

Language acculturation among the children of immigrants in Spain at the end of the prodigious decade of immigration

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In Spain, few studies have analyzed how children of immigrants combine the acquisition of Spanish with the maintenance/acquisition of heritage languages. This paper moves into that direction by exploiting data from a survey conducted at the end of the so-called prodigious decade of immigration in Spain. We conduct cluster and bivariate analyses to analyze the distribution of children immigrants across the four types of language acculturation resulting from this conjunction. Competent bilingualism was the most frequent type, followed by monolingual assimilation. Yet, 45% of the sample did not fall into competent bilingualism. Therefore, the bilingual potential of these youth was not being exploited. Multivariate analyses show that the odds of falling into one type of acculturation or another are affected by age on arrival in Spain and language use preference. Youths with a Chinese background were the ones who presented the most problematic situation in terms of linguistic integration into the host society.

Keywords: acculturation, immigration, language, heritage language, Spain.

La aculturación lingüística de los hijos de inmigrantes en España al final de la década prodigiosa de la inmigración. En España, pocos estudios han analizado cómo los hijos de inmigrantes combinan la adquisición del español con el mantenimiento/adquisición de sus lenguas de herencia. Este trabajo avanza en esa dirección explotando datos de una encuesta realizada al final de la llamada década prodigiosa de la inmigración en España. Mediante análisis de conglomerados y bivariados analizamos la distribución de los hijos de inmigrantes en los cuatro tipos de aculturación lingüística resultantes de esta conjunción. El bilingüismo competente es el más frecuente, seguido de la asimilación monolingüística. Sin embargo, el 45% de la muestra no encajaba en el bilingüismo competente, lo que indica una

infraexplotación del potencial bilingüe de estos jóvenes. Los análisis multivariantes muestran que las probabilidades de situarse en un tipo de aculturación u otro se ven afectadas por la edad de llegada a España y por la preferencia del idioma utilizado. Los jóvenes de origen chino son los que presentan una situación más problemática en su integración lingüística en la sociedad de acogida.

Palabras clave: aculturación, inmigración, lengua, lenguas de herencia, España.

1. Introduction

With the increase of migratory flows, societies have become increasingly multicultural and exposed to intercultural contact. Hence, acculturation, defined as the dual process of cultural and psychological change that results from contact between two or more cultures (Berry, 2017), has become a primary focus of interest for academics and policy makers. Although research on immigrants' acculturation initially focused mainly on adults, over the last three decades, this interest has shifted onto children and young people as well (e.g., Fuligni 2001; Portes and Rumbaut 2001; Berry *et al.* 2006; Portes *et al.* 2016).

Among all the dimensions and features of acculturation in immigrants and their children, language is one of the most widely studied. Research has analyzed how immigrants and their descendants adapt linguistically to the multicultural settings they live in. Some authors (e.g., Portes and Rumbaut 2001; Berry *et al.* 2006; Parameshwaran 2014) study not only how well they acquire the dominant official language(s) of the host society (OL hereafter), but also how that acquisition is combined with the maintenance or learning of their heritage language(s) (HL hereafter).

Studying the phenomena of immigrants' language acculturation is not only relevant *per se* in linguistic, anthropological, sociological, or psychological terms, but also because it affects their integration both into the host society and into the ethnic group in multiple ways (Portes and Rumbaut 2001; Berry *et al.* 2006; Chiswick and Miller 2010; Medvedeva and Portes 2017; Parameshwaran 2014; Budría *et al.* 2019), and because this in turn affects how the larger society reacts to immigration.

In Spain, the language adaptation of immigrants' offspring is also a prevalent issue when social and educational integration is discussed (Álvarez-Sotomayor and Martínez-Cousinou 2020). Within the Spanish academic arena, concern regarding the linguistic integration of these

students has focused not only on the acquisition of OLs, but also on the maintenance of their HL (García *et al.* 2015). Primarily, this emphasis on the value of HL maintenance and teaching has emerged from the perspective of intercultural education. The main argument is that the learning of the HL is key so that these young people do not lose their connection with their culture of origin, which is also a *sine qua non* condition for situations of intercultural learning to occur (Barrett 2013).

However, despite this concern, we still find little empirical literature that addresses the ways in which, in Spain, the acquisition of OLs is combined by the children of immigrants with the maintenance or learning of their HL. That is, there is still little research that would indicate the extent to which the patterns of language adaptation among these youngsters move towards either forms of monolingualism or plurilingualism when considering their HL(s) and the OL(s).

This paper aims to help fill this empirical gap by analyzing how second-generation immigrants in Spain combine the acquisition of the country's OLs (Spanish or Catalan for this study) and the learning or maintenance of their HL. As a second goal, we will attempt to shed light on the factors that may explain the language acculturation patterns followed by these youngsters. We use data from the first wave of the Longitudinal Study of the Spanish Second Generation (ILSEG), in 2008, with representative samples of young second-generation immigrants in two of the principal areas of concentration in Spain, the metropolitan areas of Madrid and Barcelona. Despite the age of these data, they provide a unique opportunity to analyse the topic of language acculturation among these youngsters at the end of a crucial period in Spain's demographic and social landscape. A period which marks and consolidates the establishment of the transition from an emigration country to an immigration country.

