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Personality, Plurilingualism, and Self-Perception: Evidence of Interplay from an International Survey and Its Impact on Language Teaching and Learning

Abstract

This paper presents initial findings from a qualitative study exploring the connection between personality traits, plurilingualism, and self-perception, and their potential impact on language learning and teaching. Data from an international survey were analyzed to examine the correlation between participants' linguistic repertoires, their self-perception, and personality traits. The study used a TIPI test (Thørrisen & Sadeghi, 2023) and a self-perception tool adapted from Aguilar Río (2023). Three hypotheses were tested: (1) respondents with a larger linguistic repertoire would score higher in extraversion, agreeableness, and openness; (2) those with higher neuroticism and conscientiousness would have lower tolerance for plurilingual communication and ungrammatical speech; and (3) those with a larger linguistic repertoire would have a positive self-perception as plurilingual. The data analysis did not conclusively support or reject these hypotheses. However, the observed tendencies highlight the potential pedagogical benefits of considering learners' personality traits in designing learning objectives and classroom dynamics. The study also suggests valuable content for training future language teachers.

Keywords: linguistic repertoire; personality traits; plurilingualism; quantitative methods; self-perception; survey

Resumen

Este artículo presenta los resultados iniciales de un estudio cualitativo que explora la relación entre los rasgos de personalidad, el plurilingüismo y la autopercepción, así como su posible impacto en el aprendizaje y enseñanza de idiomas. Se analizaron datos de una encuesta internacional para examinar la correlación entre los repertorios lingüísticos de los participantes, su autopercepción y sus rasgos de personalidad. El estudio empleó una prueba TIPI (Thørrisen & Sadeghi, 2023) y una herramienta de autopercepción adaptada de Aguilar Río (2023). Se evaluaron tres hipótesis: (1) los participantes con un repertorio lingüístico más amplio obtendrían puntajes más altos en extraversión, amabilidad y apertura; (2) quienes presentaran mayor neuroticismo y responsabilidad tendrían menor tolerancia hacia la comunicación plurilingüe y el discurso no gramatical; y (3) los participantes con un repertorio lingüístico amplio tendrían una autopercepción positiva como plurilingües. El análisis de los datos no confirmó ni refutó de manera concluyente estas hipótesis, pero las tendencias observadas destacan los beneficios pedagógicos de considerar los rasgos de personalidad de los estudiantes al diseñar objetivos de aprendizaje y dinámicas de aula. El estudio también sugiere contenidos útiles para la formación de futuros profesores de idiomas.

Palabras clave: repertorio lingüístico; rasgos de personalidad; plurilingüismo; métodos cuantitativos; autopercepción; encuesta

1. Introduction

This paper focuses on the interplay among personality, plurilingualism, and self-perception, as well as their potential impact on language learning and teaching contexts. Personality is characterized as a psychophysiological construct that enables the modeling and systematization of an individual's cognition, feelings, and behavior (Morizot & Miranda, 2007a, p. 327). In this context, plurilingualism has a twofold meaning: it refers to a communicative setting in which more than one language is used to convey meaning with fellow interactants (Juillard, 2007).

Plurilingualism is also understood as a potential trait of an individual whose linguistic repertoire includes multiple languages (Europarat, 2020). Finally, self-perception refers to the vision that an individual may develop and aspire to at a particular moment, as well as throughout her lifetime (Mohebi & Bailey, 2020).

Previous research has explored some complexities and intricacies of the interplay among personality, plurilingualism, and self-perception (Chen et al., 2022; Dewaele & van Oudenhoven, 2009; Erton, 2010; Norton, 2019). This paper aims to build on this previous research to further examine the interplay among these three constructs and their potential impact on language learning and teaching contexts. In what follows, each of the three constructs will be contextualized and discussed. This theoretical grounding will be followed by a presentation of the current study, including the hypotheses underpinning it, the methodological approach, and the data obtained. A series of analyses of the data will enable us to present results that may help (in)validate the formulated hypotheses. The paper will conclude with a discussion of the potential applications of this study in relation to foreign language pedagogy and the education of future language teachers.

2. Personality

According to Bloch (1999, p. 639), 'personality' refers to a set of affective, emotional, dynamic, relatively stable, and general characteristics that define a person's way of being and their reactions to the situations they encounter. Fine-tuning the basic components of an individual's behavior is an enduring scientific endeavor in psychology, as underscored by Eysenck and Eysenck (1971, p. 5):

"The importance of describing the major patterns of behavior in human subjects has always been recognized by psychologists, and the search for the main dimensions of personality has been pursued by many well-known figures."

Personality continues to occupy a central position in research within the field of psychology. Morizot and Miranda (2007a, p. 364) note that researchers in disciplines such as psychoeducation, criminology, and social work agree that people tend to exhibit stable patterns of cognitive, emotional, and behavioral adaptation that distinguish them from one another and seem to predict their overall adjustment.

According to Bloch, personality research has produced models that favor 'traits' as units of analysis rather than 'types.' Although the epistemological validity of these traits has not yet been unequivocally established (Morizot & Miranda, 2007a, p. 371), research provides sufficient empirical evidence indicating that these traits exhibit systematic organization (ibid., p. 372), are continuously distributed across populations (ibid., p. 375), and remain stable across different situations (ibid., p. 381) as well as throughout an individual's lifespan (ibid., p. 402). Personality traits have been characterized as an evolutionary response, genetically inherited (ibid., p. 384), but they also demonstrate contextual dependency (ibid., p. 382) and interact with socio-cognitive processes (ibid., p. 392). Ultimately, personality traits are described as universal (ibid., p. 377).

The construct of 'personality trait' was adopted by Eysenck (Eysenck & Eysenck, 1971), who proposed a model of personality consisting of five traits: extraversion, agreeableness, conscientiousness, emotional stability, and openness. Similarly, Cattell (Cattell & Cattell, 1995) developed a model comprising 16 primary personality factors, which are grouped into five global factors: extraversion, anxiety, tough-mindedness, independence, and self-control. These global factors appear functionally similar to Eysenck's traits. Morizot and Miranda (2007b, p. 158) provide characterizations of the five personality traits. According to these scholars, extraversion

represents a disposition to be energetic and positive, as well as a tendency to actively seek out social relationships and thrills. Agreeableness relates to a prosocial and accommodating attitude toward others. Conscientiousness is associated with a disposition toward organization, planning, and respect for social norms and conventions. Emotional stability reflects a propensity to experience positive or negative emotions more easily in response to environmental stressors. Finally, openness concerns a propensity for intellectual curiosity, imagination, and appreciation of new cultural values and experiences.

According to Bloch (1999, p. 639), personality research has produced diagnostic tools that can be categorized as either projective or objective. In both cases, factor analysis emerges as the prevailing choice for data analysis. Eysenck and Eysenck (1971, p. 7) referred to factor analysis as "a necessary but not a sufficient method for isolating the main dimensions of personality." They state that "[c]orrelational analyses are important, but they are merely permissive, not compelling" (ibid.). Among the diagnostic tools developed through personality research, the "Eysenck Personality Inventory" (EPI) (Eysenck & Eysenck, 1971) and Cattell's "16PF" (Cattell & Cattell, 1995) stand out. In this article, the "Ten-Item Personality Inventory" (TIPI) (Thørrisen & Sadeghi, 2023) is implemented. The TIPI "is a brief instrument designed to assess the five-factor model (FFM) personality dimensions" and was created "to provide a brief assessment option in situations where using more comprehensive FFM instruments would be unfeasible" (Thørrisen & Sadeghi, 2023, p. 1).

2.1 Personality in language learning, teaching and use

Previous research in language learning, teaching, and use has integrated the construct of 'personality' into various research designs. Dewaele and Furnham (1999) conducted a metaanalysis of the literature to explore the interplay between the personality trait 'extraversion' and speech production and language learning. The authors concluded that although "extraversion may not be a predictor of success in second language learning," it "does affect both L1 and L2 speech production" (ibid., p. 509). They subsequently conducted a pilot study to examine "the effect of personality on spontaneous speech production" (Dewaele & Furnham, 2000, p. 355), concluding that "the formality of the situation, or rather the interpersonal stress that it provokes, has the strongest effect on the speech production process of introverts" (ibid., p. 362). In a later study, Dewaele and van Oudenhoven (2009, p. 443) investigated possible links "between multilingualism/multiculturalism, acculturation, and the personality profile" through a quantitative survey administered to "79 young London teenagers" (ibid.). Although the results confirmed a link between some of the teenagers' personality dimensions and their multilingualism and multiculturalism, the authors noted that "personality dimensions are also shaped by environmental factors" (ibid., p. 457).

