



# DEMOGRAPHIC RESEARCH

*A peer-reviewed, open-access journal of population sciences*

---

## ***DEMOGRAPHIC RESEARCH***

**VOLUME 40, ARTICLE 37, PAGES 1063–1096**

**PUBLISHED 24 APRIL 2019**

<https://www.demographic-research.org/Volumes/Vol40/37/>

DOI: 10.4054/DemRes.2019.40.37

*Research Article*

### **The living arrangements of Moroccans in Spain: Generation and time**

**Chia Liu**

**Albert Esteve**

**Rocío Treviño**

© 2019 Chia Liu, Albert Esteve & Rocío Treviño.

*This open-access work is published under the terms of the Creative Commons Attribution 3.0 Germany (CC BY 3.0 DE), which permits use, reproduction, and distribution in any medium, provided the original author(s) and source are given credit.*

*See <https://creativecommons.org/licenses/by/3.0/de/legalcode>.*

## Contents

|     |  |      |
|-----|--|------|
| 1   | Introduction   | 1064 |
| 2   | Background   | 1065 |
| 2.1 | Moroccan migrants in Spain                                     | 1065 |
| 2.2 | Families in Spain and in Morocco                               | 1066 |
| 2.3 | Living arrangements of migrants as a proxy for family dynamics | 1067 |
| 2.4 | Migrant generation and time                                    | 1067 |
| 3   | Data and methodology   | 1070 |
| 4   | Results  | 1073 |
| 4.1 | Descriptive findings   | 1073 |
| 4.2 | Logistic regression  | 1075 |
| 4.3 | Origin, migrant generation, and time dimensions                | 1078 |
| 5   | Discussion   | 1081 |
|     | References   | 1086 |
|     | Appendix   | 1094 |

## **The living arrangements of Moroccans in Spain: Generation and time**

**Chia Liu<sup>1</sup>**

**Albert Esteve<sup>2</sup>**

**Rocío Treviño<sup>2</sup>**

### **Abstract**

#### **BACKGROUND**

Southern Europe experienced large-scale migration in the recent decades. Compared to regions with a longer migration history, the assimilation and socialization processes of family formation and age of childbearing for young adults of migrant background is underexplored. Spain, in particular, is now home to a burgeoning second generation of which little is known.

#### **OBJECTIVE**

This study explores the family living arrangements of Moroccans in Spain by migrant generation and time, using census microdata from the Integrated Public-Use Microdata Series International (IPUMS-i) and the Spanish Statistical Office (INE). We examine the living arrangements as an estimate for family processes for young adults of Moroccan origin between ages 20 to 34 separately by sex.

#### **METHODS**

Taking a cross-national perspective, we examine the level of coresidence with parent(s), spouse, and child(ren) for young adults aged 20 to 34 in three groups – Moroccans in Spain, nonmigrants in Morocco, and nonmigrants in Spain – using binomial logistic regression.

#### **RESULTS**

Results show that 1.5 and second generation Moroccan women transition into adulthood at younger ages than their Spanish counterparts, except for the ones who are highly educated. The differences in living arrangements between Moroccans in Spain and the nonmigrant Spanish population widened between 2001 to 2011, possibly due to the fact that coresidence with kin is subject to the influence of migrant stock flow.

---

<sup>1</sup> Max Planck Institute for Demographic Research, Rostock, Germany. Email: [liu@demogr.mpg.de](mailto:liu@demogr.mpg.de).

<sup>2</sup> Centre d'Estudis Demogràfics (CED), Barcelona, Spain.

## **CONTRIBUTION**

We incorporated a region-of-origin approach in combination with classical assimilation and socialization theories to study migrant family processes in Spain by using living arrangement as a proxy.

