



Article

Bilingualism in Brazil: An Examination of Its Effect on the Formation of Individual Identities

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Abstract: The 21st century has witnessed a substantial increase in research focused on the benefits of bilingualism for individuals. The aspects that have received the most attention have been executive functions. And communication skills. Less is known, however, about the noncognitive and nonlinguistic aspects of bilingualism. Personality psychologists claim that personality is the result of a combination of nature-related and nurture-related factors, but the latter have not been sufficiently addressed in studies on bilingualism. Thus, to bridge this gap, the present contribution pursues this line of inquiry by adopting a quantitative approach to the examination of the self-perceived mobility, employability, and intercultural competence of participants who studied in a bilingual education program. A total of 835 respondents living in Brazil completed an online questionnaire. Mann-Whitney U and Wilcoxon W tests showed higher scores for bilingual graduates than for their nonbilingual counterparts on the three subscales. Correlation analyses revealed moderate-to-high positive correlations between bilingual graduates' perception of their way of being and their way of life on the one hand, and among their self-perceived mobility, employability, and intercultural competence on the other. Likewise, the analyses showed statistically significant positive correlations between being proficient in more than one foreign language and the dimension of mobility. Our findings illustrate the influence that bilingualism/multilingualism exerts on factors that determine everyday life and corroborate and expand the research conducted in this strand. Avenues for further related research are discussed.

Keywords: bilingualism; graduates; individual identities; mobility; employability; intercultural competence; multilingualism



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1. Introduction

The present urgent need for socialization within our own context, interaction with other cultures, diverse identities, and the disappearance of the notion of the individual as a holder of an unchangeable identity demand a revision of the role that education plays in the development of the individual and their subjectivity. Contributing to the construction of a mindset that speaking foreign languages is prerequisite to being a 21stcentury citizen should be a prime purpose of researchers and education authorities.

The brain of a speaker of two or more languages develops diverse cognitive (de Bot 2017) and socioemotional skills (Han 2010) that are beyond the scope of linguistics. The so-called "bilingual advantage" (BA) (Kroll and Bialystok 2013) refers to the "skills areas in which bilinguals outperform monolinguals" (de Bot 2017, p. 15). Bialystok (2011) attributes BA to the plasticity of bilinguals' cognitive system, which happens as a consequence of promptly switching back and forth between languages. As evinced in the extant literature, even when we use just one language, the "irrelevant" language (Christoffels et al. 2015, p. 371) is also working (Grosjean 2015; Kroll et al. 2006; Thierry and Wu 2007). It can be said that the

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deactivation of the other language seldom occurs, as can be noticed in the interferences sometimes found in bilinguals' output.

Bilinguals have been demonstrated to outperform nonbilinguals in tasks that require executive functions, such a splanning, updating, and monitoring (Barac et al. 2014; Bialystok 2018; Bialystok et al. 2012), and in tests of cognitive control that require response conflict (e.g., Bialystok et al. 2008) and cognitive flexibility (Garbin et al. 2010; Ikizer and Ramírez-Esparza 2018; Rodríguez-Pujadas et al. 2013). In addition to having cognitive and linguistic benefits, bilingualism influences other factors that playa decisive role in forming the identity of the individual. Psychologists explain that, for the construction of an individual's personality, both physiological and social factors come into play (Furnham and Heaven 1999; McCrae et al. 2000), but not many studies have addressed the influence of social factors. This article details a research study that looks at bilingualism as a social/cultural variable that can mold our personality.

The present study investigates the impact of bilingual education in Brazil on the self-perceived mobility, employability, and intercultural competence of bilingual graduates. It also attempts to bring evidence related to the interplay between bilingualism, on the one hand, and the way participants see themselves and their lifestyle on the other. Furthermore, it examines the effect the number of languages known has on the formation of the individual. The remaining sections of this introduction highlight the most relevant studies to the current research and offer a brief picture of the sociohistorical and linguistic environments of the participants. Thereafter, the goals of this study are outlined before directing attention to the research itself. Here, the participants, the instruments, and the procedure used are described, followed by a presentation of the results, a discussion, and some tentative conclusions. This paper is part of a series of studies developed by a research group within the framework of the national project "Facing bilinguals: Study of bilingual education programs' results through social data analysis (BESOC)", granted by the Spanish Ministry of Science and Innovation (Ref. no. EDU2017-84800-R). The research group aims to study the results of bilingual education programs throughout the world and intends to produce knowledge in the field of bilingualism through the eyes of bilingual graduates. The BESOC team comprises scholars in the fields of philology, psycho-pedagogy, statistics, computing, and economics.