Erton's (2010) quantitative survey aimed to explore potential connections between personality types and learning styles (ibid., p. 117), as well as the predictive potential of personality regarding the achievement of educational goals, focusing on an English 101 course at a Turkish university. Erton found no "significant statistical relationship between the personality traits (introversion-extroversion) of the learners and their foreign language achievement" (ibid., p. 124), noting that both introverts and extroverts employed a variety of learning styles.

The relationship between personality traits and academic performance was also explored by Chen et al. (2022) through "a systematic synthesis of the research literature on the relationships between personality traits and L2 learning achievement over the past four decades" (ibid., p. 853). The authors observed that openness and conscientiousness were the strongest correlates of

L2 performance, whereas agreeableness was a moderate correlate, and neuroticism did not correlate with L2 performance. As for extraversion, the authors noted differences in "energy creation," "reaction to stimulation," and "methods of learning" (ibid., p. 878), which led them to recommend that "L2 teachers provide an L2 learning environment where learners with different personality traits and learning preferences can be engaged" (ibid.).

2.2 Plurilingualism

The construct of 'plurilingualism' (Narcy-Combes, 2010, p. 36) can be understood as both an ideology and a sociolinguistic and anthropological fact. Indeed, plurilingualism refers to a threefold reality: "a sociocultural theory of language use, articulation of plural language ideologies, and critical pedagogy that embodies these ideologies" (Lauwo et al., 2022, p. 115).

As a sociolinguistic and anthropological fact, plurilingualism is situated at the level of human groups, particularly as it extends and evolves within identifiable historical and geopolitical contexts. The plurilingual language policies promoted by the Council of Europe aim to foster the development of a shared sense of European citizenship, especially by combating the threat of "xenophobia and ultra-nationalist backlashes as a primary obstacle to European mobility and integration, and as a major threat to European stability and to the healthy functioning of democracy" (Europarat, 2010, p. 4).

Plurilingualism also pertains to the individual, influencing their identity development and selfperception, which in turn can affect how the individual perceives others. According to Lauwo et al. (2022, p. 115), the conceptualization of the plurilingual individual requires consideration of "all of a person's linguistic resources as part of one linguistic repertoire," while emphasizing "the agency of language users to employ aspects of their repertoire of named languages, varieties of languages, and cultural knowledges in strategic ways, depending on context, sociopolitical environment, and communicative objectives."

The standpoint taken in this article is based on a complex view of individuals and human groups, where language contact is an institutional and geographical reality that tends to establish a kind of norm. Thus, this article starts from the premise that an individual's self-perception is determined, among other factors, by their potential status as a plurilingual individual (Norton, 2019).

2.3 Self-perception

According to Mohebi and Bailey (2020, p. 2), the construct of 'self-perception' was first proposed by Bem (1967). Self-perception theory posits that individuals' understanding of their behavior and circumstances enables them to gain insight into their own beliefs, attitudes, and perceptions. As Mohebi and Bailey (ibid.) state, "individuals interpret their actions in the same way they interpret others' actions, and every individual's behavior is influenced by social surroundings rather than by free will."

More recently, Palenzuela-Luis et al. (2022, p. 2) proposed a model of the individual's self, consisting of three interrelated constructs that allow the individual to develop a sense of self: self-concept, self-esteem, and self-perception. The authors highlight the importance of the latter "for understanding how individuals think, behave, and relate to others" (ibid.). They characterize self-perception as a complex construct, arguing that it includes "those internally conscious and organized concepts that the individual has about him/herself." Additionally, self-perception is described as a dynamic construct, as it appears to be "related to a greater or lesser extent to age,

low levels of schooling, income, race, marital status," among other possible contextual variables (ibid.).

2.3.1 Self-perception and plurilingualism

Since "self-perception is a product of social interaction" (Palenzuela-Luis et al., 2022, p. 3), it can be argued that the scope of self-appraisal functions and cognitive processes governed by the self-perception model extends to all episodes of socialization that shape an individual's existence, regardless of the language(s) used or the individual's proficiency in those language(s). Consequently, it can also be argued that the variable of 'language(s)'—understood as the linguistic repertoire (Europarat, 2020) that an individual may claim as their own—will influence the self-appraisal processes engaged by the individual, along with other variables through which the individual may develop a sense of self, such as age, gender, class, level of schooling, income, and marital status, among others.

Firth and Wagner (1997) paved the way for a social view of language practices, which legitimizes speakers of additional languages as such, regardless of their proficiency. In this perspective, the ability to act linguistically takes precedence over any form of normativism (Coste, 2002), as language only has intrinsic existence when it is used by speakers. To quote Norton (2019, p. 301), "the construct of 'language' is not only a linguistic system of words and sentences but also a social practice in which identities and desires are negotiated in the context of complex and often unequal social relationships."

Research on language teaching and acquisition (Aguilar Río & Brudermann, 2014; Eskildsen & Majlesi, 2018) has continued the path initiated by Firth and Wagner (ibid.), suggesting that linguistic repertoire, context, and identity are interconnected (Block, 2012). According to these studies, the integration of an additional language (AL) (Narcy-Combes & Narcy-Combes, 2019) into an individual's linguistic repertoire impacts their socialization possibilities as well as their self-perception (Norton, 2019). It follows that languages are part of the dynamics inherent in identity development and linguistic identity (Rothman & Niño-Murcia, 2008), and consequently of self-perception dynamics (Masuwd et al., 2024).

3. Study rationale, hypotheses, and methodological approach

This paper aims to explore the potential interplay between personality traits, plurilingualism, and self-perception, as well as their potential impact on language learning and teaching contexts. Three hypotheses were formulated:

H1. Respondents with a larger linguistic repertoire will score higher in extraversion, agreeableness, and openness.

H2. Respondents with higher scores in neuroticism and conscientiousness will express lower tolerance for both plurilingual communicative situations and ungrammatical communicative episodes.

H3. Respondents with a large linguistic repertoire will tend to express a positive self-perception as plurilingual individuals.

In what follows, the study's research design, as well as the data collection and analysis process, will be outlined.

3.1 Study context and participants

Given the deductive nature of the study (Blanchet, 2011), an online, anonymous survey was chosen as the sole tool for data collection. It was administered via Google Forms. The survey consisted of eleven items, organized into ten sections, as outlined below:

Table 1

Section	Type of item	Contents
1	Single-choice question (SCQ)	Language choice
2	Yes/No question (YNQ)	Informed consent and acceptance/refusal to participate in the survey
3	None	Explanation of the survey's steps and objectives
4	SCQ	Age (14 available age groupes)
	SCQ	Gender (4 available choices)
5	Multiple-choice question (MCQ)	Linguistic repertoire 1 (languages of primary socialization)
	MCQ	Linguistic repertoire 2 (current communication languages)
	MCQ	Linguistic repertoire 3 (languages perceived as closest to the respondent)
6	Likert table (10 scales, values through 7)	1TIPI (Ten Item Personality Inventory)
7 - 10	4 Likert tables (5 scales, values through 7 for each)	1Self-perception in relation to plurilingualism

The survey architecture add contents

The SCQ in Section 1, 'Language Choice,' refers to the fact that the survey was available in three languages—English, Spanish, and French—with an identical structure and content across all three versions. 'TIPI,' featured in Section 6 of the table above, refers to the "Ten Item Personality Inventory" (Thørrisen & Sadeghi, 2023).

3.2 The SPP instrument

The four Likert tables linked to 'Self-Perception in Relation to Plurilingualism' (SPP) in Sections 7 through 10 of the survey (cf. Table 1) consist of statements adapted from a previous study (Aguilar Río, 2023) that aimed at identifying the possible difficulties perceived by language teachers, and to link them to either interpersonal factors (learners, colleagues), intrapersonal factors (the link with the expectations placed on oneself), or the contextual conditions of the language teaching profession.