## **1. Introduction**

Among the various migrant communities residing in Europe, Moroccans are now one of the largest and most geographically dispersed (de Haas 2014). Over three million people of Moroccan descent currently reside in Europe (ibid.). Early Moroccan migrants gravitated toward France, Belgium, and the Netherlands but since 2000, Spain has become the leading European destination for Moroccan migration (ibid.), to such an extent that the Moroccan population in Spain grew from 173,158 in 2000 to 773,995 in 2011 and represents roughly 20% of all Moroccans residing in Europe (Aneas, Garreta, and Molina Luque 2012). Despite the importance of Moroccan migration in Spain, research on their family lives, especially for the second generation, is scarce. Most earlier studies on Moroccan migrants and their descendants focus on those living in Belgium, France, and the Netherlands (Schoenmaeckers, Lodeqijckx, and Gadeyne 1999; Crul and Doomernik 2003; Crul and Vermeulen 2003; Cebolla-Boado and López-Sala 2015; De Valk and Liefbroer 2007; Huschek, de Valk, and Liefbroer 2011). Aiming to fill this gap, this paper investigates the living arrangements of Moroccan migrants and their descendants in Spain and compares them with those of Moroccans in Morocco and Spaniards in Spain. Among descendants, we distinguish between the first generation (those who arrived in Spain at the age of 16 or older), 1.5 (those who arrived in Spain under the age of 16), and second generations (those who were born in Spain to migrant parents), with the latter two often lumped together as one group (Aparicio 2007; Crul and Vermeulen 2003; van Heelsum and Kooman 2016; Vitali and Arpino 2015).

A wealth of research on Moroccan migrants and their descendants in Spain sprung in the recent decade, particularly those focusing on educational, economic, and marital outcomes (Alarcón, Parella, and Yiu 2014; Bertran Tarrés, Ponferrada-Artaega, and Pàmies Rovira 2016; Bradatan and Sandu 2012; Cebolla and Requena 2010; Cortina Trilla, Esteve, and Domingo 2008; Esteve and Bueno 2010, 2012; Esteve and Cortina 2012; Esteve and Jiménez 2010; Portes, Aparicio, and Haller 2016; De Miguel-Luken and Solana-Solana 2016; Serret, Esteve, and López-Gay 2013). In comparison, fewer studies scrutinize the living arrangements and family situations of migrants in Spain (Vitali and Arpino 2015) and, to an even lesser extent, the family life of the second

generation. In the present study, we ask whether the living arrangements of Moroccans in Spain resemble those of nonmigrant Spaniards or are more akin to nonmigrant Moroccans.

We examine whether a pattern of changes is discernible from one generation to the next and whether migrants deviate from traditional Moroccan family norms using census microdata from both Spain and Morocco, an approach that has been little employed in European migration literature. The extent to which individuals observe cultural prescriptions, such as the age of departure from the parental home, union formation, and childbearing, is subject to modification after migration (De Valk and Billari 2007). We use three aspects of living arrangements – spousal, parental, and child coresidence – as an indirect approximation of family decisions for young adults of Moroccan origin.

## **2. Background**

### **2.1 Moroccan migrants in Spain**

Europe has experienced large-scale Muslim immigration for decades, from early receivers like the Netherlands, which saw its migration peak in the 1970s (Crul and Vermeulen 2003), followed by Belgium in the 1990s (Lievens 1999), through to latecomers like Italy and Spain in the 2000s (Fokkema and de Haas 2015). The majority of Muslim migrants are from North Africa and the Middle East, with Turks and Moroccans being the two largest groups (Ennaji 2014). Bearing the timeline of migration, literature focusing on migrants, and particularly the descendants of migrants, is far thinner in countries such as Spain.

Spain and Morocco have a long-standing tradition of bidirectional migratory movements, but the massive and mostly unidirectional migration flow from Morocco to Spain did not start to occur until the mid-1980s in response to a rising demand for low-skilled labor in agriculture, construction, and services (de Haas 2014; Ennaji 2014; Gabrielli 2015). As a result, Moroccans at first settled mainly in areas in need of agricultural and service-oriented labor, such as Catalonia, Madrid, and Andalusia, but recent migration has spread to other regions, including less traditional destinations such as La Rioja, Navarre, and Aragon (Gabrielli 2015). Moroccans tend to cluster in low-income neighborhoods, leading to high residential segregation (Bayona-i-Carrasco and Achebak 2016; Cebolla and Requena 2010; Galeano and Sabater 2016). In Barcelona and other large cities, Moroccan children now make up the largest foreign population in schools (de Miguel-Luken and Solana-Solana 2016).