The article is organized as follows. First, we briefly review the state of the art related to language acculturation among immigrants and their offspring. Second, we contextualize the Spanish case study in terms of its international immigration and linguistic profiles. Third, we describe the methods and data used for the study. After that, we proceed with the empirical analysis, which is separated into two sections. In the first section, we describe how the sample is distributed across the different types of language acculturation distinguished. In the second section, we conduct both bivariate and multivariate analyses. We use the former to describe the socio-demographic and socio-economic profiles of those who fall into each of these types. The latter allows us to identify the variables that affect the likelihood of belonging to a given type of language acculturation.

2. Background

The issue of how immigrants and their children culturally adapt to living within and between two or more cultures (usually, those of the immigrant parents and ethnic communities, on the one hand, and those of the host society, on the other) has been widely researched in old immigration countries. One of the first theoretical attempts to model the acculturation processes that result from international migrations was made by *linear assimilation theory* (Gordon 1964).

In its classic formulation, linear assimilation theory sees acculturation as a continuum, with the culture of the migrant at one end and the dominant culture of the host society at the other. As immigrants extend their presence in the host society, they advance along that continuum and eventually become fully integrated —or assimilated— (Gordon 1964). Within this framework, the cultural traits that immigrants brought with them from their countries of origin posed serious obstacles to their integration (Álvarez de Sotomayor 2008: 57). Therefore, integration necessarily entailed erasing their cultures of origin and adopting the dominant culture of the host society.

As a reaction to this and other one-dimensional models, Berry (1974; 1997) develops a framework that leads to the analysis of acculturation in two systems (host society and ethnic group) and, consequently, in two independent dimensions: migrants' links to their cultures of origin and to their host societies (Berry *et al.* 2006). When these two dimensions are crossed, an acculturation space with four scenarios —‘acculturation strategies’ in Berry’s terminology— emerges (Table 1): *assimilation* (when migrants do not preserve their cultural identity and orient themselves towards the culture of the host society), *separation* (when migrants maintain their cultural heritage, not participating in the culture of the host society), *marginalization* (when the migrant loses cultural and psychological contact both with the society of origin and with the host society), and *integration* (when migrants maintain their cultural heritage while participating in the culture of the host society). This two-dimensional model and some subsequent theories (e.g., the theory of segmented assimilation) not only question the idea of linearity in the acculturation processes of immigrants, but also take into account a wealth of evidence that shows that cultural assimilation is not an indispensable prerequisite for a ‘successful’ inclusion of immigrants into host societies (Portes and Rumbaut 2001; Berry *et al.* 2006; Portes *et al.* 2016).

		Maintenance of the culture of origin	
		YES	NO
Participation in the host larger society	YES	<i>Integration</i>	<i>Assimilation</i>
	NO	<i>Separation/segregation</i>	<i>Marginalization</i>

Table 1. *Berry's acculturation model*. Source: Berry, 1997.

To analyze the language acculturation of second-generation immigrants, we follow Esser's (2006) classification, who adapts Berry's (1997) categories. Esser distinguishes four types of language acculturation (Table 2): *linguistic marginality* or limited bilingualism (when proficiency level is low both in HL and OL), *monolingual segmentation or separation* (high proficiency in HL and low proficiency in OL), *monolingual assimilation* (low proficiency in HL and high proficiency in OL), and *competent bilingualism* (high proficiency in both languages). Although using different terminologies, this typology is analogous to that used in many other works (e.g., Mouw & Xie 1999; Portes & Rumbaut 2001; Medvedeva & Portes 2017).

In terms of social inclusion, linguistic marginality does not promote inclusion in either the ethnic group or the host society; monolingual separation leads to inclusion in the ethnic group and exclusion from the host society; linguistic assimilation would lead to the opposite situation; while competent bilingualism involves inclusion in both social systems.

		HL proficiency	
		High	Low
OL proficiency	High	<i>Competent bilingualism</i>	<i>Monolingual assimilation</i>
	Low	<i>Monolingual separation</i>	<i>Linguistic marginality</i>

Table 2. *Types of language acculturation*. Source: Esser, 2006

In the international arena, we find relevant empirical references on this issue. According to the data exploited by Esser (2006: 49) from two surveys conducted in the US and one in Germany, monolingual assimilation is the predominant pattern in the contexts analyzed. Around 40% of the population for each of these surveys fall within this type. Competent bilingualism is the second most frequent type, with percentages ranging between 23% and 31%, while monolingual separation and limited bilingualism are less widespread but have no small numbers either.

As for the case of Spain, a large body of empirical literature has already analyzed the acculturation of immigrants (for a review, see Martín

2017). However, regarding the linguistic dimension of acculturation, knowledge is still limited. Most studies focus on attitudes towards languages or on preferences in its use, while very few have analyzed language acculturation in terms of proficiency. To our knowledge, the following three studies are the only ones.

Broeder and Mijares (2003) used a large survey conducted on primary education students in Madrid during school year 2000/01. They analyzed so-called *language vitality*, based on students' self-evaluation. Two of the dimensions considered in this construct are "linguistic competence" (captured through the questions: 'which spoken languages can you understand/speak/read/talk?') and "linguistic proficiency" (through the question 'which language do you speak best?'). Regarding the former, most of the students stated that they could understand and speak their 'native language', but smaller proportions declared that they could read and write in that language. Differences across national groups were considerable. As for the latter dimension, the percentages of those who stated that they could speak that language as well as or better than they spoke Spanish differ significantly across the national groups. Although these data are a clear antecedent for our study, not measuring proficiency in a continuous way, as well as not presenting any data on proficiency in Spanish are evident limitations in terms of knowing the patterns of language acculturation of these students, which is the aim of this paper.