The SPP instrument consists of four groups of five Likert scales, with values ranging from 1 to 7, making a total of 20 scales. Each scale contains a statement related to one of the following categories: 'interaction,' 'language use and others,' 'self-perception,' 'other-perception and grammaticality,' and 'self-perception and ease of language use.' The SPP instrument is intended as a tool to measure an individual's—maybe in a language learning context, but not necessarily and not only—reported self-perception as regards language use and plurilingualism.

Table 2 below details the twenty statements contained in the SPP instrument, their correspondingcode, the category to which each statement is linked, and the valence (Potthoff & Schienle, 2023)associatedwiththestatement:

Table 2

The SPP instrument

Category	Code	Valence	Statement
Interaction (I)	I1	Negative	"I feel uncomfortable when I have to speak to someone, with whom I share a common
			language, in a language different from the one we usually share"
	I2	Positive	"If someone close to me or whom I meet frequently speaks to me in a language that I
			know and in which we have never spoken before, I manage to communicate with the
			person in this new common language"
Language use and othersLU&O1 Negative		Negative	"I am troubled when someone I think I know well speaks for the first time in front of
(LU&O)			me in a language that I did not know the person can actually speak"
	LU&O2	Positive	"I can use any language I know with anyone who also knows that language"
Ι	I3	Negative	"I find it hard to find myself at the same time, in the same activity, with two people with whom I'm used to speaking different languages"
	I4	Positive	"I don't find it difficult to mix languages, especially when I am with people with whom
			I usually communicate in different languages"
Self-perception (SP)	SP1	Negative	"I think I'm less interesting when I use a language that I don't feel is close to me"
	SP2	Positive	"Whether I am (un)interesting depends neither on the language in which I
			communicate nor on my level of mastery in that language"
SP	SP3	Negative	"I find that I don't sound real when I have to speak a language that I think I don't know well"
	SP4	Positive	"Regardless of the language I use and my level of fluency, my feeling of being myself does not change"
SP	SP5	Negative	"I feel that when I have to use languages less close to me, I let myself be less carried away by my emotions"
	SP6	Positive	"The fact that I use a language that I am less accustomed to does not prevent me from
			feeling things"
Other-perception andOP&G1		Positive	"As long as I manage to understand and make myself understood, everything is fine,
grammaticality (OP&G	i)		for me what counts is the message and not the form"
	OP&G2	Negative	"I cannot communicate, in one of the languages I know, with someone who uses that
			language in a way that I find incorrect or approximate"
SP	SP7	Positive	"My choice of language does not change the person I am"
	SP8	Negative	"When the language of communication changes, I need a little time to adapt"

LU&O	LU&O3 LU&O4	Negative Positive	"There are languages that I use with only one person, and which I cannot imagine using with anyone other than that person" "For me, languages are tools that allow communication between people"
	LU&U4	rositive	For me, languages are tools that anow communication between people
Self-perception and of language (SP&EoLU)	easeSP&EoLU1 use	Positive	"I can express complex ideas in all my languages"
	SP&EoLU2	Negative	"There are things I can't express in some of the languages I know"

As shown in Table 2 above, the 'SP' category includes four statements with positive valence and four with negative valence. The 'LU&O' and 'I' categories each contain two positive and two negative statements. Finally, the 'OP&G' and 'SP&EoLU' categories each include one positive and one negative statement.

As suggested above, the SPP instrument is intended as a meta-cognitive, reflexive tool that helps raise awareness of psychological aspects related to an individual's attitude toward plurilingualism and plurilingual situations. The meta-cognitive and pedagogical potential of the SPP instrument will be discussed later, in light of the results from the data analysis.

In its current version, the SPP instrument does not include an automated data computation tool, unlike the TIPI instrument. Instead, it primarily serves to elucidate trends in attitudes toward plurilingualism. In this study, these trends have been illustrated using Likert plots and percentage calculations. Developing an automated tool for this purpose remains a promising future direction.

3.3 Survey dissemination

A first version of the survey was sent, in early February 2024, to a group of plurilingual colleagues (n=7), who agreed to act as trial respondents and provide feedback on both the formal aspects of the survey and their experience completing it. This initial data also allowed for the internal consistency of the SPP instrument to be checked, which proved to be reliable with a Cronbach's alpha of 0.79. The feedback from these colleagues was incorporated into a final version of the survey, which was disseminated via academic mailing lists and language teaching professional networks from March 2 to May 5, 2024.

3.4 Respondents' demographics

530 respondents (n=530) took the survey, of whom 529 actually completed it (n=529), whereas one respondent refused to (n=1). The histogram below indicates the distribution of the respondents as regards gender and language choice:

Figure 1

Distribution of the survey respondents' declared genre and language choice

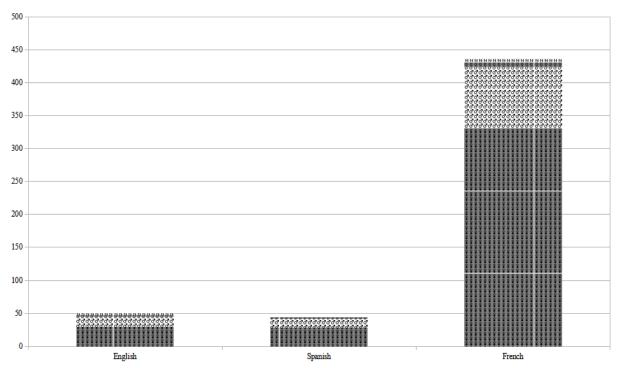


Figure 1 shows that French is the predominant language choice (n=436) compared to English (n=50) and Spanish (n=43). There are more female (${}^{\circ}{}^{\circ}$) respondents (n=390) than male (${}^{\circ}{}^{\circ}$) (n=123). This female prevalence also applies to the English, Spanish, and French subgroups, where female respondents represent 60% (n=30), 67% (n=29), and 75% (n=331) of the respondents, respectively. Nine respondents (n=9) self-declared as neither female nor male (${}^{\circ}{}^{\circ}$), whereas seven respondents (n=7) preferred not to choose any of the three options within the 'gender' item—'female,' 'male,' or 'other (specify)' ('N'). Figure 2

Distribution of the survey respondents' declared age and language choice

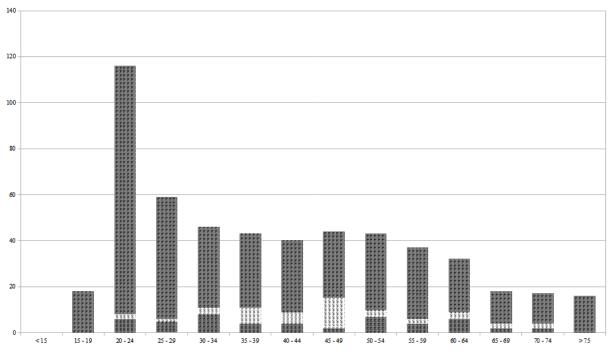


Figure 2 shows the prevalence of the age group 20-24, which totals 21,9% (n=116) of the respondents. This group age is particularly represented by respondents who chose the French ('F') version of the survey (n=108). A fairly equal distribution is observed among group ages 25 through 64, which account for 65% (n=344) of respondents. Totalling 21,2% (n=112) of the respondents, group ages 15 through 19 and 65 through over 75 appear equally distributed among them, although less populated than the former group ages. Group age under 15 is not represented.

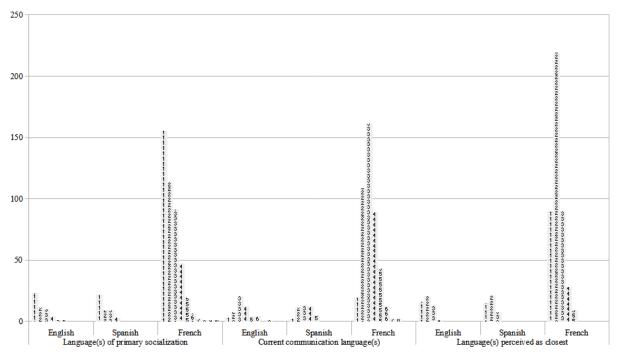
3.5 Linguistic repertoire of the respondents

As indicated above, in this study, the term "linguistic repertoire" (Europarat, 2020) was considered a threefold construct, potentially consisting of various sets of languages related to one or more of the following three contexts: the respondents' primary socialization, their current communication language, and the languages they perceive as closest to them.

