McCrae and Sutin (2009) discovered “openness is the dimension most closely associated with cognitive flexibility and tolerance of ambiguity” (p. 258). In multilingual environments people who engage with multiple languages and cultures tend to show higher openness levels according to Dewaele & Stavans (2014).

Self-discipline and organization are key aspects of conscientiousness which also entails reliability and task execution skills. People who score high on conscientiousness usually act with efficiency and a focus on achievement while being deliberate about their actions but those who score lower tend to display spontaneous behavior and disorganization. The study by John and Srivastava (1999) identifies conscientiousness as the "best predictor of job performance and academic success among the five traits” (p. 121). Research with multilingual individuals pays little attention to conscientiousness variability among languages but indicates potential influence from formal settings or self-monitoring behaviors when using different languages.

Extraversion involves sociability, assertiveness, positive emotionality, and the requirement for stimulation when interacting with others. Extraverts are talkative, active, and energetic, while introverts are quiet and contemplative. According to McCrae and Costa (1987), “extraversion is one of the most visible and influential dimensions of personality, particularly in social interaction” (p. 87). Extraversion in multilingual studies is typically expressed as a dynamic personality, with speakers rating more extraversion with a foreign language they feel has social freedom, confidence, or varied cultural norms (Dewaele & Nakano, 2013).

Agreeableness has been defined as interpersonal attributes of trust, altruism, kindness, cooperativeness, and empathy. High agreeableness is associated with prosocial behavior and emotional warmth, and low agreeableness with competitiveness, suspiciousness, or insensitivity to others' feelings. Graziano and Eisenberg (1997) include the additional comment that “agreeableness reflects individual differences in the motivation to maintain positive interpersonal relationships” (p. 798). Rates of agreeableness expressed in multilingual communities may be varied based upon sociocultural norms for politeness, directness, or emotional expressiveness.

Neuroticism, emotional instability, involves the tendency to exhibit negative emotionality such as worry, sadness, irritability, and moodiness. Those with high scores are more reactive and emotional to stress, while low-scoring individuals are less reactive and stable. According to Costa and McCrae (1992), neuroticism is “the general tendency to experience negative affects including fear, sadness, embarrassment, anger, guilt, and disgust” (p. 14). Research among multilingual participants has shown lower perceived levels of the trait of neuroticism when working in foreign languages because of emotional distance or less emotional investment in the foreign language (Pavlenko, 2006).

The Big Five traits, when examined together, offer a comprehensive yet flexible framework for investigating how personality is structured and experienced. In multilingual research, this model provides a valuable lens for analyzing whether and how individuals perceive variations in their personality expression across languages and social settings.

3.3 The Big Five and Its Use in Multilingual Personality Shift

The Big Five Model has become a significant theoretical model in the investigation of multilingualism and personality with respect to explaining the interplay between the use of language, self-concept, and behavior manifestation. Since the model has established a

clearly defined dimensional construct, researchers can now detect differences in personality traits among various languages and contexts.

Dewaele and Nakano (2013) undertook a study with multilingual participants and found that participants showed consistent differences in extraversion, agreeableness, and emotional stability across languages. A related result is found from Chen and Bond (2010), who showed that, in specific conditions, bilingual participants showed differences in their Big Five personality tests as a function of the language used to administer the test. These results lend credence to the theory that language operates as a psychological cue that triggers different cultural schemas, emotions, and constructs of the self.

Within the context of the current study, the Big Five dimensions of personality were used to analyze the personality orientation of sequential multilinguals in their L1 and L3. A modified version of the model's associated self-report measure was used to invite participants to rate their expression of the personality attributes in different languages. The research method allows for the identification of the dimensions that are most determined by the use of language and clarifies the way the differences are formed through different social milieus (e.g., public, academic, private).

Therefore, the Big Five serves as a theoretical model and as a useful tool for the study of personality variation among multilingual speakers, extending the research agenda regarding the relationship between language and identity.

IV. Multilingualism and Personality Shift

Previous studies have conducted some research on how multilingual speakers perceive themselves when they speak different languages and examined whether they have different personalities when using them . However, most of these studies focused on

bilinguals or simultaneous multilinguals. We still don't fully understand how sequential multilingualism, in which languages are learned one after the other, affects personality shifts. This review reveals important findings on language and personality and shows that more research is needed on sequential multilinguals and personality shift.

Dewaele and Nakano (2012) conducted research on multilingualism and personality with 106 adult multilinguals. They found that when participants moved from their L1 to L2, L3, and L4, they increasingly reported feeling less logical, less serious, less emotional, and more fake. The findings revealed an overall shift across the four languages on the majority of scales. Their self-perceived proficiency, particularly in the third language, was a strong predictor of the strength of these shifts (Dewaele & Nakano, 2012).

Similarly, these results aligned with a large-scale qualitative study by Pavlenko (2006); his study sample consisted of 1,039 bilingual participants. They reported that they felt like a different person when they shifted languages. According to the results of the interviews, 65% of bilinguals believed that learning a second language or changing their native tongue changed their personalities. (Pavlenko, 2006).

In addition, Ramírez-Esparza et al. (2004) conducted research on Spanish-English bilinguals and found variations in the Big Five personality traits based on the language used. The results revealed that bilinguals had higher levels of openness, extraversion, agreeableness, and conscientiousness but lower levels of neuroticism in English than in Spanish. These findings were explained by Cultural Frame Switching (CFS), which is the activation of culturally consistent behaviors depending on the linguistic context (Ramírez-Esparza et al., 2004).

Similar to that, Veltkamp et al. (2012) found that late bilinguals' scores on the Big Five traits varied depending on whether they were tested in Spanish or German, suggesting

that the cultural values of each language influence how people express their personalities. Another related study by Rezapour and Zanjirani also found that Persian-English bilinguals scored higher in Agreeableness, Extraversion, and Openness and lower in Neuroticism when speaking English compared to when they speak Persian. This suggests that language can influence the Big Five personality traits. (Rezapour & Zanjirani, 2020)

Another study concerning multilingualism and personality. Dewaele and Botes (2019) conducted an exploratory study of how multilingualism might influence people's personality traits. An online questionnaire including language background information and a shortened version of the Multicultural Personality Questionnaire, which is based on the Big Five model, was used to collect data from 651 multilingual individuals from different countries. According to their analysis, the degree of multilingualism among the participants was positively correlated with some personality traits, especially open-mindedness, flexibility, and social initiative.

Some studies have also explored the extent to which contextual factors impact perceived personality shifts across languages. Dewaele and Nakano (2012) found that those who reported feeling different after switching languages frequently connected this change to a change in the interlocutors, environment, or culture rather than the language itself. In addition, according to Koven (2007), bilinguals' behavior in each language is also influenced by sociopragmatic norms among various speech communities. This suggests that contextual consistency could reduce the perception of personality change. It's noteworthy to note that some individuals in Dewaele and Nakano's study who switched languages within the same context did not report feeling any different.

Moreover, people can feel like their personalities change when they use the same language mostly in various contexts, such as at home and at school. This could be because

the same language may produce different feelings, ideas, and actions depending on the context (Fabbro et al., 2020). For instance, even when speaking the same language, a person may behave more casually with family or friends and more formally in a formal setting. According to Chen and Bond (2010) and Fabbro et al. (2020), social context has a significant impact on how individuals express themselves.

Despite the relatively few numbers of studies conducted on sequential multilingualism and personality shift, other research explores a broader concept, such as whether multilingualism shapes personality. Also, the majority of research has been on bilinguals or simultaneous multilinguals. The impact of sequential multilingualism, in which languages are learned one after the other, on personality traits has received less attention. Furthermore, although a number of studies have looked at personality shifts associated with language use, there is little research on the social contexts in which these shifts occur, such as family settings, public places, or educational settings.

Therefore, little or no research was conducted in Algeria to tackle that issue. As a result, this study is aimed at shedding light upon the topic in our country because it is where multilingualism is popular and Arabic, Berber, French, and English coexist. Despite Algeria being a unique context for studying the impact of sequential multilingualism on personality shift, this cultural and linguistic setting remains. Therefore, the current study aims to address these gaps by examining whether sequential multilingual Master 1 EFL students perceive shifts in the Big Five personality traits when using different languages, as well as whether the context of language use (academic, public, family, etc.) may affect these perceptions.

Conclusion

This chapter discussed the theoretical framework of this study, laying the groundwork for the empirical part. It consisted of four sections, the first two of which introduced and elaborated on the main variables of this study: Multilingualism and Personality, while the third one discussed the Big Five Personality Model, and the last section discussed similar previous studies.

The first section started with the definition of multilingualism from the perspectives of general, socio-, and psycholinguistics. It highlighted the difference in language acquisition between sequential and simultaneous multilinguals, then discussed the benefits and challenges of both monolinguals and multilinguals.

The second section defined personality in classical and contemporary studies. Then, it discussed the formation of personality in relation to language and society, and the dynamicity of multilinguals' personality in their society and particularly in different contexts.

The third section elaborated on the Big Five Personality Model, discussing its origin and evolution and introducing its five traits. Then, it discussed it applicability in the multilingual personality shift studies.

The fourth and last section discussed previous studies in which personality shift was investigated in relation to language and context. This section helped identify the gap and current research objectives.

Altogether, these four sections set the foundation for the empirical part of the study, which will discuss and answer the question of whether or not context affects the perceived personality shift in the population of the current study.

Chapter II: Methodology, Findings, and Discussion

Introduction

The first chapter provided the theoretical framework and reviewed previous research on multilingualism and personality shift, moving to the second chapter, which aims to bridge the gap between theory and practice. This chapter focuses on the practical investigation of the impact of sequential multilingualism on personality shift among Master One EFL students in order to gather empirical data. It is divided into two sections: research methodology and design, and data analysis and a discussion of findings. The first section provides a detailed description of the research methodology and design, including the research method, setting, participants, data collection and analysis tools, validity and reliability, pilot study, and research procedures and data analysis procedures. The second section is dedicated to analyzing and interpreting the collected data, discussing the results, presenting pedagogical implications, exploring the study's limitations, and suggesting recommendations for future research.

I. Research Methodology and Design

This section is devoted to explaining the research methodology and the steps that were taken to collect data, analyze it, discuss it, and interpret it. It also describes the methods and approaches that were used to reach the aim of the study and answer the research questions.

1.1 The Research Approach and Method

Understanding how sequential multilinguals perceive personality shifts across different languages requires a methodological approach that captures both objective, measurable aspects and subjective experiences. Therefore, this study adopted a mixed-

methods approach to gain a comprehensive understanding of the current research phenomenon.

A mixed-methods approach, as defined by Johnson and Onwuegbuzie (2004), is "the type of research in which a researcher combines elements of qualitative and quantitative research approaches for the broad purposes of breadth and depth of understanding and corroboration". In this research, the mixed method is used through the use of a questionnaire that includes both closed-ended and open-ended questions. This ensures that numerical data provides a general idea and broad overview of the impact of sequential multilingualism on personality shift, whereas their written responses provide rich information and deeper insights into their perspectives that improve our understanding.

1.2 Research Design

To address the research questions and have a comprehensive overview of the impact of sequential multilingualism on personality shift, the research used an exploratory design in nature and implemented the descriptive method. The exploratory element of the study aimed to investigate how sequential multilinguals perceive shifts in their personality when using different languages across varied social contexts, which is still an underexplored area in the literature. Additionally, this study aimed to explore other traits and changes in behavior that sequential multilinguals feel beyond the commonly examined Big Five traits. Furthermore, while similar studies were conducted on simultaneous multilinguals, only a limited number have addressed sequential multilinguals specifically. This made the exploratory design the right one for the conduct of this study, as it investigated an underexplored area and served to lay the groundwork for future research.

Since this study aimed to describe the perception of sequential multilinguals on their personality shift when using different languages without any interference or

manipulation on the variables of the study, a descriptive research design was employed in this study. According to Gay et al. (2012), “descriptive research is used to obtain information concerning the current status of the phenomena and to describe ‘what exists’ with respect to variables or conditions in a situation.” In this context, the research sought to describe how multilinguals perceive personality shifts without establishing causal relationships.

1.3 The Study Settings and Participants

The population under concern in this research is Master's 1 EFL students at the Department of English Letters and Language at M'sila University during the academic year 2025/2026. Their total number is approximately 120, divided into three majors: Applied Linguistics, Literature and civilization, and Didactics. Out of this population, only students from the Applied Linguistics and Literature majors were included. The Didactic group was excluded due to their online study format, which made it difficult to administer the questionnaire and ensure reliable engagement. Therefore, the researchers used convenience sampling to select participants from the accessible population. Etikan, Musa, and Alkassim (2016) define convenience sampling as “a non-probability sampling technique in which subjects are selected because of their convenient accessibility and proximity to the researcher.” Although the intention was to involve all students from the chosen majors, due to attendance limitations on the day of data collection, only 40 Linguistics and 24 Literature students (53% of the total population) were present and able to participate.

Master 1 students were selected deliberately for several reasons. First, all participants have acquired at least three languages or even more sequentially. They speak Arabic as their first language (L1), French as their second language (L2), and English as

their third language (L3). This study investigates how they perceive personality shifts when they use different languages compared to their first language.

Additionally, in order to ensure more accurate responses regarding personality shifts in multilingual settings, Master 1 students are expected to have better levels of English proficiency than lower-level students. Students pursuing a master's degree are expected to have engaged with English at an advanced level both academically and socially. Moreover, the target participants frequently switch between Arabic, French, and English in various contexts, which makes them the appropriate candidates for studying perceived personality shifts across languages.

Lastly, Master 1 students are more likely to take the questionnaire seriously and give thoughtful responses. They are expected to comprehend the importance of the study and respond to the questions in a meaningful way because of their academic background. Therefore, due to these reasons, the selection of Master one EFL students is believed to be a suitable population that aligns with the primary objective of the present research.

1.4 Data Collection Tools

The tool used in the current research was a questionnaire, developed and adapted by the researchers to answer the research questions concerning the impact of sequential multilingualism on personality shifts. The questionnaire consists of three main sections, each aiming to achieve a specific objective: the participants' demographic and linguistic background, their personality traits across languages, and the influence of social context on personality shift.