1.1. The Construction of Individual Identities

Interest in the effect of bilingualism on our daily life is growing. Learning one or several foreign languages leads us to interpret ourselves and the world in a way that differs from that of monolinguals, as well as behave and assess our lives differently (Chen et al. 2013; Dewaele and Nakano 2013; Fabbro et al. 2019). Research has looked into this world of interpretations from different perspectives.

Several studies have substantiated the benefits of bilingual education on the dimensions of mobility, employability, and intercultural competence. Most of them, however, have presented them from a theoretical perspective (Aguilar and Rodríguez 2012; Alonso-Díaz et al. 2019; Byram et al. 2002; Coyle 2013; Coyle et al. 2009; Georgiou 2012; Hunt 2011; Jäppinen 2005; Lasagabaster 2008; Lasagabaster and Sierra 2010; Martínez Rincón 2016; Pérez-Vidal 2015; Sercu 2004; Stier 2006; Yang 2015). With the exception of the studies carried out within the framework of the project described earlier (Arnaiz-Castro et al. 2022; Gómez-Parra et al. 2021; Palacios-Hidalgo et al. 2021a), the three dimensions together have not received empirical examination. The few that took an empirical approach focused onlyon one or two of the dimensions (Gómez-Parra 2020; González-Rodrigo and Salto-Weis 2013; Madrid and Julius 2020; Arasaratnam-Smith 2016). Furthermore, only one of them included bilingual graduates as participants (Roiha and Sommier 2018).

The studies presented above limited themselves to the division of learners into monolinguals and bilinguals/multilinguals. None of them looked at the effect that learning more than one foreign language can have on shaping perceptions related to mobility, employability, and intercultural competence. The studies that have shown interest are found in the

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field of personality traits and psychological and affective factors. The interest in separating the two groups lies in the differences detected in the neurolinguistic representations in the brain (Higby et al. 2013). Although the term bilingual is often used interchangeably with multilingual, researchers have acknowledged that using three or more languages must necessarily produce different brain networks.

Dewaele and van Oudenhoven (2009) looked into the relationship between the number of languages known and five personality dimensions, measured with the Multicultural Personality Questionnaire (MPQ) (van der Zee and van Oudenhoven 2000). Their 79 subjects, aged between 13 and 15, were studying in a London comprehensive school and were of African, Arabic, and Asian origin. A t-test showed that multilinguals had higher levels of open-mindedness and cultural empathy than incipient bilinguals. Korzilius et al. (2011) also studied the link between multilingualism and personality traits among 144 non-international employees, international employees, and business contacts in a Dutch multinational company. The data analyzed revealed that more language proficiencies led to higher levels of open-mindedness, emotional stability, and flexibility. More recently, Dewaele and Botes (2019) examined these dimensions within a group of 651 participants, mostly university students studying in Europe and North America. Their results again indicated the strong connection between the total number of languages known and flexibility, social initiative, and open-mindedness.

As can be appreciated, the trait that has been systematically linked to the number of languages is open-mindedness. This trait shares characteristics with the lower-order trait tolerance of ambiguity, described as "the tendency to perceive ambiguous situations as desirable" (Budner 1962, p. 29), which has been demonstrated to be higher among people who know more languages (Dewaele and Wei 2013; van Compernolle 2016; Wei and Hu 2019). van Compernolle (2017) found the explanation of the relevance of this construct for the learner in the fact that "L2 learning involves the appropriation of new and/or modified patterns of language and meaning, which can be unfamiliar and complex" (p. 319). Consequently, the experience of dealing with the unknown and unexpected when using the target language may be transferred to other situations. Dewaele and Wei (2013) identified a significant positive effect of the number of languages known by 2158 multilinguals of different ages (mean age = 34.5) and from different parts of the world on this lower-order personality trait. Likewise, Wei and Hu (2019) and Wei et al. (2022) observed in 260 Chinese multilinguals between the ages of 18 and 42 that the number of languages participants were proficient in was a significant predictor of tolerance of ambiguity.

Moreover, open-mindedness, together with flexibility and social initiative, has been connected with intercultural behavior and perception. To our knowledge, the only study that has focused on these two aspects was conducted by Tsang (2020). In his mixed-methods research study with 122 bilinguals and 33 multilinguals of Chinese nationality and other Asian nationalities such as Pakistani, Tsang (2020) discovered that multilinguals tended to have more intercultural behavior and more positive intercultural views than bilinguals.