By using self-reported language proficiency measures, Álvarez-Sotomayor and Gómez-Parra (2020) analyze a case study of high school students in Marbella, a municipality with a high proportion of foreign population located in the south of Spain. In their sample, monolingual assimilation is the most frequent type of integration, followed by competent bilingualism, monolingual separation and limited bilingualism. The descriptive analyses show broad differences according to the participants' migration status and length of residence in Spain. External validity problems derived from focusing on a case study with a small sample size constitutes a major limitation of this research.

The paper by Medvedeva and Portes (2017) exploits the same data used for this paper. Although they focus on analyzing the effect of bilingualism on the educational achievement of children of immigrants, when analyzing their linguistic profiles, they distinguish four categories equivalent to the types of language adaptation differentiated by Esser. However, they made two methodological choices that have led us to reanalyze these data bearing in mind the dissimilar purpose of our paper. First, they include youths with Spanish-speaking origin in their sample, which represent 65% of the total. For these youths, language acculturation cannot be analyzed in the terms that we are interested in (the conjunction between their proficiency in the OL and in the HL), since both languages match

in this case. Second, in order to capture those linguistic profiles, Medvedeva and Portes operationalize proficiency in the foreign language through the reported level in any language other than the OLs. Such operationalization includes cases in which immigrant youths report their knowledge of a ‘foreign language’ which does not correspond to the native language of either of their parents, with English (which is taught as a second language in the Spanish education system) being the most frequent. Therefore, although valid for the intended aims of Medvedeva and Portes, this operationalization does not work for capturing immigrants’ type of language acculturation in the sense analyzed here.

Regarding the explanations for the patterns of language acculturation found in the specialized literature, there are three main sets of socio-linguistic theories that posit explanations for OL acquisition and HL attrition that must be considered (Parameshwaran 2014). The first one sees the starting age of exposure to the language as the key factor: the lower the starting age of exposure, the more rapid and intense the HL attrition and the faster and more successful the OL acquisition (e.g., Long 1993; Schmid 2002). The second one emphasizes the role of sources of language contact and opportunities to use a language (e.g., Köpke and Schmid 2004). Opportunities for both OL and HL contact, which depend strongly on individuals’ social context and media use, would determine their proficiency in both languages and, consequently, the type of language acculturation. A third set of theories focuses on attitudes, motivations, and other affective factors regarding the cultures, countries, or assimilation processes involved. One of these factors is attitudes towards languages, which has been repeatedly highlighted as playing a very important role in second language learning (Lambert 1984; Tremblay and Gardner 1995; Ibarra *et al.* 2008).

In addition to these three sets of theories, different types of explanations have stressed the role that traits and peculiarities associated with national or ethnic groups often play in these processes of acculturation. Hence, when analyzing this issue, the national origin or ethnicity variable must be considered.

3. The Spanish context: immigration and languages

From the second half of the 1990s until 2008, Spain experienced an unparalleled boom in immigration among OECD countries (Miyar 2020). During this “prodigious decade of immigration” in Spain (Arango 2009), the foreign population went from less than one and a

half million, to more than six million; from 2% to 16% of the total working-age population. In Madrid and Cataluña, two of the self-governing regions with the largest populations of immigrants, growth was even higher.

Before the start of the great recession — and about a year before the data used for this study were compiled —, the 2007 National Survey of Immigrants (ENI) offered the best picture on the composition of the immigrant population in Spain. Latin Americans (37.2%) and Europeans (31.6%) were clearly the largest groups, followed by Africans (13.1%), while immigrants from other regions accounted for 18% of the total (Reher and Requena 2009). Regarding the linguistic composition, Spanish was the native tongue for 45% of immigrants, Indo-European languages for 19.4%, languages derived from Latin other than Spanish for 18.2%, Afro-Asian languages for 11.6%, Oriental languages for 1.4%, African languages 0.8% and other languages 3.6% of them (INE 2009). In addition, we must consider Spain's own multilingual profile since Spain combines Spanish as the official language and several co-official languages. One of those is Catalan, which is co-official language in Catalonia and, more specifically, in Barcelona, one of the two areas included in the ILSEG sample.

Such important demographic change reached the Spanish education system. Consequently, self-governing regions began to implement educational integration policies aiming at responding to this challenging new reality. Language measures have been central. In fact, the creation of special-assistance classes for new immigrant students, devoted primarily to teaching the OL, is the type of policy into which the greatest efforts have been poured (Terrén 2008; Rahona and Morales 2013). Madrid and Catalonia, the two self-governing regions on which this study focuses, are no exception.