In the last three decades, the demographics of Moroccans in Spain, influenced by periods of migratory ebb and flow, have been changing rapidly. Earlier settlements tended to be of a temporary nature, but, ironically, tougher border restrictions and controls pushed many migrants to settle permanently but without documentation in the 1990s (de Haas 2014). Early settlers were mostly unmarried male job seekers and, in far lower numbers, female migrants who entered the country as spouses (Cortina Trilla, Esteve, and Domingo 2008; Esteve and Bueno 2010, 2012; Esteve and Cortina 2012). In more recent waves, there has been an increase of female economic migrants working in the domestic sectors (Campani and Chapali 2013; Ennaji 2014; Ouali 2003; Pham 2013) in addition to intensified female migration due to family reunification (Alders 2000; Esteve and Jiménez 2010; Lievens 1999). However, Moroccan migration still skews toward males (Campani and Chiappelli 2013).

## **2.2 Families in Spain and in Morocco**

Spain, alongside other Mediterranean countries, is considered family-centric, where young adults often leave the parental home only when they are ready to enter marriage (Reher 1998). It is a society characterized by strong family ties manifested through high parental coresidence and oftentimes economic dependency for young adults (ibid). Demographic transition has led to smaller family size in Spain. This is exemplified by the low total fertility rate (TFR) of 1.4 in 2010 (UN 2017a) and the late mean age of marriage of 33.4 for men and 31.3 for women in 2011 (Eurostat 2019), a drop from 28.4 and 26 for men and women respectively in 1991 (UN 2015).

Moroccan families hold several distinct characteristics from Spanish families. Adult children live with parents under different contexts in Morocco, namely, through intergenerational coresidence of married individuals living with their spouse, child(ren), and parent(s) (UN 2017b). The gap between the mean age of marriage between men and women is wider than that in Spain, with men on average marrying at 29.8 years old in 1994 to 31.2 in 2004 and women at 25.3 in 1994 to 26.4 in 2004 (UN 2015). The TFR of Morocco, although it experienced a significant decline from 4.5 in 1990 to 2.6 in 2010, is still much higher than Spain (UN 2017a).

Moroccans in Spain face the dilemma of balancing the western standard of acknowledging one's freedom of self-expression in life choices while maintaining the idea that individuals are indispensable pieces of the full puzzle of a family unit (Zarazaga 2008). Nydell (2018) defined Moroccan culture as sharing many core Arabic values, such as that women and men are inherently different and loyalty to one's family is crucial. Under this context, westernization, she further asserts, is seen as a corrupt force weakening Arabic values. The struggle of value discrepancy, which leads to a

varying degree of an intergenerational transmission of values between migrant generations, has been scrutinized in a number of studies (e.g. Merz et al. 2009; Phalet and Schönpflug 2001), most concluding that transmission does not entail full replication.

### **2.3 Living arrangements of migrants as a proxy for family dynamics**

We opted to focus on family behavior and explore living arrangements as an indirect estimate of decisions involving family life. Living arrangements are a reliable proxy for family dynamics and a key to understanding the family context of international migrants. They provide an overview of household structures and, at the individual level, of the propensity for and timing of leaving the parental home, entering into a union, and having children.

Compared with other outcomes (e.g., education, work, or health), coresidence patterns of migrants and their descendants are far less studied (Kulu and González-Ferrer 2014). The existing literature on the living arrangements of migrants tends to focus on young adulthood, a critical period of transition and emancipation (Arpino, Muttarak, and Vitali 2015; Adamopoulou 2016; Billari and Liefbroer 2007; de Valk and Billari 2007; Ferrari and Pailhé 2017; Vitali and Arpino 2015; Zorlu and van Gaalen 2016). In the cases of France, Belgium, and the Netherlands, previous research has shown that Moroccans are more likely to marry (Huschek, de Valk, and Liefbroer 2011; Pailhé 2015), leave the parental home (Zorlu and Mulder 2011; Zorlu and van Gaalen 2016), and have children (Garssen and Nicolaas 2008) earlier than their native European counterparts. This is due not only to structural, namely work and educational, differences between the migrants and the host population (Pailhé 2015) but also to cultural factors and migrants' levels of social embeddedness (de Valk and Schans 2008; Huschek, de Valk, and Liefbroer 2011). Bearing the relatively young ages of 1.5 and second generation individuals in Spain, the family situation of these coming-to-age young adults is lesser known.

### **2.4 Migrant generation and time**

Analyses of Moroccan living arrangements will be based on two dimensions: generation and time. We explore migrant generational differences in living arrangements by separating them into three groups. We distinguish among first, 1.5, and second generations. First generation migrants are operationalized as those who migrated at age 16 or older (adult migrants), 1.5 generation refers to those who

migrated when they were younger than 16 (child migrants), and second generations are individuals who were born in Spain but have foreign-born parents. Men and women are analyzed separately due to their distinct timing of transition to adulthood (de Valk and Liefbroer 2017).