The histogram below shows, for each of the three contexts, the distribution of monolinguals and plurilingualsm for each of the three language versions of the survey.

Figure 3

Linguistic repertoires of monolinguals and plurilinguals by survey language choice



There is only one instance where monolinguals outnumber plurilinguals, which corresponds to the respondents' answers to the item 'languages of primary socialization' in the Spanish version of the survey (n=22 vs. n=21). In all other cases, plurilinguals outnumber monolinguals, regardless of the linguistic repertoire or survey language choice. According to respondents' answers, plurilingualism equates to linguistic repertoires consisting of two to four languages, with regard to respondents' primary socialization (n=297), their current communication languages (n=433), and the languages perceived as closest to them (n=399). Linguistic repertoires consisting of five to ten languages are less frequent, concerning respondents' primary socialization (n=32), their current communication languages (n=72), and the languages perceived as closest to them (n=9).

4. Data analyses

The following sections detail the analyses that were conducted on the data. These consisted essentially in correlation analyses (Zou et al., 2003), and the plotting of the likert values (South et al., 2022).

4.1 Validity of the TIPI and the SPP instruments

As stated above, the survey implemented for the current study partly relies on the TIPI instrument (Thørrisen & Sadeghi, 2023). The Cronbach alpha reliability obtained from the respondents' selected values was 0.23. Although the interpretation of the Cronbach alpha statistical procedure seems to be prone to debate (Barbera et al., 2021), scholars generally agree that the higher the value, the more reliable the results. Notwithstanding this, the abundant existing literature on the TIPI instrument may be seen as sufficient proof of its validity (Thørrisen & Sadeghi, 2023).

One subsidiary objective of the current study, concerning the SPP instrument, was to test its internal consistency and, consequently, its validity. The Cronbach alpha reliability obtained from the respondents' selected values for the 20 items of the SPP instrument was 0.45. As suggested

by Taber's meta-analysis (2018, p. 1278), the interpretation of such a value in previous studies may have ranged from "acceptable" to "not satisfactory." The Cronbach alpha value of 0.45, which is within the lower half, indicates that the SPP instrument must undergo some rearrangements in order to achieve a higher score. Notwithstanding this, the value is considered sufficient to validate or invalidate the formulated hypotheses.

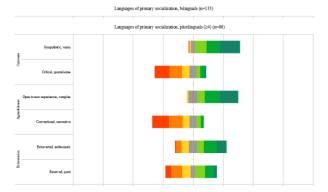
4.2 TIPI instrument and linguistic repertoires

In the following subsections, three series of data models will be presented and discussed. These correspond to the three subsets of linguistic repertoires considered: 'languages of primary socialization,' 'current communication languages,' and 'languages perceived as closest.' The analysis of these results will serve to validate or invalidate H1, which posited that respondents with a larger linguistic repertoire would score higher in extraversion, agreeableness, and openness. For all three linguistic repertoires, four groups have been considered: monolinguals, whose repertoire consists of one declared language; bilinguals, whose repertoire consists of two declared languages; trilinguals, whose repertoire consists of three declared languages; and plurilinguals, whose repertoire consists of four or more declared languages.

4.2.1 Languages of primary socialization

Figure 4 below presents four plots that correspond to the values selected by the respondents of each of the four groups—monolinguals (n=200), bilinguals (n=133), trilinguals (n=110), and plurilinguals (n=86)—to the TIPI items corresponding to the three personality traits 'extraversion,' 'openness,' and 'agreeableness.'

Figure 4



TIPI and Likert scale plotting of primary socialization languages for the four established groups

Figure 4 above presents an analog plot for the four groups. Regardless of the personality trait considered, items associated with negative valence correlate with lower scores, indicated by dark orange on the left, while items associated with positive valence correlate with higher scores, indicated by dark green on the right. However, two contradictory trends emerge in relation to the item 'reserved, quiet,' associated with the personality trait 'extraversion.' Specifically, forty-five percent of monolinguals (n=91), forty-six percent of bilinguals (n=61), and fifty-three percent of trilinguals (n=58) agreed, to varying degrees, that the trait 'reserved, quiet' described them, while thirty-nine percent of monolinguals (n=78), thirty-four percent of bilinguals (n=45), and thirty-five percent of trilinguals (n=38) did not consider this trait as descriptive of their personality. As for plurilinguals, forty-two percent (n=36) agreed that 'reserved, quiet' described their personality, whereas forty-nine percent (n=42) disagreed.

4.2.2 Current communication languages

Figure 5 below presents four plots that correspond to the values selected by the respondents of each of the four groups—monolinguals (n=24), bilinguals (n=126), trilinguals (n=194), and plurilinguals (n=185)—to the TIPI items corresponding to the three personality traits 'extraversion,' 'openness,' and 'agreeableness.'

Figure 5

TIPI and Likert scale plotting of current communication languages for the four established groups

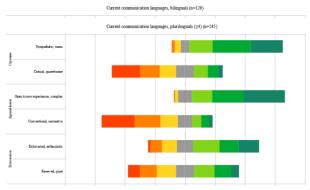


Figure 5 above shows analog plotting for the four groups. As was the case with the linguistic repertoire 'primary socialization languages,' regardless of the personality trait considered, items associated with a negative valence correlate with lower scores, indicated by dark orange on the left, while items associated with a positive valence correlate with higher scores, indicated by dark green on the right. Similar to the contrary tendency observed in the previous linguistic repertoire, the item 'reserved, quiet' trends toward dark green for the monolingual, bilingual, and trilingual groups. Forty-six percent of the monolinguals (n=11), fifty-two percent of the bilinguals (n=65), and forty-nine percent of the trilinguals (n=95) claim to be reserved and quiet to varying degrees, while forty-two percent of the trilinguals (n=69) claim otherwise. The item 'extraverted, enthusiastic' also shows scores that seem to contradict the overall tendency for the monolingual group, of which thirty-eight percent (n=9) claim to be extraverted and enthusiastic to varying degrees, while thirty-eight (n=9) percent claim otherwise.

4.2.3 Languages perceived as closest

Figure 6 below presents four plots that correspond to the values selected by the respondents of each of the four groups—monolinguals (n=121), bilinguals (n=260), trilinguals (n=110), and plurilinguals (n=38)—to the TIPI items corresponding to the three personality traits 'extraversion,' 'openness,' and 'agreeableness.'

Figure 6

TIPI and Likert scale plotting of current communication languages for the four established groups

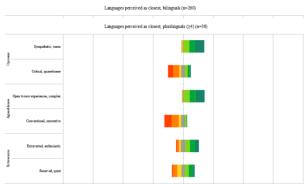


Figure 6 above shows analog plotting for the four groups. As was the case with the two previous linguistic repertoires, regardless of the personality trait considered, items associated with a negative valence correlate with lower scores, indicated by dark orange on the left, while items associated with a positive valence correlate with higher scores, indicated by dark green on the right. Similar to the contrary tendency observed in the two previous linguistic repertoires, the item 'reserved, quiet' trends toward dark green for all four groups. Forty-eight percent of the monolinguals (n=58), forty-five percent of the bilinguals (n=118), forty-eight percent of the trilinguals (n=53), and forty-five percent of the plurilinguals (n=41), forty-one percent of the bilinguals (n=106), thirty-six percent of the trilinguals (n=40), and forty-two percent of the plurilinguals (n=16) claim otherwise.

4.3 TIPI and SPP instruments, tolerance to plurilingualism and ungrammaticality

The computation formula proposed by the Goz Lab groupⁱ was applied to define two sets of groups for the personality traits neuroticism and conscientiousness. For each trait, participants were divided into a '-' (minus) group and a '+' (plus) group, with the former scoring below the indicated norm and the latter scoring above it. The 'neuroticism -' group (n=283) comprised respondents who scored below 4.83 for neuroticism on the TIPI test, while the 'neuroticism +' group (n=246) consisted of those who scored above 4.83. The 'conscientiousness -' group (n=229) included respondents who scored below 5.4 for conscientiousness on the TIPI test, whereas those scoring above this mean were assigned to the 'conscientiousness +' group (n=300).

The ten items within the categories of 'interaction' (n=4), 'language use and others' (n=4), and 'other-perception and grammaticality' (n=2) were used to measure respondents' tolerance for both plurilingual communicative situations and ungrammatical communicative episodes. The positive and negative valences of these ten items are distributed evenly among these three categories. The Likert values selected by each of the four groups for these items were plotted, as shown in Figure 7 below.