In contrast, efforts devoted to the teaching of immigrants' native languages have been scarce in Spain (Jiménez-Delgado 2016; Rodríguez-Izquierdo and Darmody 2019). ELCO programs (Spanish acronym for Teaching of the Language and Culture of Origin in minority groups) have been the major and almost only public policy that implies a linguistic acknowledgement of these minorities (Mijares 2006). They operate as bilateral agreements in which the Spanish authorities facilitate access to schools, while the country whose native language is to be taught provides the necessary teaching staff and pays their salaries. However, the level of implementation has been very low (Mijares 2006; Martínez de Lizarrondo 2009): in the whole country, only three ELCO programs have been established (Moroccan, Portuguese, and Romanian); and the percentages of students who have accessed these programs are very low. For instance, in 2006/07, the year before the data

for this study were collected, only 5.7% of Moroccan students in Madrid and 4% in Catalonia participated in the Moroccan ELCO program (Terrén 2008: 186).

Hence, in terms of public policies, efforts have targeted the acquisition of OLs among children of immigrants. Consequently, public administrations have promoted the monolingual assimilation path. This reveals a contradiction that has been noticed by many scholars (e.g., Martínez de Lizarrondo 2009; García *et al.* 2015; Jiménez-Delgado 2016), since, during this “prodigious decade of immigration” in Spain, the discursive level detected on political programs and in policy makers’ statements was dominated by the rhetoric of the intercultural education model, which considers the learning of HLs to be a key element for the development of intercultural societies.

4. Method

4.1. Data and method

ILSEG is a research designed to study the integration processes of second-generation immigrants in Spain. It replicates the methodology of the Children of Immigrants Longitudinal Study (CILS) in the United States, a major empirical source for the theory of segmented assimilation. It contains representative samples of second-generation youths in the metropolitan areas of Madrid and Barcelona. In this paper, we use data from the first stage of the ILSEG survey, conducted in secondary schools during the fall of 2008. These were the only data publicly available by the time we began the paper.

The samples of schools in each area were stratified by type of school (public/private) and by geographical location. A total of 180 schools participated (101 in Madrid and 79 in Barcelona). Data were mainly gathered from the second and third years of compulsory secondary education, since they included the population of average age 14, which was the target universe. Within each school, all second-generation students were included in the sample. As in the CILS, second generation was defined as children with at least one foreign-born parent, whether born in Spain or having arrived in the country before age 12 (Medvedeva and Portes 2017).

Since this paper aims to study language acculturation, our analyses are restricted to second-generation youths with no Spanish-speaking origin. Among them, we only excluded cases in which the “foreign” language reported by the students did not correspond to any language of origin of the countries of either of their parents or of themselves. This

was done to avoid the possible inclusion of cases in which the foreign language learned or maintained had no relation to migration (e.g., second-generation students from non-English-speaking countries who learn English through the Spanish education system). Following this process, the working sample for this paper was $n=1,968$.

Characteristics	Value	n
Age (mean)	13.82 (1.25)	1,891
Sex (%)		
Female	48.4	938
Male	51.6	1,002
Place of residence (%)		
Barcelona	58.3	1,148
Madrid	41.7	820
Family SES (mean)	0.026 (0.75)	1,968
Origin (%)		
Morocco	28.5	559
Western Europe	12.3	241
Romania	10.6	208
Other Eastern Europe	11.7	230
China	12.2	239
Pakistan	6.8	133
Other Asia	7.5	147
Others	10.3	202
Country of birth (%)		
Spain	27.0	523
Other	73.0	1,417
Age on arrival (mean)	6.2 (4.79)	1,884
Language spoken at home (%)		
Spanish or Catalan	24.6	480
Heritage language	67.5	1,317
OL (Spanish or Catalan) and HL	7.9	154
Preferred spoken language (%)		
Spanish or Catalan	65.7	1,245
Heritage language	33.0	649

Table 3. *Sample characteristics*. Source: ILSEG. Authors' own.

Note: standard deviation in brackets.

As shown in Table 3, this subsample consists mainly of foreign-born youths (73%), with 27% being born in Spain. Moroccan origin constitutes the largest group (28.5%), followed by a cluster of groups with similar proportions – Western Europe (12.3%), China (12.2%), Romania (10.6%) and other Eastern European countries (11.7%)—. The average length of their residence in Spain is around 7.5 years, and the average age on arrival was 6. Around 58% of the respondents live in

Barcelona and 42% in Madrid. As for distribution by sex, 51.6% are male and 48.4% female.

4.2. Variables

The ILSEG study contains self-reported language proficiency measures that we exploit here. To measure proficiency in HLs and in OLs, two indices were created. The ‘index of knowledge of heritage language’ (IKHL) measures children of immigrants’ self-reported proficiency in their HL. The ‘index of knowledge of official language’ (IKOL) does the same with the OL. In this case, two indices were previously created: one of them measures proficiency in Spanish and the other in Catalan. The IKOL is computed as the maximum value reached in both. As in previous studies (e.g., Portes and Rumbaut 2001; Berry *et al.* 2006), each of these indices is defined as a summated rating scale of self-reported ability to speak, understand, read, and write the language. Self-reported language ability is measured through answers to the questions ‘how well do you speak/understand/read/write that language?’ Answers were given on a 4-point scale, from *little* (1) to *perfectly* (4). Internal consistency among the four items is high (Cronbach’s alpha coefficient is 0.85 for the HL items, 0.92 for the Spanish ones, and 0.94 for the Catalan ones).