The first section of the questionnaire, titled "*Demographic Considerations & Language Profile*" (See Section 01, Appendix A), was designed to gather important

background information about the participants. This section includes items concerning age, gender, age of language acquisition, language proficiency level, the contexts, and frequency of language use. This section aimed to build a comprehensive understanding of participants' demographic and language profiles.

The second section (See Section 02, Appendix A) was an adapted version of the Big Five Inventory test, which originally consists of 44 items divided into: 8 statements for Extraversion, 9 statements for agreeableness, 9 statements for Conscientiousness, 8 statements for Neuroticism, and 10 statements for Openness. All statements were measured through a Likert scale. The adaptation involved the removal of Conscientiousness and reduction of the total number of statements from 44 to 20, distributing them on the four traits so that each 5 statements represents a trait. Each statement was designed to measure how participants' personality was expressed when speaking SL/FL in comparison to L1. Participants responded using a 5-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). Some statements were reversed to ensure variation in responses and to avoid response bias. A higher score in a specific trait when using SL/FL indicated a possible shift in that personality trait

The third section (See Section 03, Appendix 01) investigated the impact of social context on personality shift. This section contained a group of situational statements where participants were asked to express their agreement or disagreement with statements that show their behavior in different social settings, such as an academic setting, family, and friends. A Likert scale was similarly used in this section. The responses helped to determine whether social context influences personality expression in multilingual contexts.

1.4.1 The Big Five Personality Traits Test

Table 1

Description of Questionnaire Items Based on the Big Five Model

Item	Trait	Statement
1	E	1. I do not mind being the center of attention while I am speaking SL/FL compared to L1.
2	A	2. I feel others' emotions better when I am using SL/FL compared to L1.
3	N	3. I am relaxed most of the time while I am using SL/FL compared to L1. **(R)**
4	O	4. I have a vivid imagination when I speak SL/FL compared to L1.
5	E	5. I do not talk a lot while I am using SL/FL compared to L1. (**R)**
6	A	6. I tend to insult people while I am speaking SL/FL compared to L1. **(R)**
7	N	7. I worry that people might misunderstand me while I am using SL/FL compared to L1
8	O	8. I find interest in abstract ideas when I am speaking SL/FL compared to L1.
9	E	9. I feel more comfortable around people when I speak SL/FL compared to L1.
10	A	10. I sympathize with others' feelings when I use SL/FL compared to L1.
11	N	11 I am easily disturbed when I use SL/FL compared to L1.
12	O	12. I get excellent ideas while I am speaking SL/FL compared to L1.
13	E	13. I have little to say when I speak SL/FL compared to L1. **(R)**
14	A	14. I become soft-hearted when I am speaking SL/FL compared to L1.
15	N	15. I can get upset easily when I am speaking SL/FL compared to L1.
16	O	16. I am quick to understand things when I use SL/FL compared to L1.
17	E	17. When I use SL/FL, I tend to talk to different people at social gatherings
18	A	18. I make people feel at ease when I speak to them in SL/FL compared to L1.
19	N	19. I can get irritated easily when I use SL/FL compared to L1.
20	O	20. I am full of ideas when I use SL/FL compared to L1.

Note: E: Extraversion, A: Agreeableness, N: Neurotisicm, O: Openness, R: Reversed Scaling.

Scoring system:

A five-point Likert scale was used to rate each statement: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree. For reversed items, the scores were inverted during analysis to make sure that higher values consistently reflect higher levels of the trait.

The following was the reversed scoring: 5→1, 4→2, 3→3, 2→4, 1→5.

- **Calculating Mean Scores for Each Trait:**

  Each personality trait (such as Extraversion, Openness, etc.) has five items in the questionnaire. To calculate a participant's score for one trait:

  - Collect the participant's answers to all five items related to that trait; for example: the five Extraversion items are: 5, 4, 2, 3, 4
  - Add all five scores of the trait together. Example: 5 + 4 + 2 + 3 + 4 = 18
  - Divide the total by 5 (the number of items). 18 ÷ 5 = 3.6
  - The result is the mean score for that personality trait, which gives an overall score of the participant's level in that trait. Example: The participant's mean Extraversion score is 3.6

Table 2

Interpretation of Personality Trait Scores

Score intervals	Description
1.00 - 1.80	Very low
1.81 - 2.60	Low
2.61-3.40	Moderate
3.41 -4.20	High
4.21-5.00	Very high

1.5 The Data Analysis Tools

Below are the mathematical formulas representing the statistical measures employed to analyze the data obtained from the data collection tools:

Mean Calculation Formula: **Mean** $(\bar{x})=\frac{EXi}{n}$

$(\bar{x})$: represents the mean (average).

(∑Xi): signifies the sum of all individual values (Xi).

(n): represents the total number of values (number of participants) in the dataset.

Standard Deviation Formula: **Standard deviation (Sd)**= $\sqrt{\frac{(\sum x-\bar{x})2}{n}}$

∑: signifies the summation (sum of).

(X): represents individual data points

1.6 Tools Validity and Reliability

1.6.1 Validity

The questionnaire was proofread only by the supervisor, whose feedback was used to ensure whether it was relevant to the research objectives. Despite care being taken for further expert proofreading, time restrictions prevented this from being done.

1.6.2 Reliability

The reliability of the data was assessed using Cronbach's alpha coefficient. SPSS software was used to calculate the results. The Extraversion scale had a result of α = 0.63, suggesting a moderate reliability level. while The Openness scale was α = 0.69, which is near the acceptable. The Neuroticism scale α = 0.59, which is a bit low and may be because of the small number of items or the study sample. The Agreeableness scale was α = 0.65, which is somewhat acceptable. To support the reliability of this research, it is

important to note that lower Cronbach's alpha values can still be considered acceptable in exploratory research. Nunnally (1967) suggested that values as low as 0.50 are appropriate for exploratory research. In addition, Hair et al. (2010) provide that while a value of 0.70 is generally agreed upon as an acceptable value, values as low as 0.60 may be acceptable for exploratory research. Based on this, the reliability scores in this study are within the acceptable range and appropriate for getting a preliminary understanding.

1.7 Pilot Study

Before starting the main research study, two pilot studies were conducted. The first pilot study involved 17 participants who participated through an online questionnaire using through Google Forms platform. This stage aimed to explore whether the phenomenon under study, personality shifts when speaking different languages, was recognized by participants. According to their responses, many participants reported feeling different when speaking different languages. These preliminary findings confirmed the relevance of the topic and motivated the decision to proceed with the full research.

A second pilot was then conducted to assess the questionnaire itself. 10 students were randomly selected from Master One students at M'sila University to assess the questionnaire's clarity, language difficulty, response time, and the relevance of the items. Based on their feedback, some questions were reformulated, and others that are repetitive or irrelevant were removed. this step helped ensure the validity and reliability of the research tool before administering it to the larger sample.

After the pilot studies, the first stage of the main study started, which was devoted to answering the research questions. The students' Questionnaire was distributed to a sample of 64 Master EFL students.

1.8 Procedures

After confirming the clarity and validity of the research tool through a pilot study, the final version of the questionnaire was distributed to master 1 EFL participants. The data collection took place over two days in classroom settings to ensure a quiet and comfortable setting. On the first day, the questionnaire was administered to Master One Linguistics students, and on the second day, it was distributed to Master One Literature students. Participants were given clear instructions and enough time to finish answering the questionnaire at their own pace. To prevent influencing their responses, no interference was made during the administration. Students were also encouraged to ask questions before starting, ensuring that they fully understood the task.

1.9 Data Analysis Procedures

A mixed-methods approach was used to analyze the research data. SPSS version 27 was used for data analysis. For the quantitative part, Descriptive statistics (means and standard deviations) measured personality trait scores. while frequencies were calculated for participants' language background variables, including age, gender, age of language acquisition, language proficiency and frequency, and the context of language use, as well as Likert-scale responses on the influence of context on personality shifts. For the qualitative part, thematic analysis was used to analyze the open-ended answers. This involved reading the data, coding relevant responses, grouping them into themes (e.g., admiration, different thinking), and then interpreting patterns to understand how speaking different languages influences personality.

II. Data Analysis and Discussion

2.1 Data Analysis

2.1.1 Data Analysis for Demographic Considerations and Language Profile

This first section of the questionnaire, which aimed to explore the participants' background and linguistic diversity, is presented through tables and figures to determine if the participants are sequential multilinguals and to describe their language profiles. It also considered variables of age of acquisition, language proficiency, frequency of language use, and contexts of use of each language. The overall results showed that a high number of participants are sequential multilinguals, as they acquired Arabic as a first language in their early childhood, then French as a second language in primary school, and English as their third language in secondary school. Additionally, the results showed that the participants have generally good proficiency levels in all three languages, especially their first language (Arabic) and their third language (English). The consistent linguistic pattern with good proficiency levels provides a clear foundation for the analysis of personality shifts across languages in the following sections.

Table 3

Participants' Age and Gender

		Count	Column N %
Age Groups	20-22	53	82.8%
	23-25	9	14.1%
	52-57	2	3.1%
Gender	Male	10	15.6%
	Female	54	84.4%

The results in Table 03 show that a large number of participants are female (54), with a smaller percentage being male (10). This indicates that there is a great gender imbalance, which means that the study results might be more representative of female

views than of male views. Concerning participants' ages, it was found that most participants were between the ages of 20 and 22, which aligns with the expected age for Master One university students. Only a small percentage of participants are between 23-25 and 52-57. This could be the case for participants who resumed their education later or followed a non-traditional academic path.

Table 4

Languages Spoken by Participants

Spoken Languages		Count	Column N %
First Language	Arabic	64	100.0%
Second Language	French	64	100.0%
Third Language	English	64	100.0%
Fourth Language	Spanish	8	12.5%
	German	13	20.3%
	Turkish	8	12.5%
	Japanese	4	6.3%
	Italian	1	1.6%
	No Language	30	46.9%

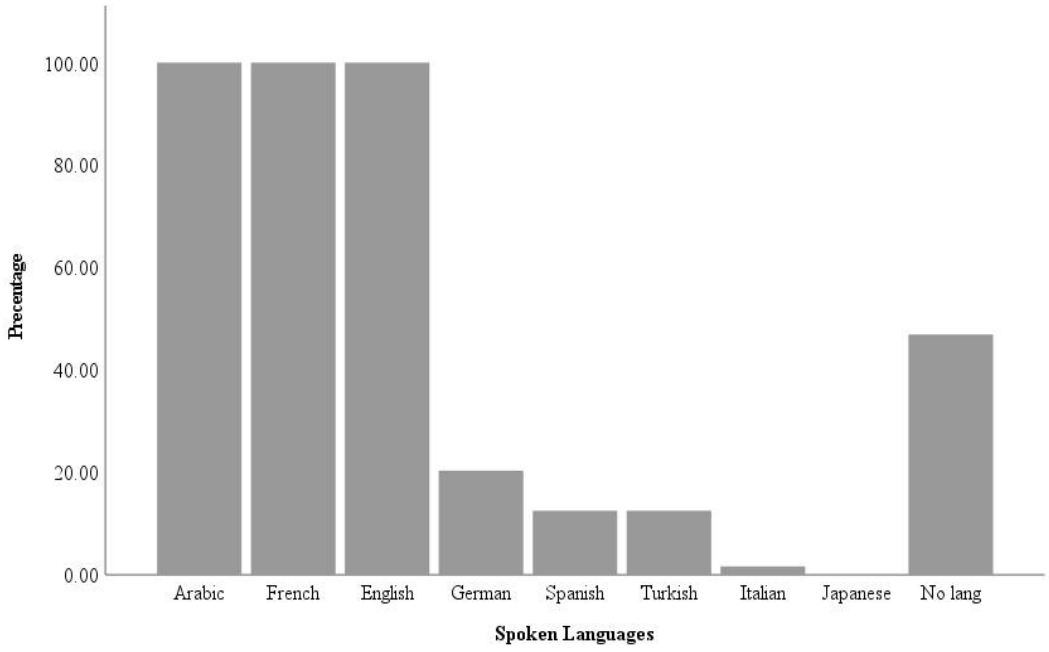

Figure 1

Languages Spoken by Participants

Table 04 and Figure 01 show that all participants share the same language sequence, with Arabic as their first language, French as their second language, and English as their third language. This shared linguistic pattern reflects a shared linguistic environment, likely as a result of the national education system in Algeria. As for the fourth language, the responses were more varied. 46.9% of participants did not indicate a fourth language, while 43.1% of answers were distributed in these percentages: German (20.3%), followed by Spanish and Turkish (12.5% each), then Japanese (6.3%) and Italian (1.6%), which were the least mentioned. This would suggest that the exposure to a fourth language among students is varied, likely due to differences in educational background, educational curriculum, or personal interest.

Table 5

Age of L2 Acquisition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Early Childhood	9	14.1	14.1	14.1
	Primary School	54	84.4	84.4	98.4
	Secondary School	1	1.6	1.6	100.0
	Total	64	100.0	100.0	

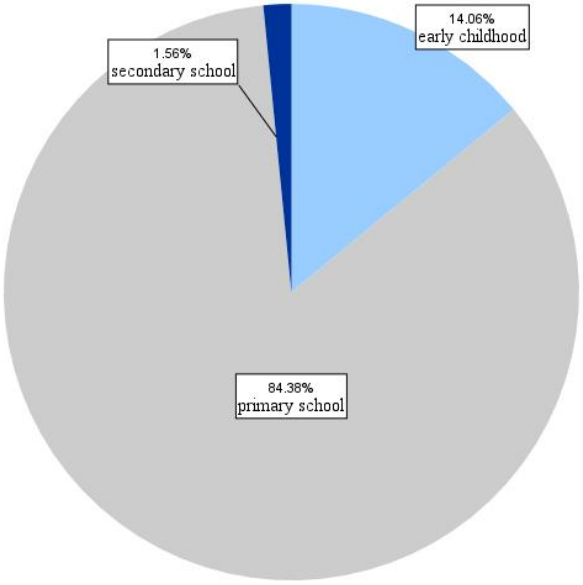

Figure 2

Age of L2 acquisition

Table 05 and Figure 02 show that the majority of participants (84.4%) learned their second language in primary school, which supports the fact that second language acquisition tends to start early in Algerian schools. While 14.1% learned it in early childhood, which suggests that these participants are simultaneous bilinguals, due to the early exposure at home or in society. Only a small percentage (1.6%) began learning their second language in secondary school, suggesting that late exposure is relatively rare. Overall, the data support the view that early bilingual development is normal in Algeria and is both influenced by formal education and sociolinguistic context.