We seek to explore the family trajectories of Moroccans in Spain, comparing them with both nonmigrants in the destination country (Kulu and González-Ferrer 2014) and nonmigrants in the sending country (Baykara-Krumme and Milewski 2017). The experience of migration may separate migrants from family members who stay behind and interrupt family processes, making nonmigrants in both Spain and Morocco appropriate comparison groups. First generation migrants often live in nonnuclear family households or transitory arrangements (Van Hook and Glick 2007) or have lower fertility levels compared to nonmigrants in the sending country (Baykara-Krumme and Milewski 2017).

Generational differences extend beyond the process of migration, which affects mainly the first generation. The adaptation hypothesis suggests that the second generation may show signs of departure from their parents' customs due to exposure to their current social context (Baykara-Krumme and Milewski 2017; Bordone and de Valk 2016; Merz et al. 2009; Phinney, Ong, and Madden 2000; Ruiz-Román and Rascón 2016). The competing hypothesis, the socialization hypothesis, suggests that migrants or child migrants tend to be influenced by the culture under which their parents grew up or the culture they experienced themselves prior to migration and therefore "[stick] to the family scripts" when making choices (Baykara-Krumme and Milewski 2017). Second generation children may also hold values that differ significantly from children of nonmigrant families in the host country through the expression of "reactive ethnicity" (Diehl and Schnell 2006; Rumbaut 2008; van Heelsum and Koomen 2016). Sometimes a compromise or emergent set of norms develop among young adults of migrant background as a manifestation of their plural cultural identities (Ennaji 2014) and adaptation, which is the product of exposure to both Moroccan and European cultural norms.

*Hypothesis 1:* We expect the living arrangements of the 1.5 generation to be more similar to the nonmigrants in Morocco due to exposure, or socialization to the norms in the sending country, and the living arrangements of the second generations to reflect the levels of parental, spousal, and child coresidence of the nonmigrant Spanish population as a result of adaptation in the host society.

Research has shown that Moroccan men and women follow distinct trajectories in the timing of family transitions (de Valk and Liefbroer 2007; de Valk and Billari 2007). Gender differences emerge as a manifestation of divergent paths in migration, family



negotiation (Bertran Tarrés, Ponferrada-Artaega, and Pàmies Rovira 2016), and integration processes (Fokkema and de Haas 2015). Moroccan families are generally male-dominated and women tend to be as “conduits of family honor” (Pham 2013), with women more susceptible to factors like parental influence (Pailhé 2015) in the decision-making process. Many Moroccan women have arrived as spouses through processes of family reunification. There is also evidence showing that Moroccan women adapt to changing gender relations, frequently in a transformative manner, as they discover a new degree of freedom in destination countries (Ennaji 2014; Schoenmaeckers, Lodewijckx, and Gadeyne 1999). In general, women are more likely to enter union formation and have children earlier than men. However, education correlates negatively with early union formation, hence, college-educated Moroccan women are the exception to the tendency for early marriage and childbearing (Huschek, de Valk, and Liefbroer 2011; Vitali and Arpino 2015).

*Hypothesis 2:* We hypothesize that the 1.5 and second generation Moroccan females would observe a more ‘traditional’ timing for transition to adulthood than nonmigrant Spanish women, which includes leaving the parental home, marrying, and having children at younger ages, with the exception of highly educated females. The convergence of living arrangements between Moroccan women in Spain and nonmigrant Spanish women would be more pronounced than their male counterparts.

Finally, the time dimension refers to the historical context in which family decisions take place. In a more practical sense, the variation in living arrangements among migrant generations also stems from structural factors that change over time, in this case, from 2001 to 2011. For instance, the opportunity constraints pertaining to living arrangements faced by early first generation migrants may be different from those who arrived in later periods. Migration often separates coresidential kin when some members of the family migrated while others stayed behind. The coresidence of kin, therefore, heavily hinges on the family reunification scheme of the host society at the time.