At this point we must clarify that although, obviously, the optimal way to measure language proficiency is through standardized objective tests, previous research has shown that self-assessments of language proficiency correlate with linguistic test scores and are a reliable measure of the actual knowledge of a language (Stolzenberg and Tienda 1997; Hulsen 2000). Consequently, they have repeatedly been used in prior studies to measure the language proficiency of children of immigrants (e.g., Mouw and Xie 1999; Parameshwaran 2014; Medvedeva and Portes 2017). Furthermore, we assume that these measures capture not only the real language proficiency of the participants, but also their language self-esteem (Bourdieu 1991).

As independent variables we use the following. ‘Age on arrival’ and ‘country of birth’ (Spain or another) to test the theory which emphasizes the importance of age of exposure to the language. For the theory that focuses on the attitudinal side of acculturation processes and, more precisely, on the role of attitudes towards languages, we use ‘preferred spoken language’ as a proxy. It distinguishes whether the respondent prefers one of the two main OL in the context of the study (Spanish or Catalan) or his/her HL. For the theories emphasizing the role of sources of language contact and opportunities to use a language, we use ‘language spoken at home’, which differentiates three categories: OL, HL, and both an OL and a HL. We also include a variable that captures the

national or ethnic origin of the children of immigrants as an independent variable. This variable was created using the country of birth of the mother and father. It is divided into eight categories (Table 2). Four of them are national categories, while the others are pan-national categories. The use of this categorization is justified by the need to avoid problems derived from conducting analyses on sub-populations with a very small number of cases. When defining these categories, we considered the geographical area and size of the groups, which, it was established, should be at least 100 observations.

As control variables, we use 'age', 'sex', 'place of residence' (Barcelona or Madrid), and 'family SES', which is measured as a standardized sum of the father's and mother's education and occupation.

4.3. Analytical strategy

In line with previous studies (Berry *et al.* 2006), cluster analysis was used to identify patterns of acculturation. We conducted cluster analysis with variables IKHL and IKOL using the *k*-means method. Because this method is sensitive to the chosen number of clusters, we first ran exploratory analyses with 20% of the analyzed sample, randomly selected. Considering both the results of these first analyses and the fit with our theoretical framework, we decided to run the final analyses (with the whole of the working sample) using four clusters. Firstly, we ran bivariate analyses in order to gain an initial understanding of the relationship between our independent variables and the clusters and, consequently, of the profiles of those who fall within each of the patterns of language acculturation defined by the clusters. Next, we conducted a multinomial logistic analysis to identify variables that have some effect on the odd ratios of belonging to a given cluster or pattern of language acculturation, taking the linguistic marginality type as reference.

5. Results

5.1. Types of language acculturation

Results from cluster analysis show that children of immigrants from non-Spanish-speaking countries are grouped in four acculturation profiles that correspond to the four types of language acculturation described by Esser (2006). The first cluster (with low scores in IKHL and high in IKOL) corresponds to monolingual assimilation, the second one (low scores both in IKHL and IKOL) to linguistic marginality, the third one (high scores in IKHL and low scores in IKOL) to monolingual

separation, and the fourth one (high scores both in IKHL and IKOL) to competent bilingualism (Figure 1).

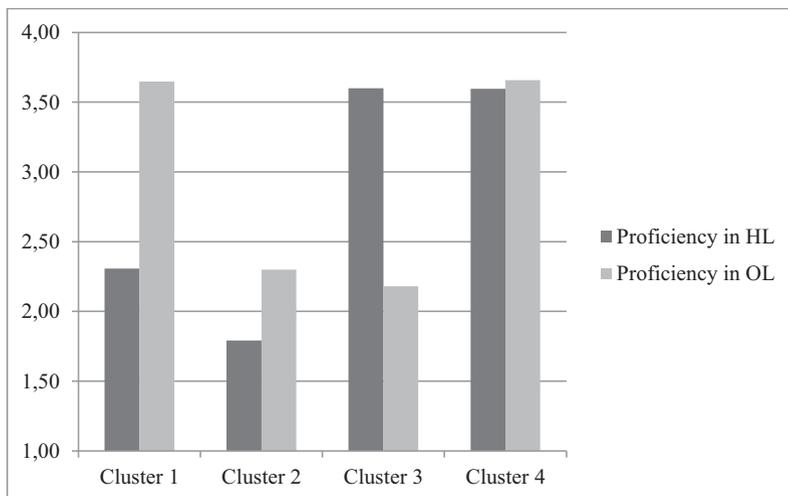


Figure 1. *Final cluster centres.* Source: ILSEG. Authors’ own.

More than half (55%) of youths fall into competent bilingualism, which facilitates inclusion both in the host society and the ethnic group; 26.3% fall into the monolingual assimilation type, which promotes inclusion in the host society and hinders inclusion in the ethnic group; 12.2% fall into monolingual separation, which facilitates inclusion in the ethnic group but obstructs it in the host society; while only 6.5% fall into linguistic marginality, which does not promote inclusion in either of the two social systems (Table 4).

Language proficiency	Competent bilingualism	Monolingual assimilation	Monolingual separation	Linguistic marginality	Total
Proficiency in the 4 language domains	55.0	26.3	12.2	6.5	100
Understanding (listening)	83.3	7.5	6.8	2.3	100
Speaking	76.8	10.7	9.3	3.1	100
Reading	60.2	25.8	9.3	4.7	100
Writing	56.3	22.9	7.9	12.9	100
N	1,082	518	241	127	1,968

Table 4. *Distribution of children of immigrants from non-Spanish-*

speaking countries in Spain across types of language acculturation.