Table 6

Age of L3 Acquisition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Early Childhood	4	6.3	6.3	6.3
	Primary School	4	6.3	6.3	12.5
	Secondary School	54	84.4	84.4	96.9
	Adulthood	2	3.1	3.1	100.0
	Total	64	100.0	100.0	

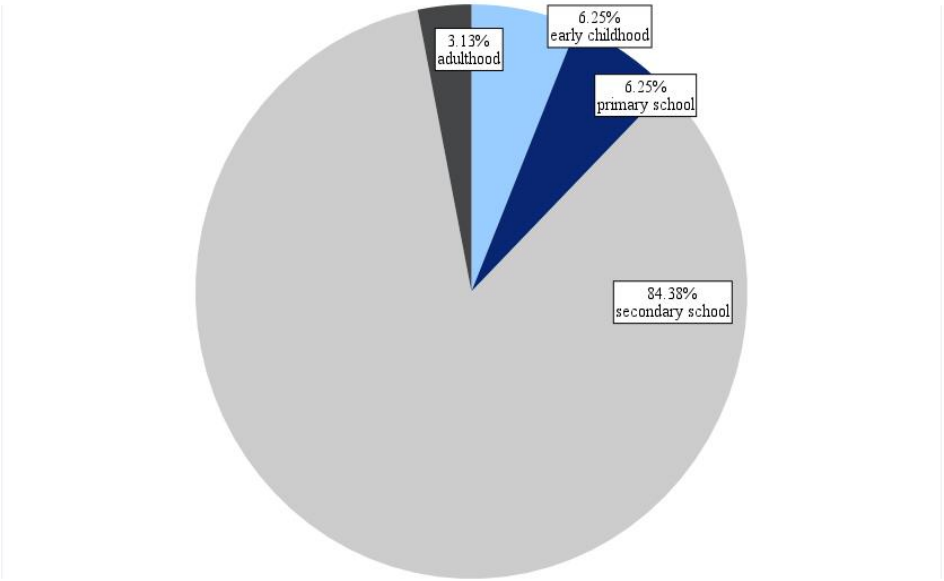

Figure 3

Age of L3 Acquisition

Table 06 and Figure 03 show that the majority of the participants are sequential multilinguals, as 84.4% of them reported that they acquired their third language (English) in secondary school after having acquired their second language (French) in primary school. This pattern is consistent with the idea of sequential multilingualism, while only a few of the participants learned it in early childhood (6.3%), primary school (6.3%), and adulthood (3.1%). This shows that earlier or later acquisition is not common in this study context. In general, the evidence supports the fact that language acquisition in Algeria is

not simultaneous but instead tends to follow sequential development, with each language building upon the previous one.

Table 7

L1 Proficiency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Intermediate B1	1	1.6	1.6	1.6
	Upper intermediate B2	4	6.3	6.3	7.8
	Advanced C1	35	54.7	54.7	62.5
	Proficient C2	24	37.5	37.5	100.0
	Total	64	100.0	100.0	

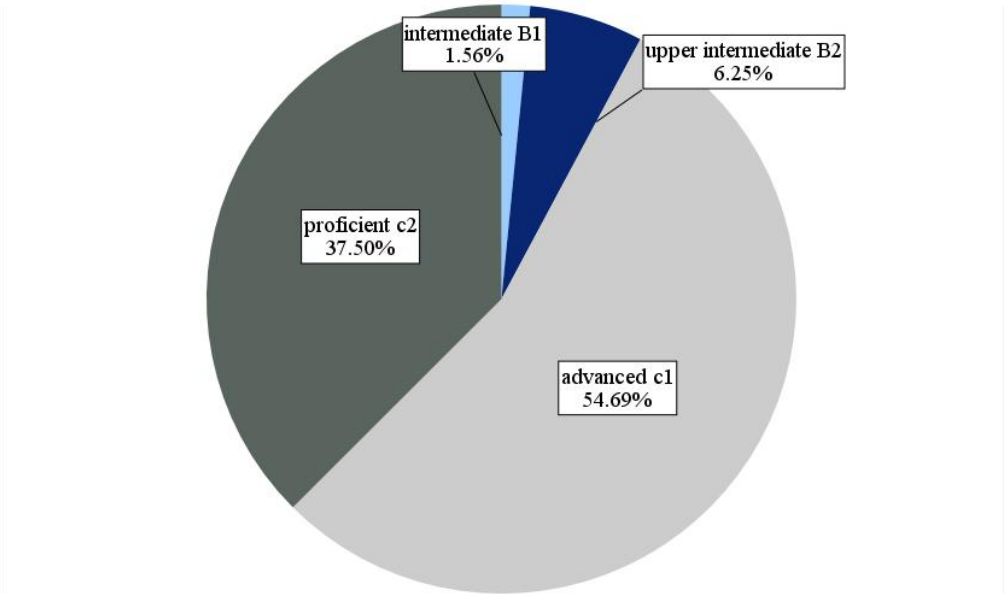

Figure 4

L1 Proficiency

Table 07 and Figure 04 show that most participants reported a high level of proficiency in their first language, which is Arabic. In particular, 37.5% reported a Proficient (C2) level, and 54.7% indicated an Advanced (C1) level. This is highly expected because it is their native language. However, a small percentage reported lower proficiency levels, with 1.6% at Intermediate (B1) and 6.3% at Upper-Intermediate (B2).

This can be explained by the influence of Darija, the Algerian Arabic dialect, which is widely used in everyday communication.

Table 8

L2 Proficiency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Beginner A1	8	12.5	12.5	12.5
	Elementary A2	10	15.6	15.6	28.1
	Intermediate B1	30	46.9	46.9	75.0
	Upper Intermediate B2	10	15.6	15.6	90.6
	Advanced C1	6	9.4	9.4	100.0
	Total	64	100.0	100.0	

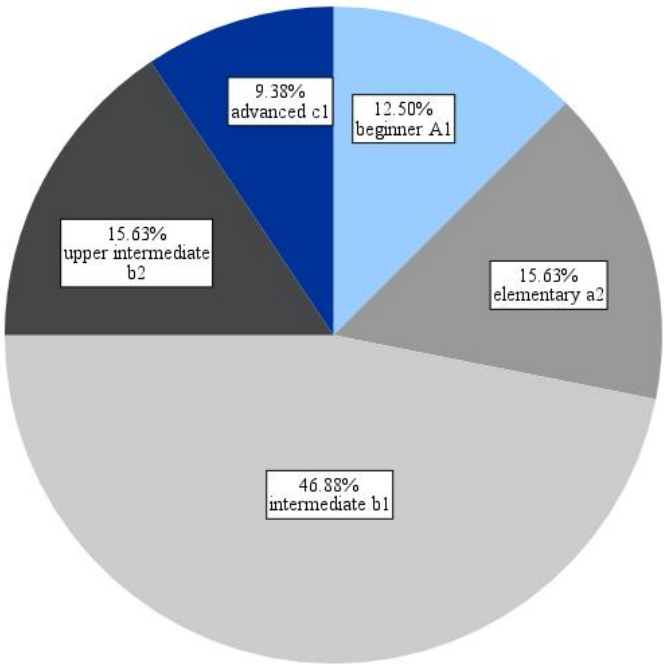

Figure 5

L2 Proficiency

Table 08 and Figure 05 show that most participants have an intermediate (B1) proficiency level (46.9%) in their second language (French). This is consistent with the idea that French is a language learned later in education (typically during primary school), while smaller groups have Elementary (A2) and Upper Intermediate (B2) levels with a

percentage of (15.6% each), suggesting that there is a range of proficiency levels within the group; less often occurring levels are Beginner (A1), (12.5%), and Advanced (C1) (9.4%), which suggest that there are some participants who are at the early stages of learning French or have achieved a more advanced level of proficiency. Overall, the results suggest that students have different levels but generally moderate proficiency in French.

Table 9

L3 Proficiency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Beginner A1	1	1.6	1.6	1.6
	Elementary A2	4	6.3	6.3	7.8
	Intermediate B1	12	18.8	18.8	26.6
	Upper Intermediate B2	28	43.8	43.8	70.3
	Advanced C1	19	29.7	29.7	100.0
	Total	64	100.0	100.0	

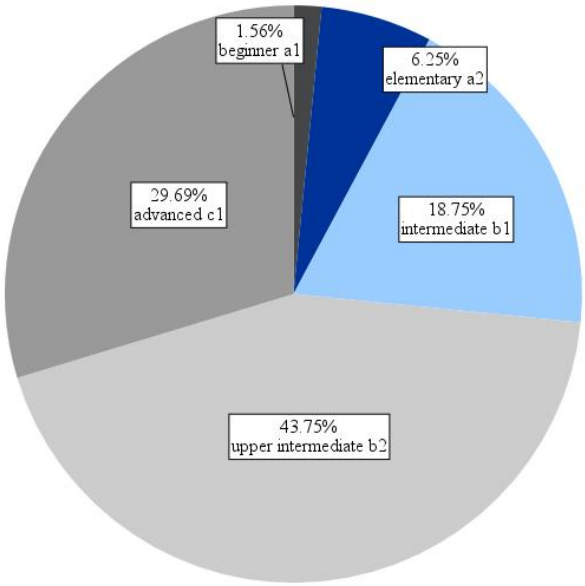

Figure 6

L3 Proficiency

Table 09 and Figure 06 show that the majority of students have Upper Intermediate (B2) proficiency (43.8%) in their third language (English), with Advanced (C1)

proficiency (29.7%) being the second. Few participants reported Intermediate (B1) (18.8%), while Elementary (A2) (6.3%) and Beginner (A1) (1.6%) are the least reported; this suggests that students have a generally high level of proficiency in their third language. This is probably because these participants are EFL (English as a Foreign Language) students. As EFL learners, they have been exposed to English in different contexts, and this may help to explain why they are at a higher proficiency level.

Table 10

L1 Frequency of Use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	63	98.4	98.4	98.4
	Weekly	1	1.6	1.6	100.0
	Total	64	100.0	100.0	

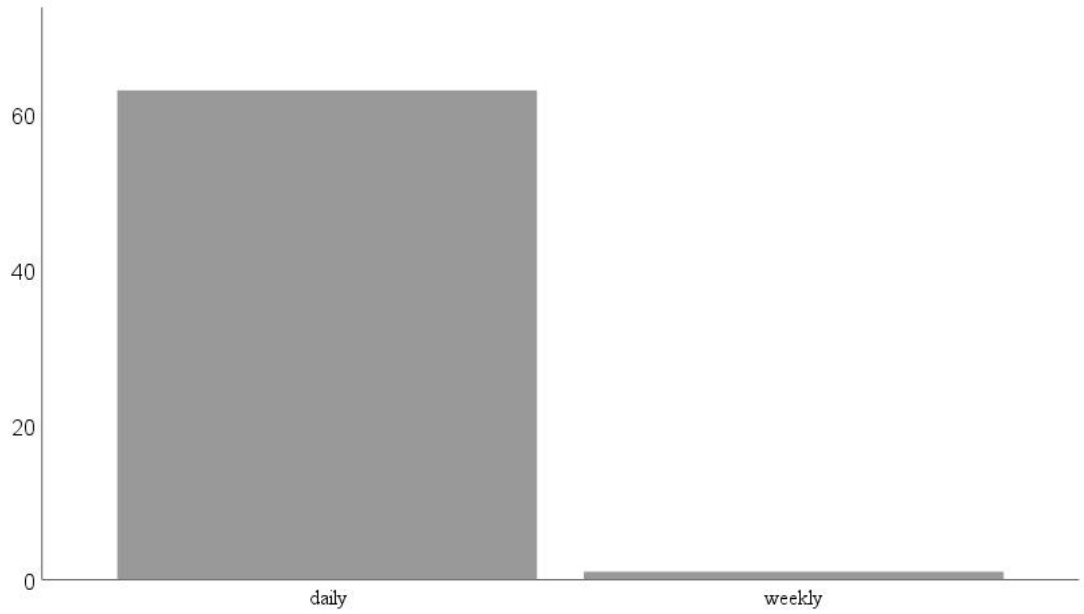

Figure 7

L1 Frequency of Use

The results from Table 10 and Figure 07 show that 98.4% of participants reported using their first language, L1 (Arabic), daily; whereas, only 1.6% of participants use it weekly. This result is expected because the first language (Arabic) is the dominant language in most contexts.