Among earlier migrants, depending on the pool of available kin and potential partners in the country of destination, the timing and patterns of leaving the parental home, forming unions, and bearing children may differ significantly from those of more recent migrants. The period of arrival is therefore important in determining the coresidential pattern of Moroccans in Spain, owing to the fact that the size of this population has changed dramatically over the last two decades. In 2009, Spain expanded the eligibility of its immigration laws in regard to family reunion, making family reunification relatively easy for its migrant communities compared to other EU

countries (MIPEX 2015). In more general terms, with the increase of migrant community size, family network ties tend to strengthen (Grzymała-Kazłowska 2005).

*Hypothesis 3:* As the community size of Moroccans grows in Spain, coresidence with kin, especially with parents, will be higher in 2011 compared to 2001 across board, particularly for the 1.5 and second generation young adults.

We also consider socioeconomic status, specifically, education and work status, as they are crucial factors in determining an individual's living arrangements (Adamopoulou 2016; Ferrari and Pailhé 2017). Moving away from one's parents requires economic resources that may be provided either by the state in the form of welfare and a generous housing policy (Zorlu and Mulder 2011) or earned income. Considering Spain's limited welfare and housing arrangements (Arpino, Muttarak, and Vitali 2015; Meier 2013) compared to countries like the Netherlands (Zorlu and Mulder 2011), employment status becomes particularly important in determining the likelihood of leaving the parental home to start a new household. Moreover, education influences the propensity of union formation and childbearing at young ages, which we intend to capture by looking at the living arrangements of young adults aged 20 to 34 while controlling for educational attainment.

### 3. Data and methodology

Our analyses draw on census microdata from the 2001 and 2011 censuses of Spain and the 1994 and 2004 censuses of Morocco. The Integrated Public-Use Microdata Series International (IPUMS-i) database provided access to the Moroccan samples and to the Spanish sample of 2001. The Spanish data for 2011 was obtained from the website of the Spanish Instituto Nacional de Estadística (National Statistics Institute – INE). The data covers 316,511 unweighted cases from Morocco 1994, 374,973 cases from Morocco 2004, 465,047 cases from Spain 2001, and 611,493 from Spain 2011.

IPUMS-i provides harmonized person-level microdata organized into households and facilitates reliable cross-national comparisons. Household-level data allows identification of interfamily relationships. IPUMS-i also uses pointer variables to identify mother-child, father-child, and spousal relationships among family members. We examine these relationships to establish living arrangements of young adults between 20 and 34 years of age. For every person in this age range, we determine whether he or she is coresiding with at least one of their parents, spouse, or children. Since a large percentage of first generation migrants tend not to live in traditional nuclear households, we created the group 'living in other arrangements' to capture

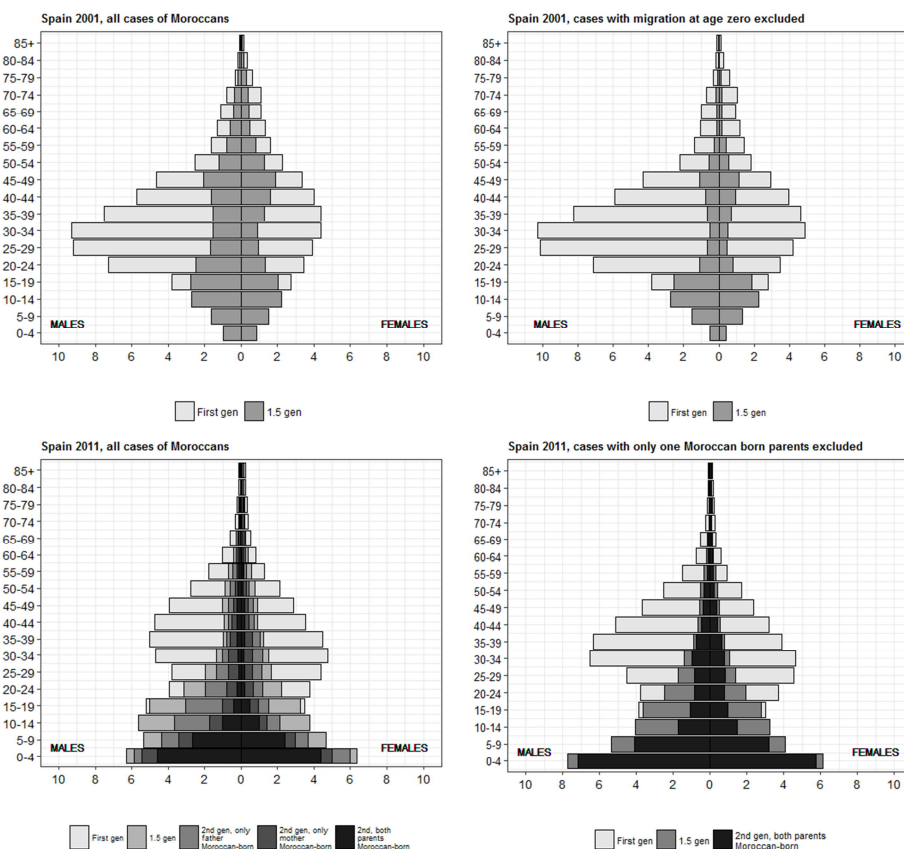
those who were not living with their parents, children, or spouse. Coresidence only implies the presence of one's father, mother, spouse, or child(ren) in the household and does not mean that those who do not coreside with spouses or their children are unmarried or childless respectively.