Source: ILSEG. Authors' own

From the perspective of OL learning, this distribution implies that 81.3% of these youths (competent bilingualism + monolingual assimilation) perceive that they have a very high level in the OL, while the remaining 18.7% perceive that they have some problems. From the perspective of HL learning or maintenance, 32.8% of the children of immigrants from non-Spanish-speaking countries assume they do not have a very good level in their HL. And from the joint perspective of competent bilingualism, 55% would be exploiting the bilingual potential of the scenario in which they live.

When distinguishing the types of language adaptation according to the four domains (Table 4), we see that the tendency towards competent bilingualism is greater in the oral than in the written ones, and, within each of these two groups, it is greater in the receptive ones (understanding and reading) than in the productive ones (speaking and writing). Quite the opposite occurs with monolingual assimilation. This shows that the acquisition of the HL is, compared to that of the OL, weaker in the more academic skills (writing and reading), acquired in a more differential way at school.

5.1. Explanations for the patterns of language acculturation

We now turn to analyze the effect of the independent and control variables considered. This will also improve understanding of the profiles of the children of immigrants who fall into each pattern. Starting with the bivariate analyses, we find that, except for 'age' and 'sex', all of our independent and control variables are strongly correlated to the dependent variable (Table 5).

Characteristics	Competent bilingualism	Monolingual assimilation	Monolingual separation	Linguistic marginality	Total (n)
Age (mean)	13.8	13.9	14.0	13.9	13.8 (1891)
$F = 3.427, n.s.; n = 1,891$					
Sex					
Female (%)	54.9	27.7	11.3	6.1	100 (938)
Male (%)	56.0	25.1	12.6	6.3	100 (1,002)
$\chi^2 = 2.007, n.s.; n = 1,940$					
Family SES (mean)	0.075	-0.014	-0.031	-0.117	0.026 (1,968)
$F = 4.038***; n = 1,967$					
Place of residence					
Barcelona (%)	57.0	21.9	13.1	8.1	100 (1,148)
Madrid (%)	52.2	32.6	11.1	4.1	100 (820)
$\chi^2 = 35.883***; n = 1,968$					
Age on arrival (mean)	6.0	3.9	10.5	9.0	6.18 (1,884)
$F = 139.04***; n = 1,884$					
Country of birth					
Spain (%)	55.3	41.5	1.1	2.1	100 (523)
Other (%)	55.3	20.7	16.1	8.0	100 (1,417)
$\chi^2 = 154.274***; n = 1,940$					
Language spoken at home (%)					
Spanish or Catalan	57.3	39.2	1.5	2.1	100 (480)
Heritage language	54.1	20.1	17.16	8.6	100 (1,317)
OL (Spanish or Catalan) + HL	55.2	39.0	3.9	2.0	100 (154)
$\chi^2 = 167.95***; n = 1,951$					
Preferred spoken language (%)					
Spanish or Catalan	57.4	33.7	4.7	4.3	100 (1,245)
Heritage language	52.9	12.3	25.3	9.6	100 (649)
$\chi^2 = 249.58***; n = 1,894$					
Origin					
Morocco (%)	50.3	38.3	7.9	3.6	100 (559)
Western Europe (%)	66.0	31.1	2.1	0.8	100 (241)
Rumania (%)	72.0	16.4	7.2	4.3	100 (208)
Other Eastern Europe (%)	57.8	25.7	12.6	3.9	100 (230)
China (%)	28.5	9.6	38.5	23.4	100 (239)
Pakistan (%)	61.7	12.8	17.3	8.3	100 (133)
Other Asia (%)	51.7	31.3	8.8	8.2	100 (147)
Others	62.9	23.3	9.9	4.0	100 (202)
$\chi^2 = 434.782***; n = 1,959$					

Table 5. *Characteristics of children of immigrants in Spain across types of language acculturation, with goodness-of-fit statistics.*

Source: ILSEG. Authors' own.

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n.s. = not significant.

We see, for instance, that children of immigrants who fall into the two types of language acculturation that imply higher proficiency in the OL (competent bilingualism and monolingual assimilation) are clearly the ones that, on average, arrived in Spain at an earlier age. Both types are also more frequent among those born in Spain — a very small minority (3.3%) of them fall into the separation and marginality types, while among those born abroad this proportion is practically a quarter (24.1%)—. Competent bilingualism is also more likely among youths with a higher socioeconomic background. As for the language spoken at home variable, we see that, compared to the other categories of this variable, those who speak a HL at home tend to be more concentrated in the monolingual separation and the linguistic marginality types. In contrast, those who speak an OL at home and those who speak both an OL and a HL tend to fall to a greater extent into the monolingual assimilation type. We find similar results with the ‘preferred spoken language’.

With regard to geographical origin, for almost all the national or ‘ethnic’ groups, competent bilingualism and, to a much lesser extent, monolingual assimilation are the most frequent types, while monolingual separation and linguistic marginality are the minority (Table 5). Youths with a Chinese background are the great exception to this pattern. They fall in high proportions not only into the monolingual separation (38.5%) but also into the linguistic marginality type (23.4%). Therefore, they are the ones who clearly present the most problematic situation in terms of linguistic integration into the host society.