Table 11

L2 Frequency of Use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	14	21.9	21.9	21.9
	Weekly	18	28.1	28.1	50.0
	Occasionally	23	35.9	35.9	85.9
	Rarely	9	14.1	14.1	100.0
	Total	64	100.0	100.0	

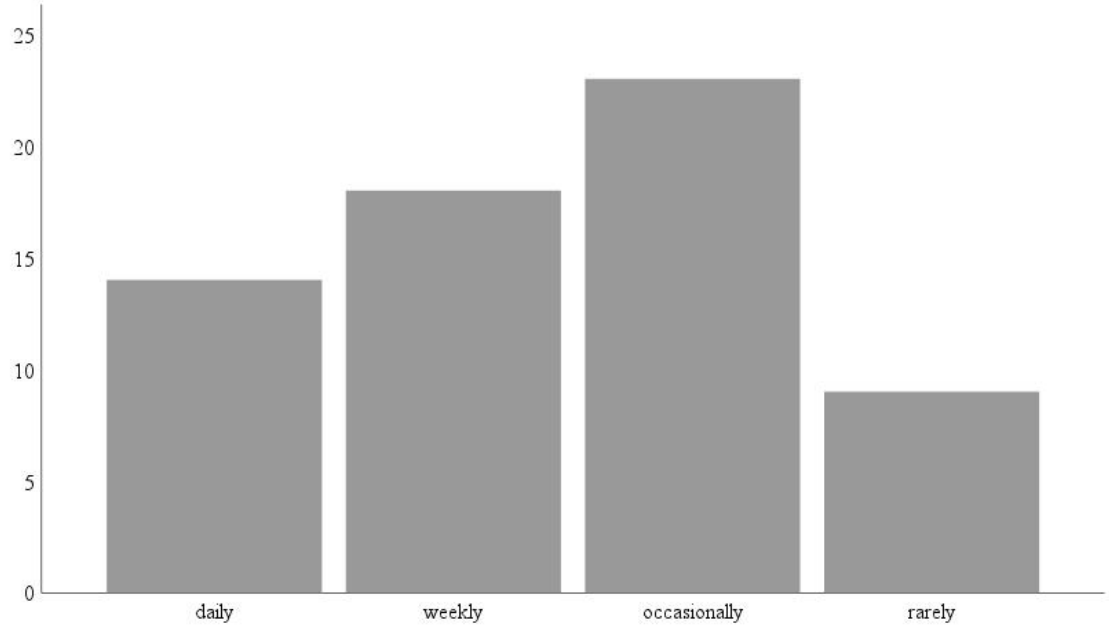

Figure 8

L2 Frequency of Use

The results of Table 11 and Figure 08 indicate varied frequencies of use of French (L2) among participants, with the most common usage is occasionally (35.9%), suggesting that French is not part of their daily routine; then, followed by weekly (28.1%), daily (21.9%), and a small percentage, (14.1%), use it rarely. Overall, these findings suggest a moderate frequency of L2 use, with notable variation in participants' usage patterns, which might be due to personal, social, or professional reasons.

Table 12

L3 Frequency of Use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	42	65.6	65.6	65.6
	Weekly	17	26.6	26.6	92.2
	Occasionally	3	4.7	4.7	96.9
	Rarely	2	3.1	3.1	100.0
	Total	64	100.0	100.0	

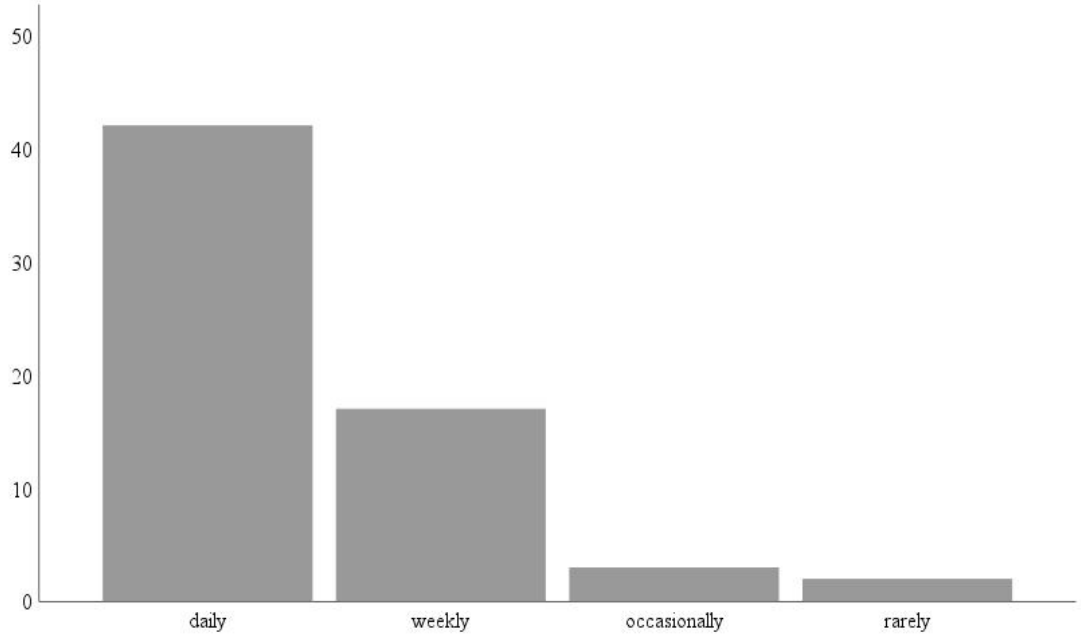

Figure 9

L3 Frequency of Use

Table 12 and Figure 09 show that the majority of participants (65.6%) use L3 daily. This is expected as the participants are EFL students, so they use English academically regularly. Nevertheless, it also suggests they might use English in other aspects of their daily lives, for example, when watching movies, using social media, or communicating with people. while 26.6% use it weekly. This suggests a moderate frequency of L3 use among the group. Only a few participants use it occasionally (4.7%) or rarely (3.1%). this suggests that limited use of L3 is uncommon. Overall, the findings demonstrate that English plays an important role in the participants' daily lives.

Table 13

L4 Frequency of Use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	3	4.7	4.7	4.7
	Weekly	1	1.6	1.6	6.3
	Occasionally	4	6.3	6.3	12.5
	Rarely	29	45.3	45.3	57.8
	No L4	27	42.2	42.2	100.0
	Total	64	100.0	100.0	

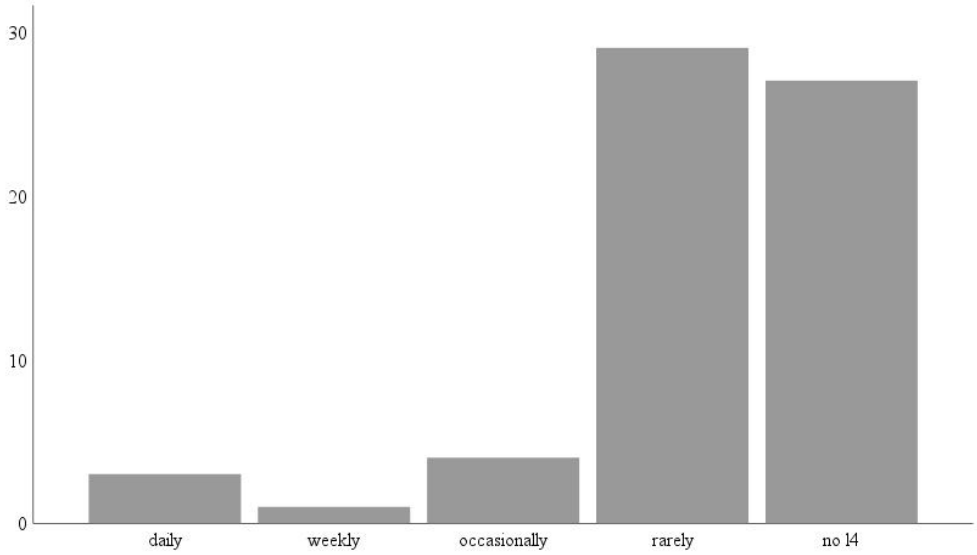

Figure 10

L4 Frequency of Use

Table 13 and Figure 10 show that only a small number of participants use a fourth language (4.7% daily and 1.6% weekly), while 6.3% use it occasionally and 45.3% rarely. Additionally, 42.2% of participants have never learned a fourth language. This means that the participants' usage of L4 is restricted and is not an essential part of their language abilities.

Table 14

Context Of Language Use

Context	L1	L2	L3	L4
At home	100%	31.3	42.4	4.7
With friends	85.9	37.5	90.6	12.5
On social media	75	45.3	45.3	14.1
In public places	87.5	23.4	32.8	0
At school	64.1	35.9	93.8	6.3

At work	65.6	26.6	57.8	3.1

Note: 42.2% of participants reported not having an L4. The percentages for the context of L4 usage are based only on those who reported having an L4.

As shown by Table 14, language use differs based on the context, which shows the impact of sequential multilingualism. L1 (Arabic) is dominant in the majority of contexts, specifically at home (100%), in public (87.5%), with friends (85.9%), on social media (75%), at school (64.1%), and at work (65.6%). Therefore, this confirmed its important role in communication and everyday interactions.

L2 (French) is used moderately, with it being used mostly on social media (45.3%) and with friends (37.5%). This suggests that French is more important socially than academically or occupationally. Because the participants are EFL students, they probably use English (L3) more frequently in the academic and workplace environments. Still, French remains important because of Algeria's postcolonial history, and it remains part of Algeria's identity and culture.

On the other hand, L3 (English) is used widely, especially in educational and social settings. It is used mostly at school (93.8%), and with friends (90.6%), and is also used in the workplace (57.8%), as well as on social media (45.3%), and even at home (42.4%). This suggests that English is important not just for academic settings but also for digital and social communication, which means that it is a part of the participants' daily lives.

Finally, the fourth language (L4) is the least used. It is not used in public spaces, and only a small percentage of participants use it at home (4.7%), with friends (12.5%), or on social media (14.1%). It is noteworthy to mention that 42.2% of the participants

reported not having a fourth language, which means that L4 is only used by persons who are interested in or have specific purposes related to the language.

2.1.2 Data Analysis for Participants' Perceived Personality Traits Across Languages

The second section of the questionnaire presents the analysis of personality traits when speaking different languages compared to participants' first language (Arabic). Data were collected through a group of statements based on the Big Five personality model. Students were asked to indicate how much they agreed or disagreed with various statements related to four traits, which are Extraversion, Agreeableness, Neuroticism, and Openness. The items were adapted to reflect self-perceived personality shifts when speaking a second or foreign language compared to the first language. Responses were measured on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), the higher scores suggesting a greater perceived increase in the given trait when speaking a second or foreign language. For each trait, the total score was calculated by summing the responses to five related items and then dividing the total by five to get a mean score, which shows the perceived shift in that trait. In addition to that, Participants responded to an open-ended question regarding perceived personality shifts when speaking a second or foreign language. The overall results suggest that most of the participants perceive noticeable shifts in their personality traits when speaking different languages compared to L1. This section attempts to analyze these potential shifts in more detail, based on both quantitative scores and qualitative responses.

Table 15

Descriptive Statistics of The Big Five Personality Trait Scores

	N	Minimum	Maximum	Mean	Std. Deviation
Extraversion	64	2.00	4.60	3.1594	.68376
Agreeableness	64	2.40	4.80	3.6094	.63188
Openess	64	1.40	5.00	3.4844	.79106
Neuroticism	64	1.00	4.60	2.8594	.74209
Valid N (listwise)	64				

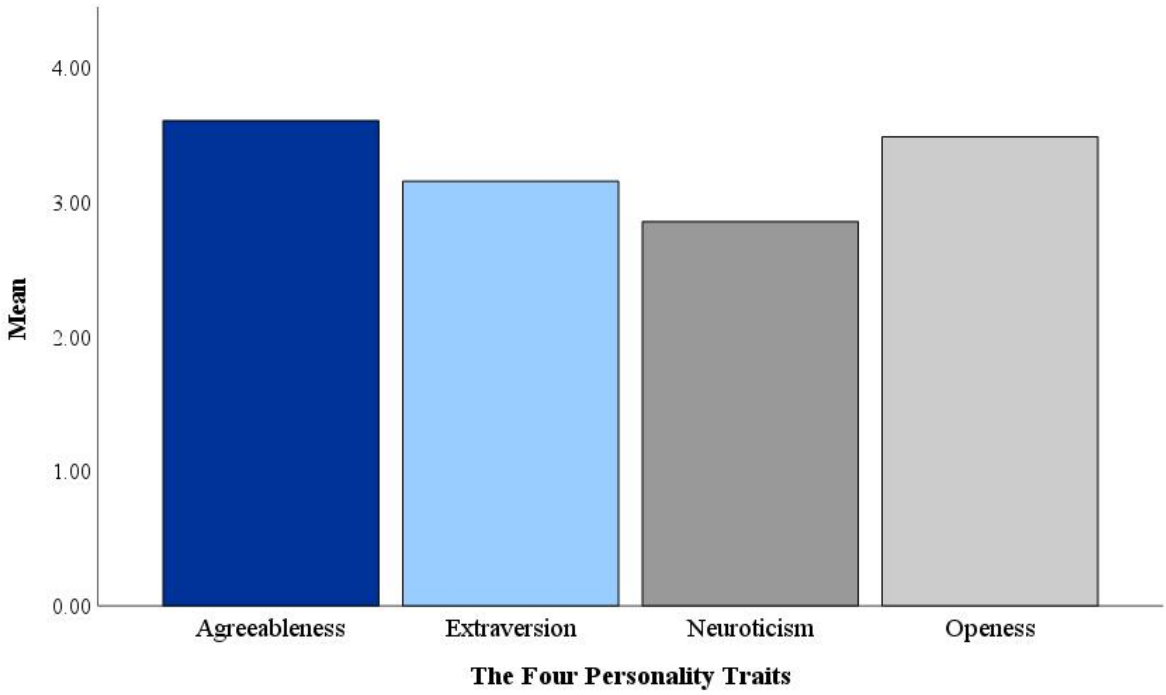

Figure 11

Mean Scores of the Four Personality Traits

According to the descriptive statistics, Table 15 and Figure 11, it was found that most of the participants have moderate levels of extraversion, as shown by their extroversion scores, which range from a minimum of 2.00 to a maximum of 4.60, with the mean being 3.15. This suggests that participants who speak a second or foreign language are generally not very social but have some social engagement. In addition, agreeableness

scores range from 2.40 to 4.80, with a high mean of 3.60. This suggests that the majority of participants are polite, cooperative, and empathetic when using a second or foreign language compared to their L1. Moving to openness, ranging from 1.40 to 5.00, with a high mean score of 3.48, this indicates that participants are usually open to new ideas and experiences when speaking SL/FL, although there is some variability in scores. Finally, neuroticism (referred to as emotional instability) scores range from 1.00 - 4.60, with a mean of 2.85, which shows a moderate level of emotional instability when using a second or foreign language compared to L1, suggesting that they are not highly emotionally unstable, but they may still experience anxiety or discomfort when speaking a foreign or second language compared to their L1.