Spanish censuses facilitate identification of Moroccan migrants by generation on the basis of country of birth and timing of arrival in Spain. Moroccan migrants are classified into first, 1.5, and second generations. First generation migrants are those who were born in Morocco and arrived in Spain at the age of 16 or older. Those who arrived at younger ages make up the 1.5 generation. The second generation is represented by those born in Spain to parents who were born in Morocco. The analysis includes Spanish individuals with no detectable international migration family background, herein referred to as 'nonmigrant Spaniards' (born in Spain with two Spanish-born parents) and Moroccans in Morocco, herein referred to as 'nonmigrant Moroccans.'

The four population pyramids in Figure 1 show the unweighted percentage of Moroccans in Spain by sex, age, and migrant generation in the Spanish censuses of 2001 and 2011. The two top pyramids illustrate population distribution by sex and age for first and 1.5 generation Moroccans in Spain in 2001. Due to lack of information on parental birth place, second generation Moroccans cannot be identified in the 2001 census. The bottom two pyramids show population distribution by sex and age for first, 1.5, and second generation Moroccans in Spain in 2011. The two left-hand pyramids are based on all cases, regardless of recording error or methodological considerations. The two right-hand pyramids reflect the final population that we study. Nonmigrant Spaniards are not shown in Figure 1.

The sample size for first generation migrants is 4,369 in 2001 and 6,178 in 2011. The 1.5 generation gave a sample size of 1,360 in 2001 and 1,824 cases in 2011. In the 2001 Spanish census, a strikingly large number of 762 individuals appear as having migrated in the year of birth and as many as 109 cases show that the year of arrival is earlier than the individual's year of birth. Previous studies using the same data (Cortina Trilla, Esteve, and Domingo 2008; Vitali and Arpino 2015) have also drawn attention to this unusually high number of migrants who supposedly arrived at age 0. In keeping with these studies, we excluded individuals who migrated at age 0 and -1, thus dropping 871 cases and leaving 489 cases for 2001, as displayed in the top right pyramid in Figure 1.

**Figure 1: Population pyramids of Moroccan migrants and descendants in the Spanish 2001 and 2011 census microdata samples (unweighted)**



*Source:* Compiled by authors on the basis of IPUMS-i and INE census samples.

The 2011 Spanish census included parental birthplace variables, which enabled us to identify individuals of Moroccan descent born in Spain. We restricted the analysis to the 475 Spanish-born cases with both parents born in Morocco, as reflected in the bottom right pyramid of Figure 1. We excluded those cases in which only one parent was born in Morocco. They were likely to be descendants of Moroccan-born Spaniards who served as civil servants in the Moroccan Spanish protectorate, which existed between 1912 and 1958. The vast majority of Spaniards living in Morocco left the country after it gained independence in 1958 and, later on, in 1975 when Spain moved

out of the Sahara (Sayahi 2005). Socially and geographically speaking, the distribution of first generation Moroccan migrants and of the 1.5 and second generations with two Moroccan parents is different from that of individuals with only one Moroccan parent.

As shown in Figure 1, first generation migrants form the biggest group among the migrant generations. They cluster around working ages in both the 2001 and 2011 census samples. Men outnumber women in both years, particularly in 2001. Figure 1 illustrates that mass migration of Moroccans to Spain is a rather recent phenomenon due to the fact that the 1.5 and second generation individuals are mostly children or young adults. The 1.5 generation encompasses mainly young adults, with very few people older than 25. Second generation Moroccans in Spain are, as of 2011, still young, forming a solid spread in the pyramid in the under-10 age group.