Nevertheless, beyond bivariate correlations, when adding all the variables to the multinomial regression (Table 6) we see that only a few of them show significant effects on the odds of falling into the different types of language acculturation analyzed. Age on arrival is the only one that has a significant effect on the three types. The odds ratio shows that this variable is negatively and significantly associated with the likelihood that children of immigrants will fall into the two types which imply a high proficiency in an OL, while positively and significantly associated with the odds that they will fall into the monolingual separation type. Concretely, the odds of being a competent bilingual decrease by 21% for every year’s increase in the age on arrival, by 28.5% in the case of monolingual assimilation. They increase by 25% in the case of monolingual separation.

The way it is operationalized, ‘preferred spoken language’ has a significant and, as expected, opposite effect on the two acculturation types that imply having a clear dominant language. Thus, we see that when children of immigrants have their HL as their preferred spoken language, the odds of falling into the monolingual assimilation type decrease by 50%, whereas the odds of falling into the monolingual separation type increase by almost 80%.

These results give clear empirical support to two of the theories tested: the age of exposure theory, and the one that focuses on the attitudes towards languages. In contrast, in this case we find no support for the theory that emphasizes the role of sources of language contact and opportunities to use a language, although it has only been measured in one of the linguistics domains (speaking) and within the home environment. As shown in Table 4, after controlling for all the other variables, ‘language spoken at home’ does not have any significant effect on any of the types of language acculturation.

As for the differences by ethnicity or national origin, only two of the ‘ethnic groups’ show some significant effects when the other independent and control variables are taken into account. This is the case for youths with a Chinese background, for whom the odds of falling into competent bilingualism or into monolingual assimilation are around 95% lower compared to their Western European peers. Likewise, youths from an Asian background aside from China and Pakistan also have about 85% lower odds of being competent bilinguals. We took the Western Europe group as the reference category because this group showed higher proportions of youths who were linguistically integrated into the host society according to their proficiency in OL (Table 5).

Variables	Competent bilingualism			Monolingual assimilation			Monolingual separation		
	Exp(B)	CI-	CI+	Exp(B)	CI-	CI+	Exp(B)	CI-	CI+
Family SES	1.321	0.694	2.512	0.951	0.482	1.879	1.376	0.662	2.862
Age	1.154	0.938	1.420	1.194	0.956	1.491	0.785*	0.618	0.998
Age of arrival	0.787***	0.703	0.880	0.715***	0.636	0.804	1.249**	1.088	1.434
Sex (ref. Male)									
Female	1.028	0.663	1.596	1.133	0.706	1.819	0.848	0.518	1.388
Place of residence (ref. Madrid)									
Barcelona	0.910	0.527	1.571	0.469*	0.263	0.839	0.547*	0.300	0.996
Country of birth (ref. Spain)									
Birth in other country	2.654	0.776	9.074	3.442	0.977	12.130	0.483	0.483	0.082
Origin (ref. Western Europe)									
China	0.035***	0.008	0.158	0.046***	0.009	0.223	0.736	0.108	5.001
Other Eastern Europe	0.390	0.077	1.966	0.639	0.122	3.356	0.972	0.128	3.545
Other Asia	0.147*	0.030	0.722	0.352	0.069	1.796	0.544	0.070	13.356
Morocco	0.355	0.075	1.675	0.774	0.160	3.738	1.153	0.161	5.397
Romania	0.727	0.133	3.970	0.638	0.111	3.677	0.624	0.075	3.286
Pakistan	0.270	0.053	1.379	0.305	0.055	1.708	0.841	0.108	5.334
Others	0.382	0.076	1.913	0.461	0.088	2.403	0.885	0.116	6.107
Language spoken at home (ref. Spanish/Catalan)									
OL (Spanish or Catalan) + HL	1.643	0.405	6.666	1.555	0.374	6.473	1.700	0.279	5.111
Heritage language	0.992	0.435	2.260	0.762	0.326	1.778	1.668	0.534	10.371
Preferred spoken language (ref. Spanish/Catalan)									
Heritage language	0.902	0.558	1.460	0.504*	0.294	0.863	1.796*	1.030	5.204

Table 6. *Multinomial regression*. Source: ILSEG. Authors' own.

Notes: Reference category: Linguistic marginality. Exp(B)=odd ratios, CI-, CI+=confidence interval for odd ratios at 95%. n=1,968, R²=0.337 (Cox and Snell),

$\chi^2=717.90^{***}$. *p < 0.05; **p < 0.01;

***p < 0.001; n.s. = not significant.

Regarding the control variables, the effect of place of residence should be mentioned. Compared to the children of immigrants living in

Madrid, those who reside in Barcelona have significantly lower odds of falling into the two monolingual types of language acculturation (the odds drop 53% in the case of monolingual assimilation and 45% for monolingual separation). Perhaps the distinctive bilingual setting of Catalonia regarding the OL contributes to this result.