Table 16

Frequency Distribution of Extraversion Score Intervals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.81 - 2.60	15	23.4	23.4	23.4
	2.61 - 3.40	29	45.3	45.3	68.8
	3.41 - 4.20	19	29.7	29.7	98.4
	4,21 - 5.00	1	1.6	1.6	100.0
	Total	64	100.0	100.0	

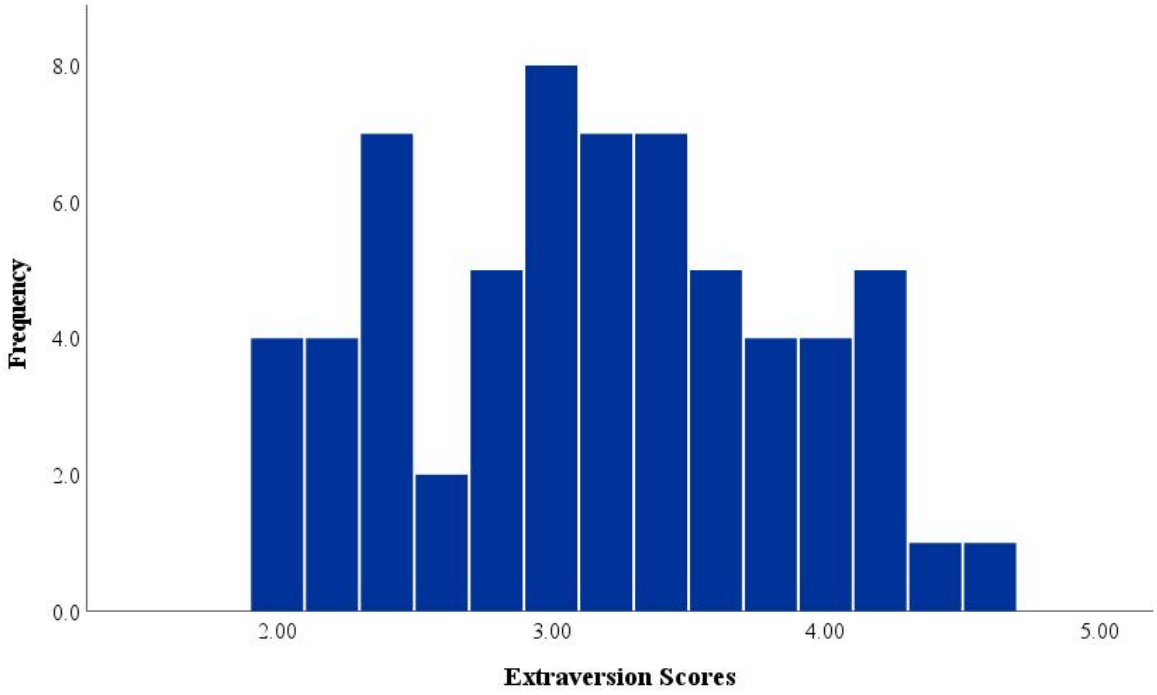

Figure 12

Distribution of Extraversion Scores Among Participants

The results in Table 16 and Figure 12 show significant variation in the students' extraversion scores when using a second or foreign language (SL/FL) compared to L1. 45.3% of participants fall into the moderate range (2.61–3.40), which suggests that they have average levels of sociability and outgoing behavior when speaking different languages compared to their L1. Meanwhile, 23.4% of the participants have scores between 1.81 and 2.60, indicating lower levels of extraversion, which suggests that they are more introverted and more reserved when speaking SL/FL than their native language (Arabic). On the other hand, 29.7% scored between 3.41 and 4.20, indicating high levels of sociability, and only a small number of participants achieved the greatest interval, 1.6% of participants between 4.21 and 5.00, scoring in very high extraversion, suggesting they are even more outgoing and sociable in SL/FL than in L1. Overall, the majority of participants are somewhat outgoing when speaking another language, but only a few are very outgoing.

This is likely because participants may feel less confident or comfortable when they're not speaking in their first language.

Table 17

Frequency Distribution of Agreeableness Score Intervals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.81 - 2.60	2	3.1	3.1	3.1
	2.61- 3.40	25	39.1	39.1	42.2
	3.41- 4.20	31	48.4	48.4	90.6
	4.21 - 5.00	6	9.4	9.4	100.0
	Total	64	100.0	100.0	

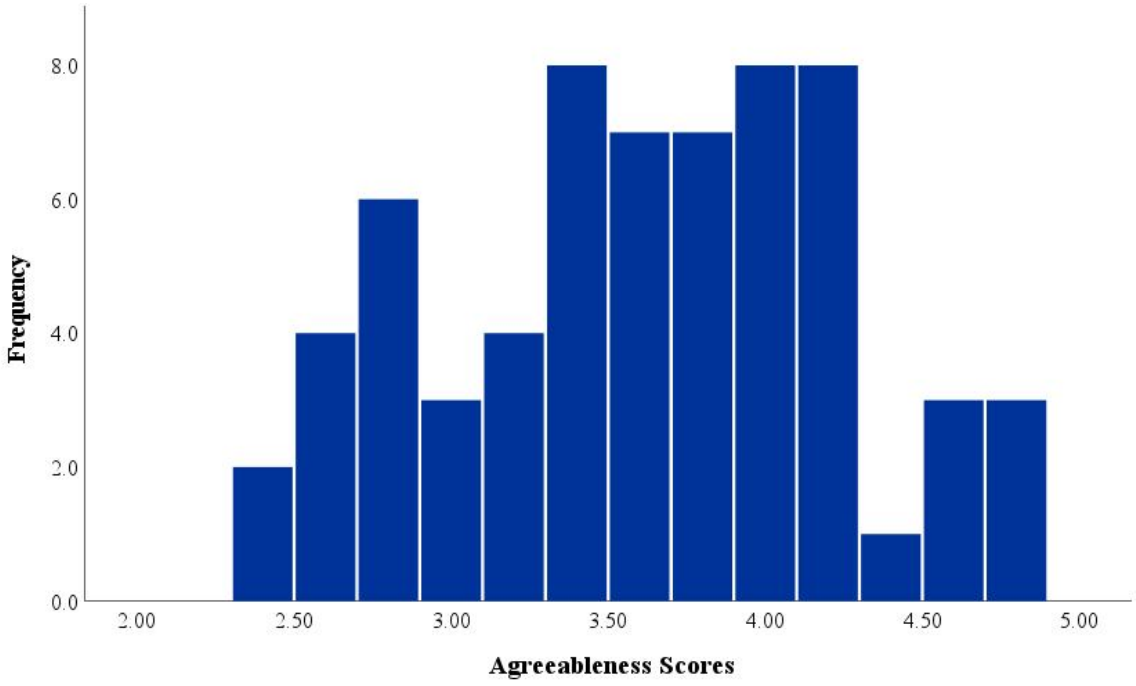

Figure 13

Distribution of Agreeableness Scores Among Participants

The results in Table 17 and Figure 13 show that the majority of participants are fairly agreeable when speaking a second or foreign language (SL/FL). The largest group, 48.4%, had scores between 3.41 and 4.20, which suggests a high level of agreeableness. This means they tend to be friendlier, kinder, and more cooperative when speaking in

different languages compared to their first language (L1). In addition, 39.1% of participants have moderate levels, scoring between 2.61 and 3.40. These participants show moderate levels of politeness and cooperation in SL/FL compared to L1. Only 3.1% scored between 1.81 and 2.60, which indicates a low level of agreeableness. This suggests that students are more reserved or less cooperative when using SL/FL than they are in L1. Finally, 9.4% of the participants had scores between 4.21 and 5.00, suggesting a high level of agreeableness. Such students are always polite and thoughtful, even when communicating in a different language.

Table 18

Frequency Distribution of Openness Score Intervals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00 - 1,80	1	1.6	1.6	1.6
	1,81-2,60	7	10.9	10.9	12.5
	2,61 - 3,40	24	37.5	37.5	50.0
	3,41 - 4,20	26	40.6	40.6	90.6
	4,21- 5,00	6	9.4	9.4	100.0
	Total	64	100.0	100.0	

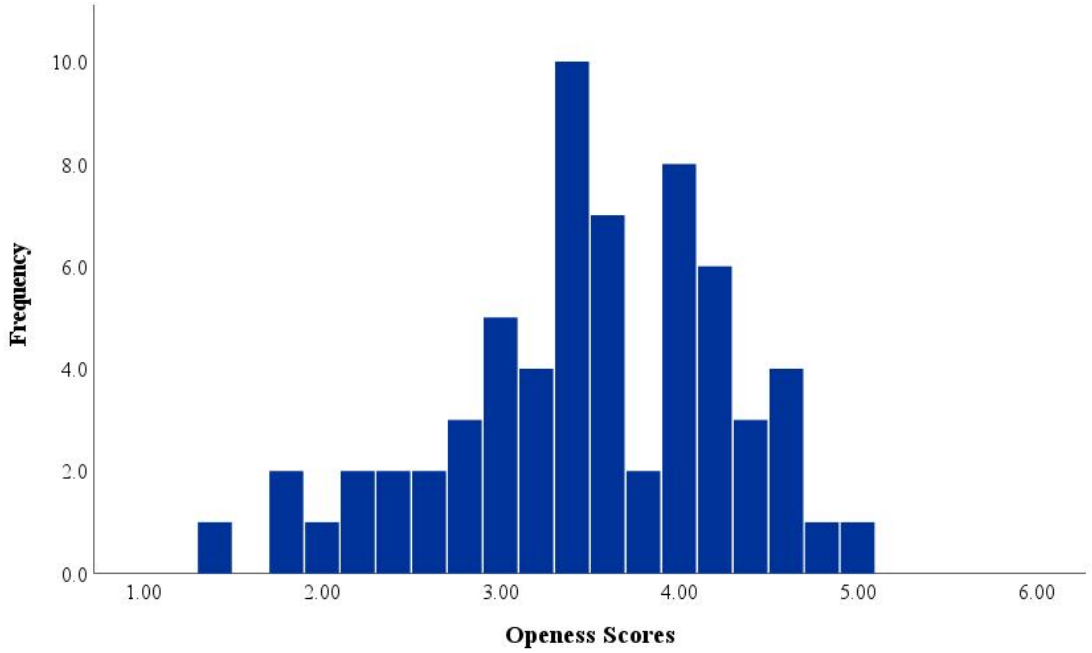

Figure 14

Distribution of Openness Scores Among Participants

The results in Table 18 and Figure 14 show that most participants tend to be more open-minded when speaking a second or foreign language (SL/FL) compared to their first language (L1). Specifically, 9.4% of the participants scored within the Very High range (4.21–5.00), which indicates a very high level of openness trait. As well as, 40.6% scored in the High-level range (3.41–4.20), suggesting that they often show creativity, curiosity, and openness to new experiences when speaking a SL/FL compared to when they speak L1. Therefore, half of the participants (50%) generally demonstrate a high to very high level of openness when using an SL/FL compared to L1. 37.5% of participants fall into the Moderate range (2.61–3.40), showing a balanced openness. In contrast, 10.9% have scores in the Low range (1.81–2.60), and 1.6% in the Very Low range (1.00–1.80), indicating limited and less openness. Overall, half of the participants report feeling more open when speaking a second or foreign language compared to their L1, and some participants are moderately open, and very few have low levels of openness.

Table 19

Frequency Distribution of Neuroticism Score Intervals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00 - 1.80	2	3.1	3.1	3.1
	1.81 - 2.60	21	32.8	32.8	35.9
	2.61- 3,40	27	42.2	42.2	78.1
	3,41 - 4.20	13	20.3	20.3	98.4
	4.21 - 5.00	1	1.6	1.6	100.0
	Total	64	100.0	100.0	

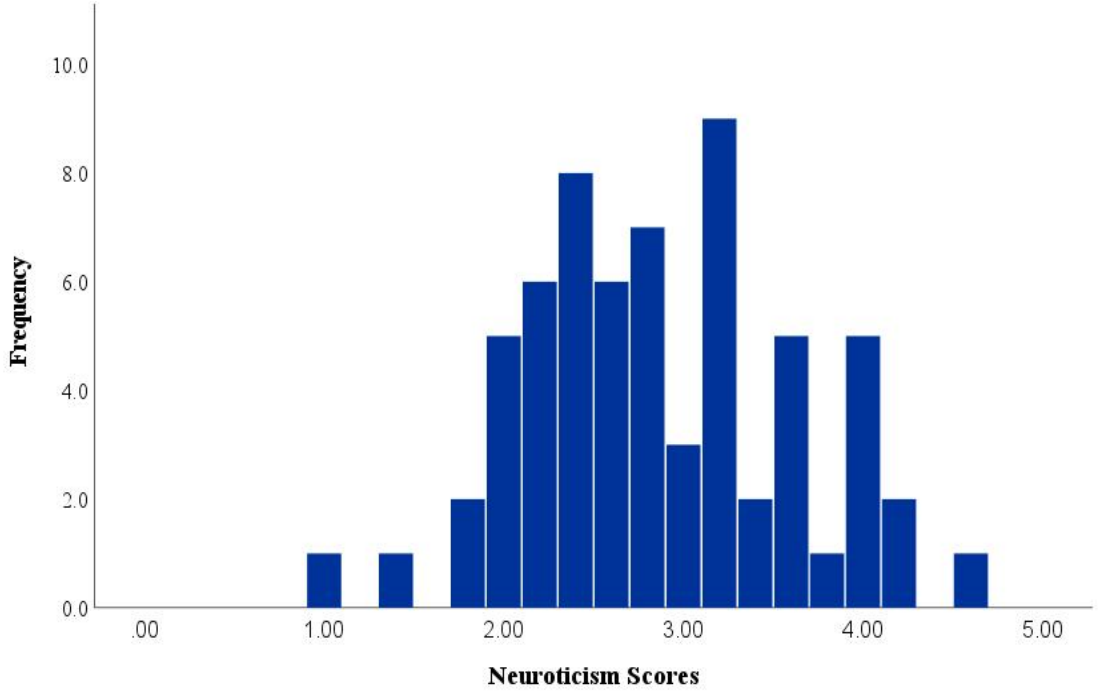

Figure 15

Distribution of Neuroticism Scores Among Participants

The results in Table 19 and Figure 15 show that the majority of participants experience moderate neuroticism when using a second or foreign language (SL/FL) compared to their first language. Specifically, 3.1% of participants scored in the Very Low range (1.00–1.80) and 32.8% in the Low range (1.81–2.60), suggesting a tendency toward emotional stability and lower neuroticism. In addition, 42.2% of participants scored in the

Moderate range (2.61–3.40), which would indicate some levels of emotion but still be somewhat stable. Whereas, 20.3% scored in the High range (3.41–4.20), and only 1.6% in the Very High range (4.21–5.00). These participants feel more nervous or emotionally unstable in SL/FL situations compared to L1. Overall, the findings suggest that many participants show signs of emotional balance, while only a few experience increased levels of stress or anxiety when speaking SL-FL compared to their L1.