Within the field of emotional dimensions, foreign language anxiety has been shown to also be strongly associated with the number of languages known (Dewaele 2010; Dewaele et al. 2008). Participants who speak more languages score lower in anxiety when communicating in both their foreign languages and their mother tongue. It may be that the knowledge of more languages gives individuals more confidence when solving communication breakdowns (Dewaele et al. 2008). When confronted with a lexical or grammatical gap in the language they are speaking, multilinguals are able to use not only the knowledge but also the strategies learned to communicate in other languages.

1.2. Bilingualism in Brazil

The Brazilian context was selected for exploring how bilingual programs can play a role in the formation of individual identities. In spite of the still scarce research evidence on bilingualism in South America, the continent has a long history of bilingual education (de Oliveira and Höfling 2021), dating back to the times of the colonies. Bilingual education

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programs were implemented for indigenous communities with the purpose of encouraging their incorporation into the education system and the culture of the country they were living in (de Mejía 2005). Furthermore, bilingual education with sign language has also been long present. In Brazil, for example, laws from 1993 and 1996 regulate indigenous and sign language bilingual education, respectively (Liberali and Megale 2016). In the case of Argentina, the first bilingual programs were launched in the 19th century to cater for the European immigrants settling in the country. Banfi and Day (2004) labeled Argentine bilingual schools as "global language schools", which is in accordance with the processes of globalization the world has experienced in the last two decades. In Colombia, the first bilingual schools appeared at the beginning of the 20th century, although mainly in the private sector (de Mejía 2005; Garzón-Díaz 2018). It was not until the National Bilingualism Education Plan was launched (2004–2019) that bilingual programs were implemented in all schools across the country. For society, however, bilingual education, just like content and language-integrated learning (CLIL), continues to be regarded as something rare, which might be due to the "myth of monolingualism" (Pimentel Siqueira et al. 2018, p. 197) still predominant in some places in South America. With more than 200 different languages spoken as a mother tongue, Brazil is a perfect example of this concealed multilingual reality even though the country has a single official and national language (Brazilian Portuguese) and is, therefore, mostly monolingual (Finardi et al. 2020). Foreign language education has historically played a minor role in both government policies and people's minds (de Oliveira and Höfling 2021; Landau et al. 2021). It was from the 1990s onward that the situation started to change, albeitgradually, with the publication of documents such as The Law of Basic Tenets and Guidelines for National Education (LDB) (Brasil 1996), the National Curricular Parameters (PCN) (Brasil 1998), and the more recent National Basis for a Common Curriculum (BNCC) (Brasil 2017a). The BNCC specifies that the teaching of English opens "horizons of communication and cultural, scientific, and academic changes" (Brasil 2017b, p.1).

It can be said that serious attention to bilingualism and CLIL was not paid until the so-called "enrichment model of bilingual education" was implemented in the South American private context at the beginning of the 21st century. This model has been referred to by some authors as elite bilingual education (EBE) (Cabral and Lessa 2020; de Mejía 2002; Liberali and Megale 2016), and by others as foreign language bilingual education (FLBE) (Pimentel Siqueira et al. 2018). As pointed out by Pimentel Siqueira et al. (2018), the latter term indeed better reflected the idea that the model would progressively be implemented in the public sector.

As observed, the reality in Brazil differs considerably from countries where studies in bilingual education or CLIL are common. The last decade has been crucial for Brazilians' level of English. As stated in the report by the prestigious education company EF EPI (2022), the progress experienced has transformed them, together with other countries in the Latin American region, from a very-low-proficiency country to a largely moderately proficient one.

1.3. Goals of the Study

As stated in the introduction, bilingual education continues to be associated primarily with cognitive and linguistic gains. This gap is one of the motivations of this research. The other motivation is the need to create a more comprehensive picture of bilingual education in the world. A wealth of studies on bilingualism have been carried out in Europe and Asia, but very little research in this area has been conducted in South America so far (Banegas et al. 2020; Pimentel Siqueira et al. 2018). It was not until 2008 that the first data on bilingual education in Brazil were published (e.g., Fernández 2008). As de Bot (2017) noted, it is essential to focus attention on the BA caused by other factors and indifferent populations.