Figure 7

SPP Likert scale plotting distribution of tolerance to plurilingualism and ungrammaticality in relation to personality traits neuroticism and conscientousness

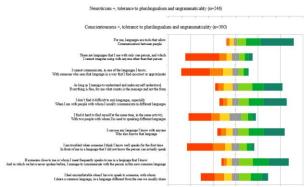


Figure 7 displays the Likert plot for the subgroups '-' on the left and '+' on the right, with neuroticism at the top and conscientiousness at the bottom. Regardless of subgroup, respondents generally show varying degrees of agreement with items associated with positive valence (indicated by dark green on the right) and varying degrees of disagreement with items associated with negative valence (indicated by dark orange on the left).

Some disparities worth noting do appear, however. Specifically, seventy-six percent of respondents in the 'neuroticism +' group agreed (n=186), to varying degrees, with the item '12', which indicated tolerance to plurilingualism. In contrast, sixty-six percent of respondents in the 'neuroticism -' group (n=188) agreed with the same item. Given the relatively balanced number of respondents in each of these two subgroups, this nearly ten-point gap seems noteworthy and is probably not explainable as a statistical anomaly. A similar, complementary gap is also noticeable between these two groups in relation to '12' regarding respondents' disagreement. Specifically, thirteen percent of the 'neuroticism +' group (n=31) disagreed, while twenty-one percent of respondents in the 'neuroticism -' group (n=60) disagreed with 12.

'12' also scored differently in regard to the trait 'conscientiousness'. Seventy-foour percent of the respondents within the group (n=221) 'conscientiousness +' agreed to varying degrees with '12', while fifteen percent (n=46) affirmed to disagree, to varying degrees. In contrast, sixty-seven percent of the respondents in the 'conscientiousness -' group (n=153) agreed, to varying degrees, while twenty percent (n=45) said to disagree, to varying degrees.

A similar gap is observed with regard to the item 'I4', which indicates tolerance to plurilingualism. Seventy-two percent of respondents in the 'neuroticism +' group (n=178) agreed with 'I4', while seventeen percent disagreed (n=41). In contrast, sixty-eight percent of respondents in the 'neuroticism -' group (n=192) agreed, while twenty-four percent (n=68) disagreed.

Two additional trends are worth noting concerning the 'conscientiousness' trait. Fifteen percent of respondents in the 'conscientiousness +' group (n=45) agreed with the item 'OP&G2', which indicated a low threshold of tolerance for ungrammaticality, while seventy-six percent (n=228) did not, to varying degrees. In contrast, twenty-three percent of respondents in the 'conscientiousness -' group (n=53) agreed with the item 'OP&G2', whereas sixty-six percent (n=152) did not. Although the 'conscientiousness +' (n=300) and 'conscientiousness -' (n=229) groups show a certain imbalance, and despite the general trend within these two groups to reject this intolerance as defining their attitude toward plurilingualism, it is noteworthy that more respondents in the 'conscientiousness -' group recognized it as plausible compared to those in the 'conscientiousness +' group.

Finally, twenty percent of respondents in the 'conscientiousness +' group (n=61) agreed with the item 'LU&O1', which indicated a low threshold of tolerance for plurilingualism in relation to specific interlocutors and languages, whereas sixty-nine percent (n=208) disagreed. In contrast, thirty-eight percent of respondents in the 'conscientiousness -' group (n=88) agreed with 'LU&O1', while fifty-eight percent (n=132) disagreed.

4.4 SPP instrument and linguistic repertoires

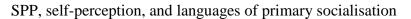
The following subsections will present and discuss three series of data models, corresponding to the three subsets of linguistic repertoires considered: 'languages of primary socialization,' 'current communication languages,' and 'languages perceived as closest.' As before, four groups are considered: monolinguals, bilinguals, trilinguals, and plurilinguals.

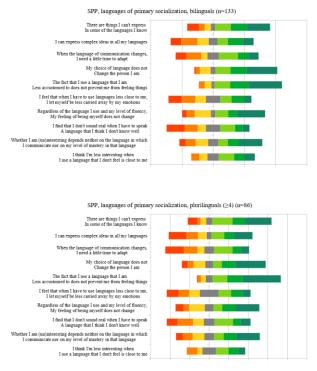
The ten items within the categories of 'SP' (n=8), and 'SP&EoLU' (n=2) were used to measure respondents' self-perception as plurlingual individuals. The positive and negative valences of these ten items are distributed evenly between the two categories. The Likert values selected by each of the four groups for these items were plotted, as shown in Figure 8 through 10, in the sections below.

4.4.1 Languages of primary socialization

Figure 8 below presents four plots that correspond to the values selected by the respondents of each of the four groups—monolinguals (n=200), bilinguals (n=133), trilinguals (n=110), and plurilinguals (n=86)—to the aformentioned ten SPP items.

Figure 8





As shown in Figure 8 above, for all four groups, items associated with positive valence tend to correlate with higher scores, indicated by dark green on the right, except for the item 'SP&EoLU1', with which forty-three percent of the monolinguals (n=87) agreed, while forty-seven percent disagreed (n=95).

In contrast to the previous two sets of Likert plots, items associated with negative valence do not systematically correlate with lower scores, indicated by dark orange on the left. A certain balance is observed between agreement and disagreement regarding the monolingual respondents' chosen values for most of the negative valence items. The number of negative valence items with which respondents tend to agree varies across the groups. Bilinguals tend to agree with three negative valence items, namely 'SP1,' 'SP8,' and 'SP&EoLU2.' Trilinguals tend to agree with

all five negative valence items—'SP1,' 'SP3,' 'SP5,' 'SP8,' and 'SP&EoLU2'—while plurilinguals only agree with the item 'SP&EoLU2,' with which all four groups actually tend to agree, to varying degrees. In effect, regardless of the group, more respondents systematically agree with this item than those who disagree.

4.4.2 Current communication languages

Figure 9 below presents four plots that correspond to the values selected by the respondents of each of the four groups—monolinguals (n=24), bilinguals (n=126), trilinguals (n=194), and plurilinguals (n=185)—to the aformentioned ten SPP items.

Figure 9

SPP, self-perception, and current communication languages

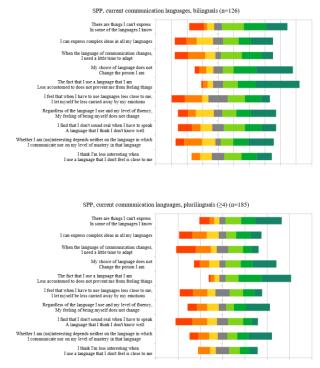
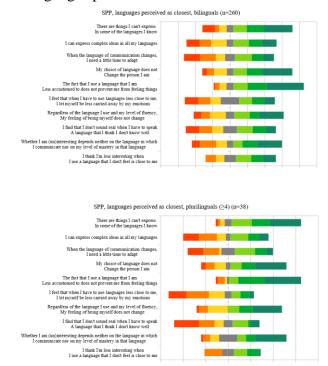


Figure 9 above shows that the number of negative valence items with which respondents tend to agree varies across the groups. While bilinguals agree with all five negative valence items— 'SP1,' 'SP3,' 'SP5,' 'SP8,' and 'SP&EoLU2'—, monolinguals and trilinguals agree with four of the five—'SP1,' 'SP3,' 'SP8,' and 'SP&EoLU2'—, and plurilinguals agree only with 'SP&EoLU2,' which, once again, all four groups agree on, to varying degrees.

4.4.3 Languages perceived as closest

Figure 10 below presents four plots that correspond to the values selected by the respondents of each of the four groups—monolinguals (n=121), bilinguals (n=260), trilinguals (n=110), and plurilinguals (n=38)—to the aformentioned ten SPP items.

Figure 10



SPP, self-perception, and languages perceived as closest

Figure 10 above shows that the number of negative valence items with which respondents tend to agree varies across the groups. Bilinguals tend to agree with three negative valence items— 'SP1,' 'SP3,' and 'SP&EoLU2'—, while trilinguals and plurilinguals agree with two of the five—'SP5,' and 'SP&EoLU2.' Monolinguals agree with all five negative valence items—'SP1,' 'SP3,' 'SP5,' 'SP8,' and 'SP&EoLU2.' As in the two previous linguistic repertoires, all four groups agree, to varying degrees, with the item 'SP&EoLU2.'