Table 20

Participants' responses to feeling different when speaking a second or foreign language

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	51	79.7	79.7	79.7
	no	13	20.3	20.3	100.0
	Total	64	100.0	100.0	

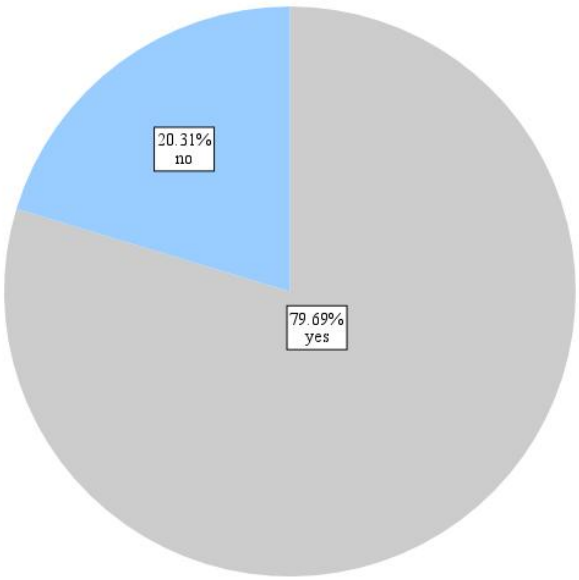

Figure 16

Feeling Different When Speaking a Second or Foreign Language

According to the results shown in Table 20 and Figure 16, 79.7% of participants responded to feeling different when speaking a second or foreign language, in contrast to 20.3% who did not. This suggests that most participants experience some degree of personality shift when speaking a second or foreign language, while a smaller group does not perceive any shift.

Table 21

Themes Identified from Participants' Descriptions of Feeling Different When Speaking a Second or Foreign Language

Themes	Frequency	Percentage	Example Response
Cultural influence	6%	9.4%	I feel I have a different personality due to cultural influence.
Confidence	9%	14.1%	I feel like a different person, more confident and open-minded
Comfort	9%	14.1%	Sometimes, but not always, I feel more comfortable
Better self-expression	7%	10.9%	I express my ideas easily, and it helps me be the best version of myself. I feel different in a unique way as i become more flexible and express better ideas and emotions more effectively
Admiration	17%	26.6%	My fundamental traits remain the same, but I admire myself more when speaking English.
Communication facilitation	5%	7.8%	I am not exactly sure in which way, but I feel that I have become more patient, comprehensive, and affectionate. i get along better with those who speak the same foreign language
Different Thinking	6%	9.4%	Encourages thinking outside the box
Uniqueness	9%	14.1%	i feel proud to speak a language that not everyone can
Consistent Personality	4%	6.3%	No, I do not think so. My personality stays the same regardless of the language I use; only the words change.

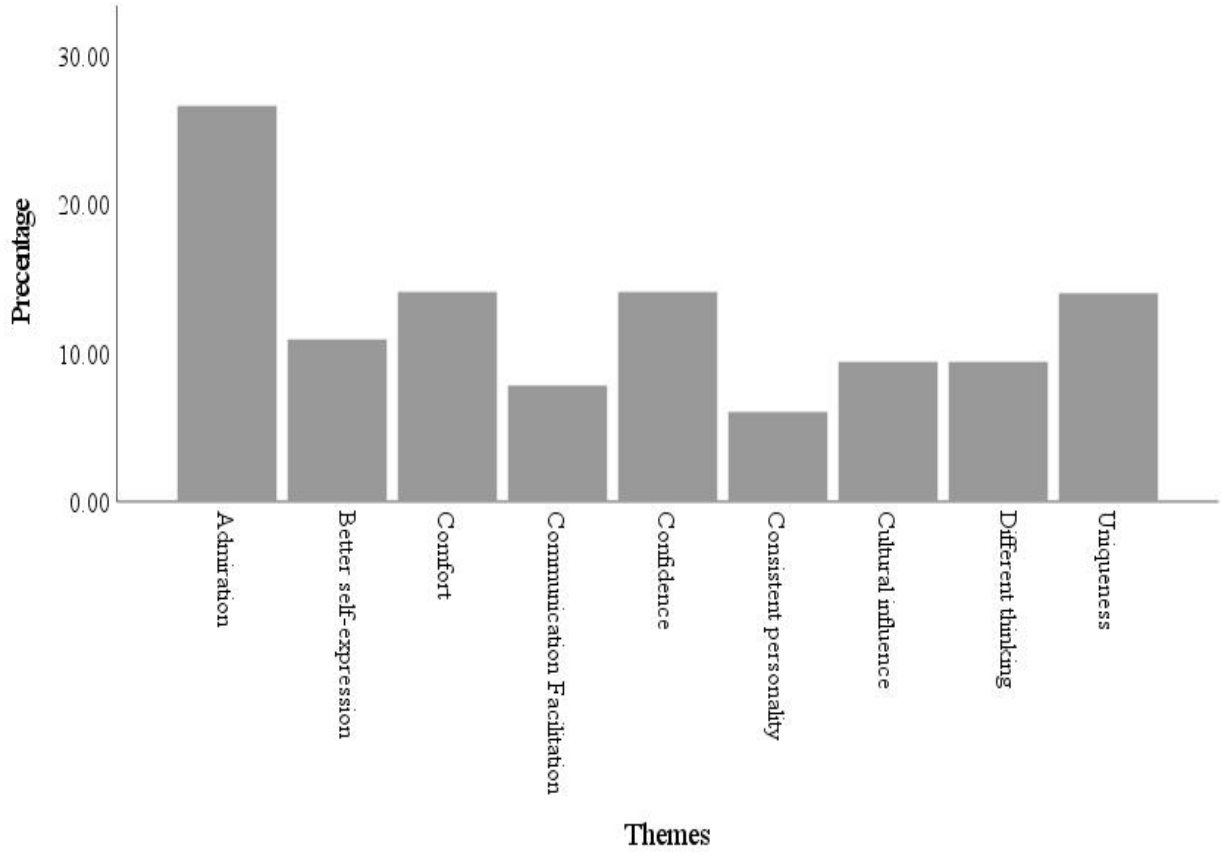

Figure 17

Reported Themes of Feeling Different in a Second or Foreign Language

Based on the open-ended answers to the question, “Do you feel different when you speak a second or foreign language? If yes, how?”, the data shows different new themes as shown in Table 21 and Figure 17. The most common theme is admiration (26.6%), where participants say that using SL/FL makes them admire themselves more or feel better about their personalities. This shows that acquiring another language can increase self-esteem and help people feel more positive. Followed by comfort and confidence (both at 14.1%), where participants report feeling more comfortable and confident when speaking L2 or FL, which shows that language influences emotions, not just speech. Another theme was better self-expression (10.9%), which indicates that individuals feel that they can express their

ideas and feelings better when speaking in another language. In addition, cultural influence (9.4%) suggests that the participants' perceptions of their personalities are influenced by the culture of the spoken language. However, the less common but important themes are: different thinking, communication facilitation, and uniqueness. These suggest that using an L2 or FL promotes open-mindedness, easier communication, and a feeling of uniqueness. However, a few of the participants, 9.4%, said they had a "consistent personality" when they spoke in different languages. This shows that not everyone perceives a shift, and it may depend on some factors like personality, language proficiency, or the situation. Overall, most students feel that speaking a different language change how they see or express themselves. It shows that personality isn't always fixed. it can shift depending on the language an individual speaks. Multilinguals often adapt and express themselves through each language, making language a significant part of personal identity.

2.1.3 Data Analysis for the influence of the context on personality shift

The final section of the questionnaire aims to answer the second research question, which was whether social context influences personality shifts among sequential multilinguals when speaking a second or foreign language. The statements were constructed to identify how the personalities of participants may shift depending on the language used in different contexts. (e.g., being more confident or more formal in SL/FL compared to their mother tongue). These statements were designed from selected aspects of the Big Five personality traits. For example, confidence (linked to extraversion), emotional connection (linked to agreeableness), and formality or sociability (linked to openness and extraversion). The participants rated on a Likert scale the level of agreement from "strongly disagree" to "strongly agree". It is important to note that the current study does not attempt to assess all five traits in every context. Rather, it aimed to confirm

whether context itself plays a role in shifting some observed personality traits across languages. In addition, an open-ended question was asked to gain more insights into whether participants experienced situations where they talked and behaved the same way in a second or foreign language as they do in their first language. Overall, the results show that social context does significantly influence personality shift when speaking different languages, with many participants reporting shifts in behavior depending on the language and the context.

Table 22

Participants' agreement on contextual use of SL-FL versus First language

Statements	SD	D	N	A	SA
1. In my workplace, I feel confident when using SL/FL than when using L1.	6.3%	12.5%	32.8%	37.5%	10.9%
2. In academic settings, I find it easier to express complex ideas in SL/FL than L1.	3.1%	23.4%	25%	34.4%	14.1%
3. I feel more emotionally connected to my family when I speak to them in L1 than in SL/FL	7.8%	7.8%	21.9%	25%	37.5%
4. I feel more sociable and outgoing when I speak SL/FL with my friends compared to L1	6.3%	18.8%	20.3%	35.9%	18.8%
5. When I speak FL/SL in public, I tend to be more formal and reserved than I usually am	3.1%	17.2%	23.4%	45.3%	10.9%
6. I feel more comfortable expressing emotions and affection in SL/FL with intimate partners than L1.	7.8%	17.2%	31.3%	29.7%	14.1%
7. I notice that my personality shifts depending on the language and the context.	6.3%	12.5%	32.8%	34.4%	14.1%

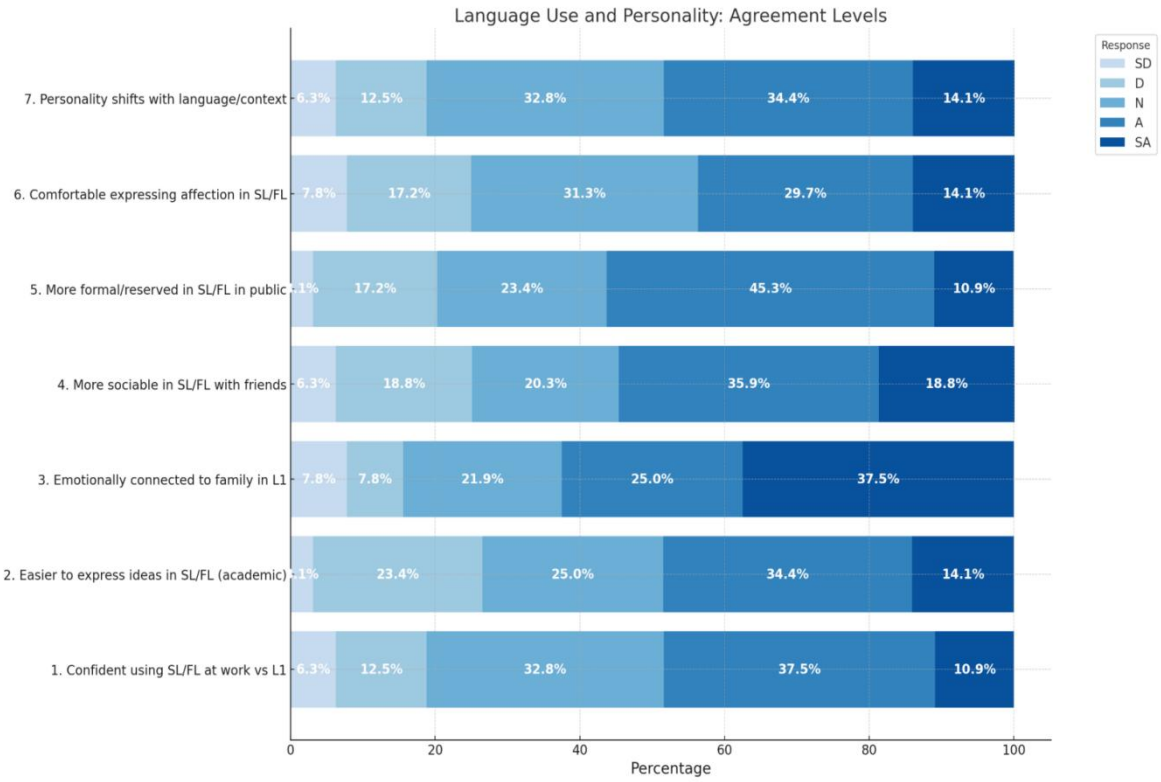

Figure 18

Participants' Agreement on Contextual Use of Second/Foreign Language vs. First Language

According to the findings shown in Table 22 and Figure 18, it was found that language and context influence how participants of this study feel and express themselves. 48.4% of participants answered that they feel more confident using SL/FL at work instead of using L1, while 48.5% of participants found it simpler to communicate complex ideas in SL/FL in academic contexts compared to L1. This is because of their long academic use of L3. However, when speaking L1, 62.5% of the respondents reported feeling more emotionally linked to their family, indicating the high level of emotional connection in L1 compared to SL or FL. 54.7% of the participants felt more outgoing in SL/FL with friends compared to L1. In addition, when speaking SL/FL in public compared to L1, 56% said they felt more formal and reserved; possibly because they feel more nervous or they want

to speak correctly. Moreover, with intimate partners, the responses were mixed. 44% felt more comfortable expressing emotions in SL/FL compared to L1. Most importantly, 49% said that their personality traits shift depending on the language and context, suggesting that students' personality traits are not fixed across languages and contexts; rather, they shift with the change of the two.