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With this panorama in mind, we believed it would be of interest to collect data and shed light on the results of bilingual education in an under-researched context such as Brazil. Specifically, the current study addresses the following questions:

- (1) Regarding self-perceived mobility, employability, and intercultural competence, will the scores of participants in a bilingual program differ from the scores of individuals in mainstream education? Is there a gender effect among the participants of bilingual programs on the three dimensions?
- (2) Regarding way of being and lifestyle, will the scores of participants in a bilingual program differ from the scores of individuals in mainstream education?
- (3) Is there a link between participants' perception of their way of being and lifestyle, on the one hand, and their self-perceived mobility, employability, and intercultural competence on the other?
- (4) Is an individual's knowledge of multiple languages linked to their scores on self-perceived mobility, employability, and intercultural competence?

2. Materials and Methods

2.1. Participants

A total of 835students with an average age of 48.88 (SD = 12.26) completed the questionnaire. As usually happens in this type of research, the gender disparity was noteworthy (Dewaele 2019; Dewaele and Botes 2019; Mijatović and Tytus 2019)—81.3% females and 18.7% males. Only 15.3% had participated in a bilingual program in one or more educational levels (i.e., primary, secondary, vocational, or higher education). However, this figure started to change gradually in Brazil more than a decade ago thanks to the program *Language Without Borders* (2012), designed to increase the English proficiency level of Brazilian university students. Apart from the late incorporation of the appropriate regulations that both supported and encouraged the learning of English into the Brazil education system, some scholars have argued (Guimarães and Finardi 2020; Leffa 2013) that a phenomenon that cannot be overlooked is the ideological refusal to learn English as an additional language.

The sample consists of 522 monolinguals, 183 participants who spoke one foreign language (FL), 91 participants who spoke two FLs, 27 participants who spoke three FLs, four participants who spoke four FLs, three participants who spoke five FLs, and one participant who spoke six FLs. For most of the analyses undertaken, participants were divided into two categories: bilinguals and nonbilinguals. Consequently, in those cases, all students who considered themselves either bilingual or multilingual belonged to the same group. When it was the purpose of the researchers to examine participants' perceptions according to the number of languages known, three categories were established: participants who spoke just their mother tongue or whose proficiency in the foreign language is very low, participants speaking one FL, and participants speaking more than one FL.

2.2. Instrument

A 15-item Likert scale instrument was created by the researchers of the project. The instrument initially had 24 items to measure participants' perception of mobility, employability, and intercultural competence, but nine items were deleted due to their adverse effect on the statistical reliability of the scales. Participants also filled out a short sociobiographical questionnaire, which contained questions on gender, age, country where they attended school, number of FLs they know, and the use they make of those languages both in the oral and in the written form.

The questionnaire has been used in two other cultures: Spain (Gómez-Parra et al. 2021) and Colombia (Arnaiz-Castro et al. 2022). It has been applied to groups with mean ages of 37.2 and 39.9. The scales have always proven to be reliable, and the correlations among variables have been high. In the current contribution, the Cronbach's alpha values were higher than 0.851 in the three subscales (mobility = 0.862; employability = 0.852; intercultural competence = 0.927) and 0.939 for the total scale, which indicates the high reliability of the

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questionnaire (Nunnally and Bernstein 1994). Bartlett's test of sphericity (0.00; sig. < 0.05) and the Kaiser–Meyer–Olkin measure of sampling adequacy (0.936; sig. > 0.8) were also performed, with both being significant (Field 2013). Additionally, a confirmatory factor analysis with Promax rotation was conducted to validate the three established dimensions as measures of linguistic success, and all items were saturated in the dimensions, with values higher than 0.511. The analysis also revealed that the three factors extracted with Promax rotation explained 70.433% of the total variance. The factor which accounted for most of the variance was intercultural competence (54.366%), followed by the much lower mobility (9.66%) and, lastly, employability (6.404%).

2.3. Data Collection

Like other notable investigations on perceived feelings, we relied on a web-based questionnaire. We followed a nonprobability sampling (Ness Evans and Rooney 2013); however, the participants had to match the selection criteria, i.e., they had to have attended school in Brazil and have already finished their studies (university or otherwise).

2.4. Data Analysis

The statistical analyses were conducted with the Statistical Package for the Social Sciences (SPSS version 22.0). Once the data were collected, data cleansing was performed. Questionnaires in which more than 15% of the items were unanswered were rejected, as were questionnaires with data anomalies. In this cleansing process, the number of questionnaires decreased from 2520 to 835. A basic descriptive study was then carried out.