6. Discussion and conclusions

This article is part of a research tradition dedicated to analyzing the acculturation processes of so-called second generations of immigrants (e.g., Portes and Rumbaut 2001; Berry *et al.* 2006; Parameshwaran 2014; Portes *et al.* 2016). More specifically, we have studied the language acculturation of children of immigrants in Spain, a country that has experienced one of the largest growths in the number of immigrants in recent decades, at the end of that period of extraordinary growth. A period in which, in addition, among the educational policies for the integration of the immigrant population in Spain, the language measures devoted to the teaching of the official language of the host society were those into which the greatest efforts were poured. Therefore, the article aimed to provide a snapshot of this issue in such historical context, which is of great importance for the country because it represents the establishment of the transition from being a country of emigration to a country of immigration.

First, we have provided insights on how these youths combine the acquisition of the country's official language and the learning or maintenance of the heritage language in terms of proficiency. Second, we have shed light on factors that explain the different language acculturation patterns identified in these youngsters. We followed Esser's (2006) typology of language adaptation, which adapts Berry's (1997) two-dimensional model of acculturation, one of the most influential approaches when it comes to analyzing such processes (Paredes 2020).

Results from cluster analyses show that the processes developed by the youths in the sample analyzed correspond to the four types of language acculturation described by Esser (2006). Competent bilingualism is the prevalent type of language acculturation, followed by monolingual assimilation and monolingual separation, while linguistic marginality is the minority. Within Berry's framework, the prevalence of competent bilingualism points to a trend towards *integration* (when migrants maintain their cultural heritage while participating in the culture of the host society) as the most frequent pattern of acculturation. This prevalence is good news in terms of both social inclusion —since competent bilingualism facilitates inclusion in the ethnic group and in the host

society— and interculturality. However, 45% of the sample does not fall into this type, which means that there is still a great deal of room for competent bilingualism to grow. Results show that, at the time these data were collected, the greatest potential for this growth among this population resided in learning or maintaining their heritage languages. Specially, if we assume that, on average, the respondents who fell into the separation and marginality categories had been living in Spain for a relatively short period of time, it is likely that many of them will have moved away from these two types as their length of residence increases and their proficiency in Spanish or Catalan improves. The results also show that, compared to the official languages in Spain, the acquisition of heritage languages is poorer in the more academic domains (writing and reading).

These initial findings offer a clear interpretation in terms of policy orientation, particularly if we put them together with the fact that language and education policies aimed at immigrants and their children in this country have focused on the teaching of Spanish (and other co-official languages), while the teaching of heritage languages is practically non-existent (Jiménez-Delgado 2016). Hence, we can say that the bilingual potential of children of immigrants is not being exploited by the Spanish administrations. It seems clear that these youths, but also their ethnic communities and the host society, would potentially benefit from measures seeking to improve their proficiency in their heritage languages.

Regarding the explanatory purpose of this article, we have tested the main set of socio-linguistic theories that posit explanations for OL acquisition and HL attrition (Parameshwaran 2014). The results offer empirical support to theories emphasizing the role played by age of exposure (Long 1993; Schmid 2002) and attitudes towards languages (Lambert 1984; Tremblay and Gardner 1995; Ibarra *et al.* 2008). These two factors significantly affect the odds of the type of language acculturation followed. In particular, the later the age of arrival in Spain (and thus the later the age of exposure to OLs), the more likely they are to fall into monolingual separation and the less likely they are to fall into monolingual assimilation and competent bilingualism —the two types that imply a high proficiency in an OL—. Likewise, a positive attitude towards speaking in the HL rather than an OL increases the odds of falling into monolingual separation and decreases the odds of falling into monolingual assimilation.

In contrast, our results do not support the theory that emphasizes the role of sources of language contact and opportunities to use a language. However, we acknowledge that, because of certain limitations in the exploited data, the way we have approached the measurement of this explanation is very narrow. Consequently, in terms of policy orienta-

tion, the continued development of linguistic measures that increase the exposure of children of immigrants to OLs and promote their learning would appear to be desirable. Especially in the cases of those who arrive in Spain at a later age or who, influenced by other factors, as is the case with a significant percentage of children of Chinese origin, fall into the monolingual separation or into the linguistic marginality types.

Finally, it is interesting that no significant differences have been found between most national or ethnic groups once the other variables are controlled for. A priori, this result rules out other ethnic or cultural explanations in the processes of language acculturation of these groups. Youths with a Chinese background are, as mentioned, the only exception. Language distance to Spanish and Catalan and high levels of ethnic endogeneity in their social networks found by recent studies based on Spain (Badanta *et al.* 2021a; 2021b; Wang 2021) are plausible explanations for this.

Despite the advances made in this paper in terms of understanding a relatively new immigration country like Spain at the end of the period of the largest growth of the immigrant population for this country, more and better data on this country are still needed on this topic. Specially, the results of this paper and the policy implications derived from them should clearly be reviewed in the light of more recent data. Likewise, it would be valuable for future research on Spanish territories with multiple official languages to distinguish the proficiency of each of these languages in their analyses. This is something we have not done here in order to be more in line with our main objectives, as well as for the sake of brevity and comparability. Nevertheless, we consider that it should be taken into account given the complex and different situations of language acculturation and language uses found in such contexts (see, e.g., Corona and Block 2020; Srhir and Esbert 2022). Finally, we believe that more qualitative studies are needed to deepen our understanding of the nuances and complexity of the language acculturation patterns of different ethnic groups.

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