Table 23

Thematic analysis where SL-FL behavior is similar to L1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Behavioral match with friends	9	14.1	14.1	14.1
	Behavioral match in religious context	5	7.8	7.8	21.9
	Behavioral match in emotional context	3	4.7	4.7	26.6
	No Behavioral match -Totally different	32	50.0	50.0	76.6
	No respose	13	20.3	20.3	96.9
	Behavioral match with family	1	1.6	1.6	98.4
	Behavioral match in academic topics	1	1.6	1.6	100.0
	Total	64	100.0	100.0	

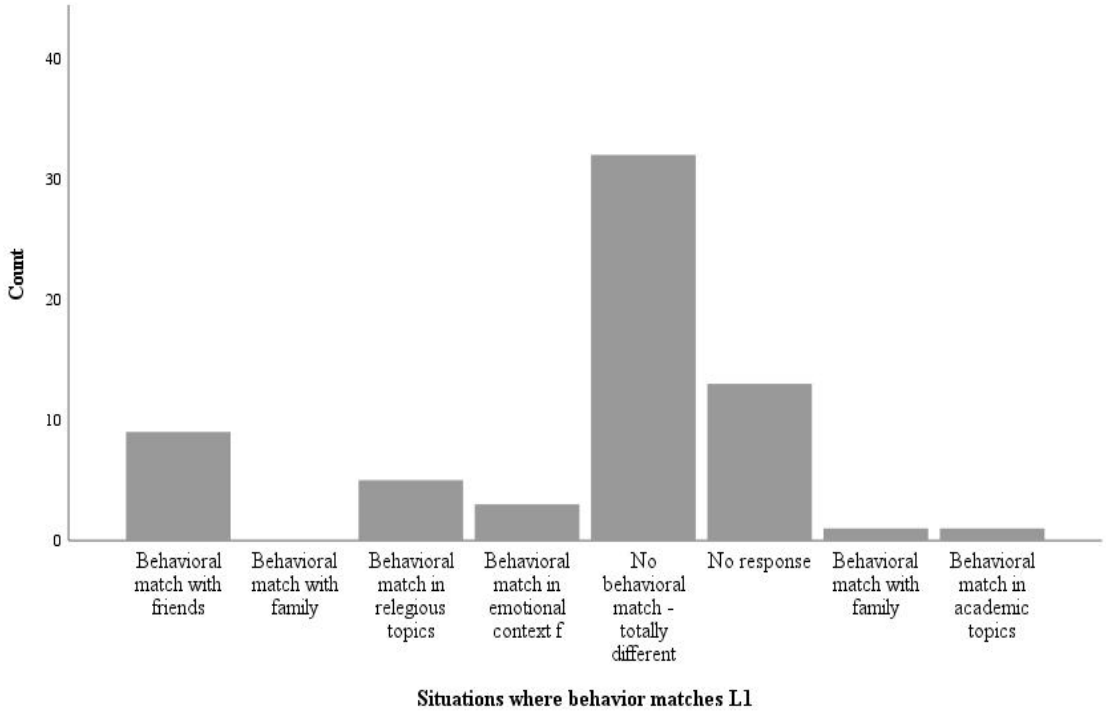

Figure 19

Themes Identified on Behavioral Similarities Between SL/FL and L1

According to the results shown in Table 23 and Figure 19, it was found that language has a great influence on how participants behave in different contexts. A large number of respondents (50%) said that their behavior is totally different when speaking a second or foreign language (SL/FL) compared to their first language (L1). This suggests that language can result in noticeable shifts in behavior or personality. Only a few participants, ranging from 1.6% to 14.1%, reported behaving the same way in SL/FL as in their first language (L1) in various contexts. For example, 14.1% felt that they behaved the same when speaking with friends, and only 1.6% reported consistency in family and academic contexts. 7.8% of students said their behavior is the same in religious contexts, and 4.7% felt the same way in emotional contexts. The high percentage of "no response" (20.3%) has uncertainty or complexity in identifying shifts. Overall, the data support the idea that language plays a significant role in shaping behavior.

2.2 Discussion of the Results

The purpose of the current research is to explore whether Master 1 EFL students at M'sila University experience personality shifts. It investigates shifts in Extraversion, Agreeableness, Openness, and Neuroticism when students speak a second or foreign language (SL/FL) compared to their first language (L1). It also examines whether the social context influences personality shifts. This section presents a discussion of the study's findings. For clarity, the findings are discussed according to the two core objectives of the research.

2.2.1 Participants' Self-Perceived Personality Traits Across Languages

One of the main objectives of this study was to explore whether Master 1 EFL students at M'sila University perceive shifts in specific personality traits when speaking a second or foreign language compared to their first language. In response to this research question, the findings show that participants do report noticeable shifts in how they perceive their personalities across languages, particularly in traits like extraversion, agreeableness, openness, and neuroticism. These perceptions confirm our first hypothesis (H1).

Regarding extraversion levels, Master 1 EFL learners self-report moderate extraversion when speaking a second or foreign language compared to their first language ($M = 3.15$, $SD = 0.68$). The low standard deviation suggests that most participants answered in a similar way, showing a consistent pattern across the group. The moderate level means that most of the participants are neither extremely social nor introverted when speaking a second or foreign language compared to their L1. This suggests a partial personality shift in extraversion. This finding is somewhat different from previous studies. For example, Ramírez-Esparza et al. (2004) found that Spanish-English bilinguals showed

higher levels of extraversion when speaking English compared to their native language. Similarly, Rezapour and Zanjirani (2020) reported that Persian-English bilinguals scored higher on extraversion in English. The current findings found a moderate level of extraversion rather than a high level in comparison to previous research. This difference might suggest that our participants tend to feel more extraverted in their L1. In other words, their social side could not be fully revealed by a second or foreign language compared to their L1.

In addition, participants perceived a high agreeableness level (M = 3.60, SD = 0.63), with low variability in responses. This suggests that they perceived themselves as more cooperative and empathetic when using a second/foreign language compared to their L1. This suggests a positive personality shift in agreeableness. The possible explanation for the high agreeableness when speaking different languages is that, because multilinguals adapt their behavior depending on language and context, they fit in socially or align with cultural expectations. (S. X. Chen et al., 2013). This finding is aligned with a previous study by Dewaele and Wei (2012), who found that bilingual and multilingual people usually score higher on agreeableness, especially when speaking a second or foreign language. They explained that switching between languages can improve social flexibility, empathy, and emotional control, which are all crucial components of agreeableness.

Moving to openness levels, Master 1 EFL learners self-report high openness when speaking a second or foreign language compared to their first language (M = 3.48). This suggests that participants in this research stated that speaking a second or foreign language made them feel more open than speaking their first language, Arabic. This trait is often associated with imagination, curiosity, and a willingness to explore. This suggests a positive personality shift in openness. However, the standard deviation (SD = 0.79)

suggests that not all participants experienced this shift equally. While some felt more open, others showed less shift, suggesting individual differences in how multilingualism affects this trait. This finding aligns with a previous study by Dewaele and Botes (2019), who found a significant positive correlation between multilingualism and traits such as open-mindedness, flexibility, and social initiative. Likewise, Wang (2023) reported that openness scores tend to increase with the number of languages spoken, further suggesting that multilingual experience may improve this personality trait.

Moreover, concerning neuroticism, participants perceived a moderate level (M = 2.85). This shows that participants are not highly emotionally unstable, but they may still experience anxiety or discomfort when speaking a foreign or second language compared to their L1. This suggests a partial personality shift in neuroticism. Participants likely feel more emotionally stable when using their L1, this is because they are more comfortable and familiar with it. In contrast, Ramírez-Esparza et al. (2004) found that Spanish-English bilinguals reported lower levels of neuroticism when speaking English compared to their native language.

However, having found moderate levels of both extraversion (M = 3.15) and neuroticism (M = 2.85), it is important to mention the factors that may account for these results. Two essential factors appear, which are language context and language proficiency. In terms of the context, for example, in section 2, figure 18, 56% of participants reported feeling more formal and reserved when speaking a second or foreign language in public, likely due to anxiety or the desire to speak correctly. This may lead to higher neuroticism and lower extraversion. In contrast, 54.7% reported feeling more outgoing when speaking with friends, showing that informal contexts help reduce neurotic reactions and increase sociability. This shows how context influences emotional expression when using different

languages. This confirms the findings of Koven (2007) and Fabbro et al. (2020), who explained that behavior can change depending on the social setting, even if the language stays the same. In addition, language proficiency plays a key role. Participants with lower proficiency in English or French are more likely to feel shy, anxious, or emotionally disconnected when using those languages. This supports Dewaele and Nakano's (2012) finding that lower proficiency often results in feelings of fakeness and emotional distance. Together, these findings help explain why extraversion and neuroticism have moderate levels

After quantitatively measuring participants' personality traits when speaking different languages compared to their L1, the open-ended responses supported the research objective that sequential multilingualism influences personality shift. Most participants (79.69%) said they feel different when speaking a second or foreign language, mainly when speaking in English. Common themes emerged, such as admiration, confidence, comfort, and better self-expression. they may be related to traits like extraversion and emotional stability. For example, one participant said, ***'I admire myself more when speaking English.*** Another said, ' ***I feel different in a unique way as I become more flexible and express better ideas and emotions more effectively.'*** This supports Dewaele and Nakano (2012), who discovered that multilingual speakers were likely to report emotional shifts, for example, high confidence or comfort, in this study, when switching languages. Some also mentioned themes such as cultural influence, different thinking, and communication facilitation. These themes suggest that language affects how people express themselves and think. This aligned with the Sapir-Whorf hypothesis (Lucy, 1997), which suggests that language can influence thinking patterns and social behavior. Overall, these results confirm that sequential multilingualism can affect personality shifts.

On the other hand, 20.31% of participants said they did not perceive a shift when speaking different languages. However, only 6.3% explained how and said they had a consistent personality and did not notice any shift. This is explained by Dewaele & Nakano's research (2012)**.** Who found that some participants did not feel any personality shift because they often switch languages in daily life and feel emotionally connected to both languages, which helps them maintain a stable sense of self.

In summary, this study confirms that sequential multilingualism influences personality among Master 1 EFL students at M'sila University. Participants perceived noticeable shifts in agreeableness and openness, with partial shifts in extraversion and neuroticism traits. These shifts were influenced by language context and language proficiency. Additionally, open-ended answers supported the idea that speaking different languages can impact individual personality. Overall, using language does not affect only communication but also how personality is expressed.

2.2.2. Contextual Influence on Personality Shift

This part of the research study confirms the second hypothesis of the second research question by showing that context indeed plays an important role in personality shifts among sequential multilinguals. Participants reported that their behavior shifts depending on the context of the language use, which supports the idea that language alone does not cause personality shifts; context has an influence as well. The findings are aligned with Chen and Bond (2010) and Fabbro et al. (2020): social context has a significant impact on how individuals express themselves.

For example, in a workplace context, 48.4% of the participants self-report that they felt more confident when speaking a second or foreign language (SL/FL) than when using L1, which suggests a shift toward extraversion. While in academic contexts, 48.5% said

that they can express complex ideas more easily in SL/FL than L1, suggesting high openness in this context. However, with family, 62.5% of participants felt more emotionally connected using their first language (L1), showing high agreeableness and no personality shift in this context. In contrast, social interaction with friends results in a personality shift, where 54.7% of the participants said they were more sociable and outgoing in SL/FL than when using L1. This shows that in social or informal situations, participants show their extroverted personality in SL/FL compared to L1. While approximately 56.2% suggested that in public, they become more formal and reserved when speaking SL/FL than when using L1, this is related to neuroticism, which involves feelings of stress or anxiety. Last, in private or intimate contexts, 43.8% of participants reported feeling more comfortable expressing emotions in SL/FL compared to L1. For some participants, SL/FL allows them to avoid emotional stress, reducing neuroticism. For others, emotions and feelings are better expressed when speaking L1. Overall, these findings support the idea that personality shifts among sequential multilinguals are greatly influenced by the context of language use.

In addition, the open-ended question of whether participants behave the same in SL/FL as they do in L1, depending on context, topic, or interlocutor, supported the second research objective of how context influences personality shifts. It was found that 62,7 % of those who responded self-report that they felt their behavior was different when speaking a second or foreign language compared to their first language. *One participant said, "There is no context where I behave the same as in L1 because I can't express myself or show my true personality in SL or FL as I do in L1". Another said, "No, I don't behave the same, even if it's the same topic.* This supports the idea that context has a significant influence on behavior. In addition, it was found that very few participants reported behavioral match in specific contexts such as with friends (14.1%), in religious contexts (7.8%), in emotional

contexts (4.7%), and in academic and family contexts (1.6%). These cases were limited and do not challenge the overall trend. This also reinforces the results of the first objective, where the majority of participants showed that they perceive noticeable shifts in their personality when speaking different languages. These results align with the concept of Cultural Frame Switching (CFS), which explores how bilinguals activate different cultural norms and behaviors depending on the language they use. (Ramírez-Esparza et al., 2004). Overall, the results confirm that context plays a key role in personality shift across languages.

In sum, this research confirms that context does influence personality shifts in sequential multilinguals. Participants respond in different ways in all contexts. Instead, their traits vary based on the context and the language. SL/FL facilitates it for many participants to be more open, more expressive, or more reserved, based on the context of the language use. Overall, the research results show how context and language work together to shape a person's personality.

III. Implications, Limitations, and Recommendations for Further Research

3.1 Implications

The current research aimed to investigate the impact of different language use on the personality traits, specifically within different contextual situations, which is an underexplored area in the field of psycholinguistics. Therefore, this study contributes significantly to the growing body of psychology research, especially for peer researchers in Algeria. The findings of this study offer several theoretical, methodological, and psychological implications.

Theoretically, the findings support the previous research in the field of personality psychology that debates the dynamicity of personality, and research on perceived personality shift in multilinguals generally, and sequential multilinguals specifically. By applying the Big Five Personality Model in a multilingual framework, the study highlighted how specific traits, such as extraversion and agreeableness, may be more or less expressed depending on the language spoken and the context in which it is used.