TIPI and SPP instruments, and linguistic repertoires correlation matrix

As a final analytical element, a three-dimensional correlation matrix was implemented from the respondents' responses to the linguistic repertoires section, as well as the values they selected for the TIPI and SPP instruments' Likert scales. The codes corresponding to the SPP instrument are organized as in the survey. The code items are presented in coded form rather than in full.

Figure 11

Linguistic repertoires, TIPI and SPP instruments, correlation matrix

C	1	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33
	1. Primary socialization languages	1 0,24 0,27 0 0,02 0,06 0,04 -0,1 0 0,12 0 0,05 -0,1 -0,1 0,01 0 -0,1 -0,1 0,04 -0,1 -0,2 -0,1 0,05 0,03 0,06 0,02 0,09 0 0 0,01 0 0 0,01
	2. Current communication languages	1 0,45 0,04 0 0,06 0,09 0 0 0,1 0 0,15 -0,1 -0,2 -0,1 -0,2 -0,2 0 -0,2 -0,1 0 0 0,15 0,09 0,02 0,23 0 0 0,03 -0,1 0 0
	Languages perceived as closest	1 0,01 0,04 0,1 -0,1 0,06 0,13 0 0,11 -0,1 -0,2 -0,1 -0,1 -0,2 -0,1 -0,1 -0,1 -0,1 -0,1 0,08 0,14 0,15 0,04 0,14 0,04 -0,1 0,03 0 0,05 0,01
	Critical, quarrelsome	1 0,13 0 0 0,27 -0,2 -0,1 0 0,06 0,16 0 0,06 0,02 0,04 0,03 0 0 0,09 0,06 0,02 0 0 0,03 0 -0,1 0 0 -0,1 0 0
	Anxious, easily upset	1 0 -0,1 0,14 -0,3 -0,1 0,12 -0,1 0,01 0,11 0,08 0,12 0,16 0,07 0 0,06 0,04 0,07 0,03 -0,2 -0,1 0 -0,1 -0,1 -0,1 0 -0,1 0 -0,1 0 -0,1
	Dependable, self-disciplined	1 0,18 -0,2 0,21 0,38 0,12 0,31 0,02 -0,1 0 0,05 0 0 0,06 0 0 0 0 0,14 0,11 0,1 0,13 0,09 0,08 0,19 0,1 0,15 0,12
	7. Extraverted, enthusiastic	1 0,07 0,01 0,4 -0,4 0,31 -0,1 -0,1 -0,1 -0,1 0 -0,1 0 0 0 0 0,18 0,18 0,18 0,17 0,16 0,17 0,15 0,08 0,18 0,18
TIPI	Disorganized, careless	1 <u>-0,2</u> -0,1 -0,1 0,01 0,23 0,07 0,07 0,05 0,17 0,06 0 -0,1 0,18 0,25 -0,2 -0,1 -0,1 0 0 0 0,06 -0,1 -0,2 0 -0,1
Instrument	9. Calm, emotionally stable	1 0.22 0.24 0.14 0 0 0.05 0.03 -0.1 0.02 0.09 0.13 0 -0.1 0.14 0.1 0.08 0.01 0.05 0.05 0 0.1 0.14 0.02 0.02
	10. Sympathetic, warm	1 0 0,35 0 0 0 0 0 0 0 0 0,08 0,09 -0,1 -0,1 0,14 0,18 0,15 0,18 0,12 0,09 0,12 0,16 0,21 0,04 0,24
	 Reserved, quiet 	1 0 0,13 0,13 0,22 0,19 0,06 0,15 0,11 0,17 0,01 0 0,14 -0,1 -0,1 -0,1 -0,1 -0,1 -0,1 -0,1 0 -0,1 0 -0,1 0
	Open to new experiences, complex	1 <u>-0.2</u> -0.1 -0.1 -0.1 -0.1 -0.1 0.02 -0.1 -0.1 0.04 0.27 0.15 0.19 0.24 0.13 0.14 0.2 0.15 0.13 0.08
	Conventional, uncreative	1 0,06 0,09 0,1 0,08 0,02 0 0,12 0,09 -0,1 0 -0,1 -0,1 -0,1 -0,2 0 -0,1 0 -0,1 0,01 -0,1 -0,2 0 -0,1 0,01 0,01
	14. I3	1 0,37 0,4 0,33 0,34 0,15 0,38 0,21 0,11 0,19 -0,3 -0,3 -0,2 -0,3 -0,2 -0,1 -0,2 -0,1 -0,2 -0,1 -0,2 0
	15. SP3	1 0,42 0,32 0,52 0,29 0,24 0,06 0,26 -0,2 -0,2 -0,3 -0,3 -0,3 -0,1 -0,2 -0,1 -0,2 0,1 -0,2
	16. II	1 0,29 0,46 0,24 0,24 0,17 0,08 0,13 -0,3 -0,3 -0,3 -0,3 -0,1 -0,2 -0,1 -0,2 0,1 -0,2 0
	17. LU&O1	1 0,28 0,18 0,2 0,28 0,24 0 -0,3 -0,2 -0,1 -0,2 -0,1 -0,2 -0,1 -0,1 -0,1 -0,1 -0,1
	18. SP1	
	19. SP5	1 0,24 0,12 0,09 0,2 -0,1 -0,2 -0,2 -0,1 -0,1 0 -0,2 0 -0,2 0,02
	20. SP8	1 0,12 -0,1 0,49 -0,2 -0,3 -0,1 -0,3 -0,1 -0,1 -0,1 0,08 -0,3 0,09
SPP Instrument	21. OP&G2	
	22. LU&O3	
	23. SP&EoLU2	
	24. I2	1 0,47 0,23 0,32 0,16 0,14 0,22 0,2 0,27 0,2
	25. LU&O2	1 0,25 0,44 0,33 0,25 0,37 0,19 0,42 0,18
	26. SP2	1 0,24 0,45 0,36 0,26 0,34 0,31 0,18
	27. 14	1 0,25 0,26 0,33 0,13 0,27 0,08
	28. SP4	0,36 0,44 0,51 0,33 0,23
	29. OP&G1	1 0,28 0,29 0,3 0,34
	30. SP6	1 0,32 0,37 0,24
	31. SP7	
	32. SP&EoLU1	
	33. LU&O4	

The correlation matrix analysis (Figure 11) reveals distinct patterns across instruments. The strongest correlations were found within rather than between instruments. Within the Linguistic Repertoires section, moderate positive correlations emerged between current communication languages and languages perceived as closest (r ≈ 0.45). The TIPI instrument demonstrated expected personality trait relationships, including a strong positive correlation between 'extraversion' and 'sympathy' (r \approx 0.40), and a negative correlation between reserved and extraverted traits (r \approx -0.37). The SPP instrument exhibited the most internal correlations, with particularly strong relationships between 'SP1' and 'SP3' ($r \approx 0.52$), and 'SP4' and 'SP7' ($r \approx$ 0.51). While the strongest correlations remain within each instrument, cross-dimensional patterns emerge when examining correlations above $r \approx 0.15$. Specifically, current communication languages display weak negative correlations with several SPP items (ranging from r \approx -0.13 to -0.18), particularly with items related to language use ('I1', 'LU&O1', 'SP1'). With regard to personality traits, 'extraversion' (TIPI) exhibits weak positive correlations with several SPP measures (r ≈ 0.15 to 0.18), especially those related to language interaction ('I2', LU&O2'). Similarly, 'languages perceived as closest' demonstrate weak negative correlations with various SPP items (r \approx -0.15 to -0.18). These cross-dimensional correlations, while potentially meaningful for understanding the interplay among personality, plurilingualism, and selfperception, are weak and should be interpreted with caution, as they explain only a small portion of the shared variance among these three constructs.

5. Discussion

H1 posited that respondents with a larger linguistic repertoire would score higher in extraversion, agreeableness, and openness. The analysis of the Likert values selected by respondents for the items associated with the personality traits of extraversion, agreeableness, and openness from the TIPI instrument did not reveal any clear tendency that would allow for distinguishing among the four established subgroups—monolinguals, bilinguals, trilinguals, and plurilinguals—in relation to the three linguistic repertoires considered: primary socialization languages, current communication languages, and languages perceived as closest. However, the item 'reserved, quiet' was endorsed, to varying degrees, by more respondents across the four subgroups, which tends to invalidate H1.