A one-sample Kolmogorov–Smirnov test revealed no normal distribution (p < 0.05), and nonparametric tests were performed. Mann–Whitney U and Wilcoxon W tests were used for three main purposes. Firstly, we ascertained whether there were significant differences between former bilingual and mainstream participants regarding their self-perceived mobility, employability, and intercultural competences. Secondly, scores were later compared by gender; Lastly, we determined whether there were significant differences between the scores of each group of participants on two specific items that had been extracted from the longer version of the questionnaire: How much do you think your bilingualism/languages has/have impacted the way you are? How much do you think your bilingualism/languages has/have impacted the way you live? Spearman Rho correlation analyses were subsequently performed between these two items and the three dimensions. Finally, another Spearmen's Rho correlation analysis was computed between the number of languages known by all participants in the study and each of the three dimensions. With this aim, the decision was made to classify participants according to the number of FLs known.

3. Results

On the basis of the data analyzed, some key findings emerged. A series of Mann–Whitney U and Wilcoxon W tests were carried out. The first of them (Table 1) indicated that the bilingual education graduates group scored significantly higher on the three subscales than their nonbilingual counterparts.

When participants were distributed by gender, Mann–Whitney U and Wilcoxon W tests showed that gender had no significant effect on any of the three dimensions (p > 0.05).

As can be appreciated in Table 2, the third and last Mann–Whitney *U* and Wilcoxon *W* tests identified significant differences in the way participants perceived the impact that speaking FLs has had on the way they are and their lifestyle.

Correlational analyses are presented in the subsequent tables. Table 3 shows the correlations among all observed variables as measured by Spearman's Rho correlation coefficient. The dimensions of mobility, employability, and intercultural competence had statistically moderate-to-high significant correlations with the way participants are and their lifestyle.

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KERRYPNX	Bilingual Program	N	Mean Rank	p	U	W	z
Mobility	Yes No	128 707	532.49 397.27	0.000 *	30,593.0	280,871.0	-5.852
Employability	Yes No	128 707	515.77 400.30	0.000 *	32,733.0	283,011.0	-4.991
Intercultural competence	Yes No	128 707	475.55 407.58	0.003 *	37,881.5	288,159.5	-2.952
Total scale	Yes No	128 707	525.60 398.52	0.000 *	31,475.5	281,753.5	-5.486

Table 1. Differences between bilingual and nonbilingual graduates on the three dimensions.

Table 2. Differences between bilingual and mainstream participants on their perception of the way they are and their lifestyle.

	Bilingual Program	N	Mean Rank	р	и	W	z
How much do you think your languages have impacted the way you are?	Yes No	128 707	506.87 401.91	<0.001 *	33,872.5	284,150.5	-4.637
How much do you think your languages have impacted the way you live?	Yes No	128 707	496.15 403.85	<0.001 *	35,245.0	285,523.0	-4.077

^{*} *p* < 0.001.

Table 3. Spearman correlations between variables according to education program.

	D:1:1	Spearman's Rho Correlation Coefficient					
	Bilingual Program	Mobility	Employability	Intercultural Competence	Total Scale		
How much do you think your languages	Yes	0.673 *	0.645 *	0.756 *	0.760 *		
have impacted the way you are?	No	0.574 *	0.571 *	0.773 *	0.718 *		
How much do you think your languages	Yes	0.564 *	0.562 *	0.763 *	0.703 *		
have impacted the way you live?	No	0.571 *	0.593 *	0.760 *	0.720 *		

^{*} $p < 0.\overline{001}$.

The results of the second Spearman's Rho correlation analysis performed revealed a slight positive correlation between the number of languages known and the dimension of mobility (r = 0.388, p < 0.001).

4. Discussion

As the world is becoming increasingly bilingual (and multilingual), we consider it of utmost importance to strike a balance in bilingualism research and reinforce areas that have been neglected. In this particular case, we looked at the areas closely connected with the construction of individuals' identity. Previous studies on self-perceived mobility, employability, and intercultural competence have reported higher scores on the three dimensions for bilingually educated participants than for their nonbilingual counterparts (Palacios-Hidalgo et al. 2021a; Arnaiz-Castro et al. 2022). This finding was confirmed in the present study.

The fact that participants who have received bilingual education in Brazil perceive that they use their FL(s) more when they travel for pleasure, and that their FL(s) make(s) them want to travel abroad or register in training courses abroad to a higher degree than nonbilinguals is in line with The National Common Core Curriculum's (Brasil 2017c) position. With a more transdisciplinary approach to the learning of foreign languages than previous regulations, the document emphasizes the social and globalizing power of

^{*} *p* < 0.001.