Methodologically, the study introduced a remarkable adaptation of the Big Five Inventory. Although similar adaptations exist, the instrument used in this study offers a unique linguistic framing by explicitly comparing self-perceived traits across L1, SL or FL within different communicative contexts. This adaptation serves as a valuable tool for future research on multilingual personality expression and invites further development to improve validity and applicability.

In the domain of psychological practice, these research findings provide practical significance for professionals working in therapy and counselling. Since the findings show that individuals report changes in their levels of openness and agreeableness when using different languages, this may influence how they engage in therapeutic settings and reveal personal information. Therefore, language choice acts as a filter through which personality and emotional states are perceived and managed, rather than only a communication tool. Practitioners working with multilinguals should be aware of how language may affect personality traits, as that might facilitate their interactions with their clients.

In the domain of educational practice, the findings offer valuable insights for foreign language teachers, especially in EFL and multilingual contexts. Students are more likely to show different personality traits when using a foreign language, affecting their participation and confidence in class. Silence or non-participation in the target language is

not always a sign of low interest or lack of competence in the target language, but can be an emergent personality adaptation influenced by linguistic comfort. By understanding these shifts, educators can foster more supportive, inclusive, and emotionally safe learning environments. This understanding encourages teachers to move beyond rigid, performance-based evaluation toward more flexible approaches that take into consideration each student's identity, emotional expression, and psychological well-being. In addition, the study raises students' own awareness of the power of language in building their personality and behavior, promoting self-reflection and deeper engagement in the learning process.

3.2 Limitations

Although this study found positive findings and showed valuable insights about the impact of sequential multilingualism on personality shifts with Master's one EFL learners, it had a number of limitations. First, participants' gender imbalance: there were 54 females and only 10 males; therefore, the results considered only female perspectives, limiting the generalizability of the results. Second, this research relied on a self-perceived questionnaire in measuring participants' personality traits, which could not accurately reflect one's personality traits. Third, measuring personality shifts was limited due to the use of an adapted version of the BFI rather than the full test administered in two languages. Moreover, the researcher didn't measure participants' language proficiencies using measuring tests; they relied only on self-report items to collect the necessary information.

3.3 Recommendation for Future Research

Based on the research findings and limitations, the researchers recommend the following:

1. it is advisable to conduct similar research with a balanced sample, taking into consideration factors such as age and gender, and selecting participants from different academic and cultural backgrounds to improve the generalizability of the findings.
2. To use more objective methods and observations rather than relying only on subjective techniques, such as self-perceived questionnaires, to explore real behavioral personality shifts
3. To use the original Big Five Inventory distributed twice, each in a different language, to accurately measure personality shifts.
4. To use standardized tests for assessing language proficiency to avoid any inconsistencies in language knowledge, as well as ensuring more accurate answers.
5. Integrating more qualitative methods, such as interviews or focus groups, to get deep insights about participants' personal experiences with language and personality.
6. To measure participants' cultural competence and study how it correlates with participants' personality shift.

General Conclusion

Personality shift among multilinguals is a phenomenon that many scholars have investigated for the last decade. Although many writers mentioned that when speaking different languages, they feel emotionally disconnected from their L1 and like having language-related personas (Dewaele, 2015), it was only in the 2000s that this personality shift got the required attention. Jean-Marc Dewaele, Seiji Nakano, and Anneta Pavlenko are among the actively contributing researchers to this matter and have conducted many studies on bilinguals and multilinguals concerning perceived personality shift. Nevertheless, this trait variation when using different languages is underexplored in Algeria, with many studies focusing on emotional perception and emotional intelligence (EQ). Therefore, this study aimed to investigate the dynamicity of personality in the Algerian population, particularly sequential multilinguals whose L1 is Arabic, L2 is French, with English being the third language, when using their L3 in different social contexts.

The current research focused on exploring two main questions. The first one was to investigate the personality shift that EFL master students perceive when they use SL or FL compared to their use of L1, and the second one was to look into their perceptions of their personality traits when speaking different languages in different social contexts. The study answered these two queries, describing four traits: Extraversion, Openness, Agreeableness, and Neuroticism.

The research results showed that, indeed, EFL Master students perceive a change in their personality traits when they speak SL or FL, particularly English, with agreeableness and Openness being the most affected traits. Also, results indicated that not only does language have a direct influence on personality, but also social contexts have a mediating

role in the personality manifestation when different languages are in use; In other words, the context helps determine how strongly the language influences personality expression.

These findings aligned with previous literature on this phenomenon, confirming that sequential multilinguals perceive personality shift, with context having an impact on the apparent patterns of the behavior. This study is a gate that introduces this phenomenon to be further investigated in the Algerian context. With Algerian multilinguals being Arabs, they significantly have a different culture from European and Western societies, in which most of the similar studies were conducted; therefore, researching the Algerian population could show alternate findings to research and contribute greatly to the field. Moreover, given that personality traits manifest differently in various contexts when using different languages than L1, interlocutors who communicate in more than one language would be able to choose the right language according to different contexts and topics to achieve the best social engagement and interpersonal exchange.

Although the study aimed to broadly explore the traits' dynamicity and the impact of social contexts within sequential multilinguals' personality, some limiting factors to the current research must be acknowledged. First, the sample, which was an EFL Master's student at the University of M'sila, doesn't represent all sequential multilinguals, therefore, affecting the generalizability of the results in the broader sense. The study relied only on self-perceived data collected through a questionnaire, which could have affected the overall validity of the findings. Additionally, while the Big Five Personality Inventory is considered a valid tool across languages and contexts, using an adapted version could make it less reliable, especially since one trait was removed and the number of items was reduced. Lastly, considering the allocated time and resources for conducting this research, it would have been better to pick only one main research question and dedicate the data

collection tool to the analysis of that question rather than addressing two questions with one tool.

Building on the limitations of the study, and for future research, it is suggested to engage a greater number of participants in future studies. This will make the data more reliable and increase the rate of applicability to the population. Moreover, it is highly advised to pick up younger participants through purposive sampling techniques, for they are assumed to be more culturally immersed than older generations whose language acquisition was solely academic, and based on the Cultural Frame Switching Hypothesis, they are more likely to experience personality shifts. Also, the implementation of a second data collection tool, such as an interview or observation, would greatly reduce the participants' answer bias, especially if an adapted version of the Big Five was used rather than the full version administered in two languages.

Future research should investigate the variation in traits across language use through the full version of the Big Five Inventory; this will increase the accuracy of the scores of the traits. It is advisable to investigate the variation in scores of the full five traits across different contexts. Furthermore, correlational studies such as language proficiency and personality shift, intercultural competence and personality shift, would contribute significantly to the current literature.

In conclusion, understanding how multilinguals manifest different personality traits across languages would not only contribute to linguistic research but also to all humanity, for this topic has great implications for human communication.

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Appendix

Appendix A

Foreign Languages' Use and Personality Shifts

Dear participants,

We would like to ask you to help us by answering this questionnaire concerning your experience speaking foreign languages and your feelings toward your personality when shifting between languages. This questionnaire is conducted by Nia Manel and Koudri Younes under the supervision of Dr. Cheriet from the Department of English and Letters at the University of Msila to investigate the role of foreign language use in affecting one's personality. Please know that there are no wrong or right answers and that your answers are valuable to our study. We are interested in your spontaneous, honest, personal opinion. Thank you so much for your help!!

Instructions:

- Please answer all the questions honestly based on your personal experience.
- For closed-ended questions, tick (✓) the option that applies most to you.
- For open-ended questions, write your responses in the space provided.
- ***The following questions focus on how you feel your personality changes when switching between languages. Please focus on your feelings, behaviors, and ways of interacting with others when using each language regardless of your language proficiency."***

Section I: Demographic Considerations & Language Profile

1. Age: (write your age.)

……

2. Gender:

■ Male ■ Female

1. Specify the languages you speak.

(*L1 is your mother tongue, the first language you acquired. L2 is the language you learned after acquiring L1; L3 is the language you began learning after L2 and so on…)*

3a. Specify your native language (L1)
……

3b. Specify your second language (L2):
.....

3c. Specify your third language (L3):
……...

3d. Specify your fourth language (L4):
……

1. When did you start learning L2? *Select one answer.*

■ Early childhood ■ Secondary School
■ Primary school ■ Adulthood

5. When did you start learning L3? Select one answer.

■ Early childhood ■ Secondary school
■ Primary school ■ Adulthood

6. Rate your proficiency in each language: *Select the level that applies for each language*

	Beginner (A1)	Elementary (A2)	Intermediate (B1)	Upper-intermediate (B2)	Advanced (C1)	Proficient (C2)
L1	•	•	•	•	•	•
L2	•	•	•	•	•	•
L3	•	•	•	•	•	•

7. How often do you use each of the following languages? *Select the answer that reflects how often you use the given languages.*

	Daily	**Weekly**	**Occasionally**	**Rarely**
L1	•	•	•	•

L2	•	•	•	•
L3	•	•	•	•
L4	•	•	•	•

8. In which contexts do you use the languages you know? *You can select more than one option*

Context	L1	L2	L3	L4
At home	•	•	•	•
With friends	•	•	•	•
On social media	•	•	•	•
In public places	•	•	•	•
At school	•	•	•	•
At work	•	•	•	•

Section II: Speaker's Personality Traits Across Languages' Use

- In this section, you are provided with 20 statements reflecting personality traits when using a second or foreign language, SL/FL. Each statement is accompanied by a Likert Scale (Strongly disagree=SD, Disagree=D, Neutral=N, Agree=A, Strongly agree=SA) where you can tick (✔) in the option that you feel goes with you best.

- **N.B.: all the statements have nothing to do with language proficiency but how you feel using different languages. Example: "*I have little to say when using SL/FL*". The given statement means that when speaking SL/FL, you find yourself willingly less talkative compared to when you speak L1.**
- **Neutral means neither you agree nor you disagree, for you find yourself feeling the same whether you are using L1 or SL/FL.**

Items	SD	D	N	A	SA
1. I do not mind being the center of attention while I am speaking SL/FL compared to L1.					
2. I feel others' emotions better when I am using SL/FL compared to L1.					
3. I am relaxed most of the time while I am using SL/FL compared to L1.					
4. I have a vivid imagination when I speak SL/FL compared to L1.					
5. I do not talk a lot while I am using SL/FL compared to L1.					
6. I tend to insult people while I am speaking SL/FL compared to L1.					
7. I worry that people might misunderstand me while I am using SL/FL compared to L1.					
8. I find interest in abstract ideas when I am speaking SL/FL compared to L1.					
9. I feel comfortable around people when I speak SL/FL compared to L1.					
10. I sympathize with others' feelings when I use SL/FL compared to L1.					
11. I am easily disturbed when I use SL/FL compared to L1.					
12. I get excellent ideas while I am speaking SL/FL compared to L1.					
13. I have little to say when I speak SL/FL compared to L1.					
14. I become soft-hearted when I am speaking SL/FL compared to L1.					
15. I can get upset easily when I am speaking SL/FL compared to L1.					
16. I am quick to understand things when I use SL/FL compared to L1.					
17. When I use SL/FL, I tend to talk to different people at social gatherings.					
18. I make people feel at ease when I speak to them in SL/FL compared to L1.					
19. I can get irritated easily when I use SL/FL compared to L1.					
20. I am full of ideas when I use SL/FL compared to L1.					

2. Do you feel different when you speak a second or foreign language? If yes, how?

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Section III: the influence of the context on personality shift

1. Reflect on the given statements using degrees of agreeableness by putting (✔) in the answer field

Items	SD	D	N	A	SA
1. In my workplace, I feel more confident when using SL/FL than using L1					
2. In academic settings, I find it easier to express complex ideas in SL/FL than in L1.					
3. I feel more emotionally connected to my family when I speak to them in L1 than in SL/FL					
4. I feel more sociable and outgoing when I speak SL/FL with my friends compared to L1.					
5. When I speak SL/FL in public, I tend to be more formal and reserved than I usually am.					
6. I feel more comfortable expressing affection and emotions in SL/FL with intimate partners than in L1.					
7. i notice that my personality shifts depending on the language and the context					

2. When you speak SL or FL, is there any contextual situation, that is, a specific topic or an interlocutor, where you find yourself talking and behaving the same way you do when you speak L1?

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الملخص

على الرغم من توثيق ظاهرة «تغيّر الشخصية» على نطاق واسع لدى ثنائيّي اللغة والناطقين بعدة لغات منذ الطفولة، فإن الأبحاث حولها عند متعلمي عدة لغات بشكل متعاقب قليلة، ولا سيما ما يتعلّق بتأثير السياق الاجتماعي. تهدف هذه الدراسة الاستكشافية، ذات المنهج المختلط، إلى معرفة ما إذا كان الطلاب الجزائريون يشعرون بتغيّر في سماتهم الشخصية عند الانتقال من لغتهم الأولى إلى لغة أجنبية ثالثة ، ومدى اختلاف هذا الشعور باختلاف السياقات (الأسرة، الجامعة، الأصدقاء، الفضاء العام). تم توزيع استبيان ذو «تصميم متداخل» على 64 طالب ماستر 1 (تخصص الإنجليزية لغة أجنبية) بجامعة المسيلة؛ جمع الاستبيان بين مقاييس ليكرت المبنية على نموذج السمات الخمس الكبرى (Big Five) وأسئلة مفتوحة. جرى تحليل البيانات الكمية إحصائياً، بينما حُلِّلَت الإجابات المفتوحة موضوعياً. أظهرت النتائج وجود تغيّر واضح في سمتي الانبساط والانفتاح عند استخدام اللغة الاجنبية الثالثة، في حين تأثّرت سمتا الودّ والعصبية بدرجة أقل. كما تبيّن أن السياق الاجتماعي يلعب دوراً وسيطاً حاسماً في كيفية تجلّي هذه السمات. تؤكد النتائج أن الشخصية لدى متعددي اللغات المتتاليين مرنة ومُقيّدة بالسياق، وتقدّم إسهاماً جديداً في علم اللغة النفسي، فضلاً عن دلالات عملية لمختصّي الإرشاد النفسي العاملين مع فئات متعدّدة اللغات.