H2 posited that respondents with higher scores in neuroticism and conscientiousness would express lower tolerance for both plurilingual communicative situations and ungrammatical communicative episodes. The analysis of the Likert values selected by respondents for the SPP items associated with such (in)tolerance generally suggested a tendency among respondents to agree with positive valence items and to disagree with those of negative valence. Although no systematic discrepancy could be observed between the two sets of groups formed using the scores of the 'neuroticism' and 'conscientiousness' TIPI personality traits in relation to tolerance for plurilingualism and ungrammaticality, certain disparities were noted regarding some selected items. Respondents in the 'neuroticism +' group expressed slightly greater tolerance for plurilingual communicative situations than those in the 'neuroticism -' group, which tends to contradict H2. In contrast, respondents in the 'neuroticism -' and 'conscientiousness -' groups expressed a higher threshold of tolerance for plurilingualism in relation to specific interlocutors and languages than those in the 'neuroticism +' and 'conscientiousness +' groups, which supports H2. Similarly, more respondents in the 'conscientiousness +' group expressed a higher threshold of tolerance for plurilingualism in unexpected situations with familiar interlocutors than those in the 'conscientiousness -' group, again partially contradicting H2. Finally,

respondents in the 'conscientiousness -' group expressed significantly greater tolerance for ungrammaticality, nearly twice as much as respondents in the 'conscientiousness +' group, which supports H2.

H3 posited that respondents with a large linguistic repertoire would tend to express a positive self-perception as plurilingual individuals. Several observations were made regarding H3. First, regardless of the group or linguistic repertoire, more respondents agreed with the positive valence items than disagreed. This tends to invalidate H3. Secondly, regardless of the group or linguistic repertoire, more respondents systematically agreed with the item 'SP&EoLU2'ⁱⁱ than disagreed. This calls into question the validity of this item, as it failed to produce noticeable differences in the scores for each of the four groups. Finally, regardless of linguistic repertoire, plurilinguals tend to agree with fewer negative valence items than the other three groups. This final observation supports the validity of H3.

In summary, the findings provide mixed support for the hypotheses. H1 was largely unsupported, as no significant differences emerged between the monolingual, bilingual, trilingual, and plurilingual groups in 'extraversion,' 'agreeableness,' and 'openness' scores. The general endorsement of 'reserved, quiet' across groups further weakens H1. H2 received partial support, as those with high 'neuroticism' or 'conscientiousness' showed varied tolerance toward plurilingual and ungrammatical situations. Specifically, respondents high in 'neuroticism' showed slightly more tolerance for plurilingual situations, counter to H2, while those low in 'neuroticism' and 'conscientiousness' showed greater tolerance for ungrammaticality, supporting H2. Lastly, H3 was partially validated; plurilinguals agreed less with negative valence items, indicating a positive self-perception, which supports H3. Together, these results reveal complex interactions among personality, linguistic repertoire, and attitude to plurilingualism, partially supporting the hypotheses.

The choices made in this study highlight certain unexploited variables that warrant further examination. Specifically, factors such as 'age,' 'gender,' and 'survey language' were not fully explored in the analysis. By incorporating these variables in future research, we can gain a more comprehensive understanding of how demographic and linguistic factors shape the language learning experience and the corresponding pedagogical approaches.

The self reported data collected during the study underscores the need for contextualization. This need resonates with the principles of personality traits, which are inherently context-dependent (Morizot & Miranda, 2007a, p. 382). Just as identity is a dynamic construct (Norton, 2019), personality traits can vary across different situations and environments. To truly understand the intricacies of how personality influences language learning, qualitative research designs should be employed. Such designs would allow for a deeper exploration of the contextual factors that shape learners' experiences and behaviors.

Regarding the reliability of the SPP instrument, the Cronbach's alpha coefficient of 0.79 obtained in the first beta version test (n=7) is acceptable, indicating a reasonable level of internal consistency. However, further testing is necessary to enhance the reliability of the instrument. This could involve balancing categories and items that currently exhibit unbalance in the SPP's structure. Continued refinement of this instrument will be crucial for ensuring its effectiveness in future research applications. The item 'SP5,'ⁱⁱⁱ in particular, yielded results across the groups that suggest it may imply too much ambiguity. The perspective of allowing oneself to be carried away by emotions may be open to debate. For some informants, this perspective may be perceived as negative, while for others, it may be seen as positive. This item would need to be

reformulated, and new tests of the SPP should be carried out to determine whether the new formulation helps disambiguate the results obtained from the current formulation.

The item 'SP&EoLU2,^{viv} which has a negative valence, received strong agreement from all four groups. This calls into question its capacity to produce nuanced results across different informants and, consequently, its validity. This item would also need to be reformulated, and new tests of the SPP should be conducted to determine whether the new formulation helps to achieve more nuanced results.

Lastly, it is essential to note that this study did not intend to achieve representativity; instead, a snowball sampling method was employed (Noy, 2008). The predominance of responses from the 25-29 age group, particularly those who selected the French version of the survey, suggests that the majority of participants were master's students enrolled in French-speaking programs. To achieve a more nuanced understanding of the language learning landscape, future studies should strive for a wider diversity in participant demographics, including various educational backgrounds and age groups. This approach would not only enrich the data but also provide insights that are more reflective of the broader language learning community.

6. Conclusion

The intersection of language education and psychological principles presents an opportunity for enhancing the effectiveness of foreign language instruction. Although language teachers are not trained psychologists, their linguistic, pedagogical, and technical expertise can be significantly enriched by understanding intra- and inter-personal rapport. By recognizing the psychological dynamics that underlie language learning, teachers can foster more supportive and responsive learning environments.

Research has shown that foreign language teachers frequently make psychological inferences about their students' behaviors and reactions, using an empirical and phenomenological—thus subjective—lens to interpret learner engagement (Burrows & Aguilar, 2023). Equipping teachers with empirical tools to structure these psychological hypotheses can be a responsible and proactive approach to supporting their professional development. Such tools would enable language teachers, and more broadly language educators to better understand the complexities of student behavior and tailor their instructional strategies accordingly.

Furthermore, personality traits have been identified as significant predictors of academic success (Mammadov, 2022). These traits can also serve as indicators of the appropriateness of various pedagogical dynamics in the classroom. Language learning contexts often elicit behaviors that are influenced by learners' personality configurations, suggesting that understanding these traits could help language teachers predict student responses and optimize their instructional methods.

Conducting thorough learner needs analyses that integrate personality traits can provide valuable insights into how learners may react in different situations, thereby informing the selection of pedagogical strategies that best align with their individual characteristics. Additionally, teachers' awareness of their own pedagogical styles in conjunction with learners' personality traits can enhance their planning and implementation of effective teaching practices. However, it is crucial to recognize that not all teachers approach instruction in the same manner; variations in pedagogical principles and preferences will inevitably influence how personality insights are integrated into teaching.

Integrating personality traits into language teaching contexts requires a longitudinal approach that incorporates elements of metacognition. Implementing a series of assessments throughout a term could yield data on how personality traits influence learning processes and outcomes over time. Elements borrowed from the SPP could help to complement learner profiles that language teachers develop for students whose learning processes they support. Such research would contribute to a deeper understanding of the visibility and appropriateness of teaching dynamics that consider personality elements, ultimately leading to more personalized and effective language instruction.

In summary, further research is needed to explore the implications of personality traits in language teaching. By making these dynamics visible and understanding their appropriateness, language teachers can refine their approaches, resulting in enhanced language learning experiences that cater to the diverse needs of learners.

7. References

Aguilar Río, J. I. (2023). Le comportement bienveillant, un objectif formatif reconnaissable par des enseignant es de langue? L'éclairage d'une enquête quantitative internationale. In J. Aden, S. Eschenauer, & E. Maitre de Pembroke (Eds.), *Empathie et bienveillance au coeur de l'apprenance* (pp. 77–110). Éditions Le Manuscrit.