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language, specifying that learning an FL (English) can give learners "the linguistic knowledge for engagement and participation, contributing to the exercise of active citizenship, along with the amplification of possibilities of interaction and mobility" (Brasil 2017c, p. 241). Bilingual education graduates also believe that their education has turned them into "more employable" citizens and has impacted the development of their job. The benefits that bilingual education can bring to the labor market, the influence it can have on the quality of the service offered, and the possibility of higher salaries for employees proficient in more than one foreign language have been underscored by various authors (Callahan and Gándara 2014; Palacios-Hidalgo et al. 2021b; Porras et al. 2014). With respect to intercultural competence, the current need for high levels of intercultural competence is undeniable, bearing in mind the dominant heterogeneity of cultures in both work and personal contexts. The positive findings related to bilinguals' intercultural competence align with those reported in the study by Ikizer and Ramírez-Esparza (2018) involving 769 adults whose mean age was 37.00, 265 of whom were bilinguals and 494of whom were monolinguals, living in the US and Canada. Bilinguals scored significantly higher than monolinguals on social flexibility, described as the ability "to (a) switch with ease and adapt between different social environments and (b) accurately read social cues in the environment" (p. 958). This sensitivity to social signals paves the way for social interaction. Hence, we understand it is closely related to items contained in this dimension, specifically, understanding and acceptance of others, adaptation to other cultures abroad, and empathy with foreign citizens.

No gender differences were observed either onthe total scale or ineach of the dimensions, which is in accordance with the data in Arnaiz-Castro et al. (2022). Nevertheless, in relation to intercultural competence in particular, one could have expected to find gender differences. Empathy has been found to be strongly related to intercultural communicative competence (ICC) (Arasaratnam and Doerfel 2005), and, in studies on empathy, females have been found to be more empathetic than men (Kobach and Weaver 2012). The items included in ICC deal with issues very similar in meaning to those in the dimension of intercultural competence in the current research, such as "I usually change the way I communicate depending on with whom I am communicating" (Arasaratnam-Smith 2016); therefore, it would follow that female bilingual graduates scored higher on intercultural competence.

As for the perception of changes in personality and lifestyle, bilinguals also scored higher than those who followed monolingual syllabuses. In addition, the data showed that the higher bilinguals perceive the changes in their way of being and lifestyle, the higher their self-perceptions are regarding mobility, employability, and intercultural competence, which corroborates the idea that being proficient in one or more foreign languages shapes the way we see ourselves and the way we live. The results concur with the results of many other studies conducted over the years, alluding to the idea that being proficient in one or more foreign languages exerts an influence on certain personality traits (Dewaele and Botes 2019; Dewaele and Wei 2013; Wei et al. 2022).

5. Conclusions

This research followed de Bot's (2017) suggestion to continue extending research on BA beyond executive and communicative functioning. Furthermore, it provides data on Brazil, an under-represented context.

One of the main findings in this study is that the knowledge of more than one foreign language can have an impact on self-perceived mobility. No study had looked at this relationship before. Although the results obtained are modest, this approach constitutes a crucial first step in considering the advantages of multilingualism in relation to this dimension. The findings corroborate and expand the general picture depicted in previous research; that is, being proficient in one or more foreign languages shapes the way we see ourselves and the way we live. It would be of interest to explore the effects of the frequency of use of each of the foreign languages on the dimensions.

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In addition to these contributions, the current study had various limitations that should be discussed. The first concerns the reliability of self-report questionnaires. Although many scholars have based their research on participants' perspectives (Fabbro et al. 2019; Sobkowiak 2019; Dewaele and Pavlenko 2001–2003), others have questioned their validity, explaining that participants might lack self-knowledge or might not be willing to be either sincere or precise when disclosing information about themselves (Dunning et al. 2004; Mijatović and Tytus 2019). Another limitation refers to the low number of participants who followed a bilingual track (p. 128) in comparison to those who did not (p. 707). Although this is beyond our control, as is the reality in the context selected, it cannot be overlooked. The third limitation is related to the high percentage of females, which is characteristic in this type of study but necessarily implies that the results need to be interpreted with this in mind. In spite of these limitations, our study contributes to the growing body of research on bilingualism/multilingualism and yields interesting insights into the long-term effects of the approach.

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