Aguilar Río, J. I., & Brudermann, C. (2014). Language learner. In C. Fäcke (Ed.), *Manual of Language Acquisition* (pp. 291–307). De Gruyter Mouton. <u>https://hal.archives-ouvertes.fr/hal-01414478</u>

Barbera, J., Naibert, N., Komperda, R., & Pentecost, T. C. (2021). Clarity on Cronbach's Alpha Use. *Journal of Chemical Education*, 98(2), 257–258. https://doi.org/10.1021/acs.jchemed.0c00183

Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, 74(3), 183–200. <u>https://doi.org/10.1037/h0024835</u>

Bloch, H. (1999). Grand dictionnaire de la psychologie. Larousse.

Block, D. (2012). Class and SLA: Making connections. *Language Teaching Research*, 16(2), 188–205. <u>https://doi.org/10.1177/1362168811428418</u>

Burrows, A., & Aguilar Río, J. I. (2023). Comment (faire) observer le phénomène de la projection en formation, auprès d'enseignant.e.s novices de FLES: Méthodologie, objets et outils. Recherches en didactique des langues et des cultures. *RDLC*, 21–2, Article 21–2. https://journals.openedition.org/rdlc/12621

Cattell, R. B., & P. Cattell, H. E. (1995). Personality Structure and the New Fifth Edition of the 16PF. *Educational and Psychological Measurement*, 55(6), 926–937. https://doi.org/10.1177/0013164495055006002

Chen, X., He, J., Swanson, E., Cai, Z., & Fan, X. (2022). Big Five Personality Traits and Second Language Learning: A Meta-analysis of 40 Years' Research. *Educational Psychology Review*, 34(2), 851–887. <u>https://doi.org/10.1007/s10648-021-09641-6</u>

Coste, D. (2002). Quelle(s) acquisition(s) dans quelle(s) classe(s)? AILE, 16, 3–22. https://doi.org/10.4000/aile.747

Dewaele, J.-M., & Furnham, A. (1999). Extraversion: The Unloved Variable in Applied Linguistic Research. *Language Learning*, 49(3), 509–544. <u>https://doi.org/10.1111/0023-8333.00098</u>

Dewaele, J.-M., & Furnham, A. (2000). Personality and speech production: A pilot study of second language learners. *Personality and Individual Differences*, 28(2), 355–365.

Dewaele, J.-M., & van Oudenhoven, J. P. (2009). The effect of multilingualism/multiculturalism on personality: No gain without pain for Third Culture Kids? *International Journal of Multilingualism*, 6(4), 443–459. <u>https://doi.org/10.1080/14790710903039906</u>

Erton, İ. (2010). Relations between personality traits, language learning styles and success in foreign language achievement. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 38*, 115–126.

Eskildsen, S. W., & Majlesi, A. R. (2018). Learnables and Teachables in Second Language Talk: Advancing a Social Reconceptualization of Central SLA Tenets. Introduction to the Special Issue. *The Modern Language Journal*, *102*, 3–10. <u>https://doi.org/10.1111/modl.12462</u>

Europarat (Ed.). (2010). *Common European framework of reference for languages: Learning, teaching, assessment* (10th print). Cambridge Univ. Press.

Europarat (Ed.). (2020). Common European framework of reference for languages: Learning, teaching, assessment; companion volume. Council of Europe Publishing.

Eysenck, H. J., & Eysenck, S. B. G. (1971). *Eysenck personality inventory* (4. impr). University of London Press LTD.

Firth, A., & Wagner, J. (1997). On Discourse, Communication, and (Some) Fundamental Concepts in SLA Research. *The Modern Language Journal*, 81(3), 285–300. https://doi.org/10.1111/j.1540-4781.1997.tb05480.x

Juillard, C. (2007). Le plurilinguisme, objet de la sociolinguistique descriptive. *Langage et société, 121–122*(3–4), 235–245. <u>https://doi.org/10.3917/ls.121.0235</u>

Lauwo, M. S., Accurso, K., & Rajagopal, H. (2022). Plurilingualism, Equity, and Pre-service Teacher Identity: Centring [Linguistic] Diversity in Teacher Education. *TESL Canada Journal*, *38*(2), Article 2. <u>https://doi.org/10.18806/tesl.v38i2.1359</u>

Mammadov, S. (2022). Big Five personality traits and academic performance: A meta-analysis. *Journal of Personality*, 90(2), 222–255. <u>https://doi.org/10.1111/jopy.12663</u>

Masuwd, M., Sumanik, E. D., Sarkawi, S., & Amer, M. A. B. (2024). Measuring Foreign Language Anxiety: Concerning Students' Motivation and their Self-Perception. *International Journal of Teaching and Learning*, 2(8), Article 8.

Mohebi, L., & Bailey, F. (2020). Exploring Bem's Self Perception Theory in Educational Context. *Encyclopaideia*, 24(58), 1–10. <u>https://doi.org/10.6092/issn.1825-8670/9891</u>

Morizot, J., & Miranda, D. (2007a). Approche des traits de personnalité: Postulats, controverses et progrès récents. *Revue de psychoéducation*, 36(2), 363–419. https://doi.org/10.7202/1097129ar

Morizot, J., & Miranda, D. (2007b). Développement des traits de personnalité au cours de la vie: Continuité ou changement? [Development of the features of personality during the life: Continuity or change?]. *Canadian Psychology / Psychologie Canadienne, 48*(3), 156–173. <u>https://doi.org/10.1037/cp2007015</u>

Narcy-Combes, J.-P. (2010). Pratiques, illusion ontologique et recherches en didactique des langues. *Les Après-Midi de LAIRDIL, 17*, 33–46.

Narcy-Combes, M.-F., Narcy-Combes, J.-P.-, McAllister, J., Leclère, M., & Miras, G. (2019). *Language Learning and Teaching in a Multilingual World*. Multilingual Matters.

Norton, B. (2019). Identity and Language Learning: A 2019 Retrospective Account. *The Canadian Modern Language Review*, 75(4), 299–307. <u>https://doi.org/10.3138/cmlr.2019-0287</u>

Noy, C. (2008). Sampling Knowledge: The Hermeneutics of Snowball Sampling in Qualitative Research. *International Journal of Social Research Methodology*, *11*(4), 327–344. <u>https://doi.org/10.1080/13645570701401305</u>

Palenzuela-Luis, N., Duarte-Clíments, G., Gómez-Salgado, J., Rodríguez-Gómez, J. Á., & Sánchez-Gómez, M. B. (2022). International Comparison of Self-Concept, Self-Perception and Lifestyle in Adolescents: A Systematic Review. *International Journal of Public Health*, 67, 1604954. <u>https://doi.org/10.3389/ijph.2022.1604954</u>

Potthoff, J., & Schienle, A. (2023). (No) Effects of a Self-Kindness Intervention on Self-Esteem and Visual Self-Perception: An Eye-Tracking Investigation on the Time-Course of Self-Face Viewing. *European Journal of Investigation in Health, Psychology and Education, 13*(11), 2574–2582. <u>https://doi.org/10.3390/ejihpe13110179</u>

Rothman, J., & Niño-Murcia, M. (2008). 13. Multilingualism and identity: All in the Family. In M. Niño-Murcia & J. Rothman (Eds.), *Studies in Bilingualism* (Vol. 37, pp. 301–329). John Benjamins Publishing Company. <u>https://doi.org/10.1075/sibil.37.18rot</u>

South, L., Saffo, D., Vitek, O., Dunne, C., & Borkin, M. A. (2022). Effective Use of Likert Scales in Visualization Evaluations: A Systematic Review. *Computer Graphics Forum*, 41(3), 43–55. <u>https://doi.org/10.1111/cgf.14521</u>

Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Thørrisen, M. M., & Sadeghi, T. (2023). The Ten-Item Personality Inventory (TIPI): A scoping review of versions, translations and psychometric properties. *Frontiers in Psychology*, 14. https://doi.org/10.3389/fpsyg.2023.1202953

Zou, K. H., Tuncali, K., & Silverman, S. G. (2003). Correlation and Simple Linear Regression. *Radiology*, 227(3), 617–628. <u>https://doi.org/10.1148/radiol.2273011499</u>

- iii "I feel that when I have to use languages less close to me, I let myself be less carried away by my emotions" (cf. table 1).
- iv "There are things I can't express in some of the languages I know" (cf. table 1).

i <u>https://gosling.psy.utexas.edu/scales-weve-developed/ten-item-personality-measure-tipi/</u> (last retrieved 25th on October 2024).

ii "There are things I can't express in some of the languages I know" (cf. table 1).