Our analyses rely on descriptive statistics and a logistic regression to examine trends in living with parent(s), spouse, and/or child(ren) among young adults. We control for age, origin and migrant generation, educational attainment, and work status. The dependent variable is a binary value of living with (1) or not living with (0) their parent(s), spouse, and children. Educational attainment is categorized as being ‘less than primary,’ ‘primary completed,’ or ‘secondary completed and above.’ Work status is a binary variable that separates those who were working and those who were not working at the time of the census.

## 4. Results

### 4.1 Descriptive findings

Table 1 shows the percentage of individuals aged from 20 to 34 living with their parents, spouse, children, or in other arrangements, by sex, age, country, year, and origin and migrant generation. The proportion of individuals living with parents decreases with age while the proportion of individuals living with a spouse and/or children increases. This is true for all groups, regardless of year, sex, or origin and generation. However, with regard to the level of parental, spousal, and child coresidence, the discrepancy among age groups is evident for each migrant generation. For example, the percentages of nonmigrant Spanish men in 2011 and nonmigrant Moroccan men in 2004 aged from 20 to 24 who lived with parents were similar (91.2% and 85.7% respectively) but, as we compare these two groups at older ages, the differences widen. At the ages of 30 to 34, parental coresidence among nonmigrant Moroccan men in 2004 (54.4%) is higher than among nonmigrant Spanish men (35.5%). There are almost no differences between nonmigrant Moroccan and nonmigrant Spanish women of the same age group (29.2% versus 25.1%).

**Table 1: Percentage of individuals aged 20–34 living with their parent(s), spouse, child(ren), or other arrangements**

|                               | Male    |      |      |      |       |      |      |      | Female  |      |      |      |       |      |   |      |
|-------------------------------|---------|------|------|------|-------|------|------|------|---------|------|------|------|-------|------|---|------|
|                               | Morocco |      |      |      | Spain |      |      |      | Morocco |      |      |      | Spain |      |   |      |
|                               | 1994    | 2004 | 2001 | 2011 |       |      |      |      | 1994    | 2004 | 2001 | 2011 |       |      |   |      |
|                               | NMM     | NMM  | 1    | 1.5  | 2     | NMS  | 1    | 1.5  | 2       | NMS  | NMM  | NMM  | 1     | 1.5  | 2 | NMS  |
| Living with parent(s)         |         |      |      |      |       |      |      |      |         |      |      |      |       |      |   |      |
| 20–24                         | 83.8    | 85.7 | 11.4 | 23.4 | –     | 87.8 | 47.4 | 77.0 | 85.6    | 91.2 | 55.3 | 58.4 | 11.4  | 25.0 | – | 82.9 |
| 25–29                         | 69.2    | 72.2 | 4.1  | 21.5 | –     | 65.0 | 17.5 | 51.9 | 56.3    | 69.3 | 35.8 | 40.9 | 3.5   | 21.6 | – | 53.8 |
| 30–34                         | 49.5    | 54.4 | 1.7  | 12.7 | –     | 34.8 | 7.8  | 39.9 | 30.7    | 35.5 | 21.1 | 29.2 | 2.6   | 14.1 | – | 25.0 |
| Living with spouse            |         |      |      |      |       |      |      |      |         |      |      |      |       |      |   |      |
| 20–24                         | 8.93    | 6.8  | 4.5  | 6.3  | –     | 4.2  | 12.5 | 7.7  | 2.2     | 3.1  | 33.0 | 32.1 | 50.6  | 27.0 | – | 10.0 |
| 25–29                         | 31.59   | 28.1 | 12.8 | 13.5 | –     | 22.9 | 39.2 | 33.6 | 17.2    | 18.8 | 52.5 | 49.2 | 60.0  | 46.0 | – | 36.3 |
| 30–34                         | 59.72   | 53.5 | 29.3 | 39.4 | –     | 52.6 | 58.0 | 57.8 | 47.7    | 48.8 | 67.0 | 60.1 | 64.2  | 60.7 | – | 64.6 |
| Living with child(ren)        |         |      |      |      |       |      |      |      |         |      |      |      |       |      |   |      |
| 20–24                         | 5.9     | 3.9  | 1.5  | 4.2  | –     | 2.0  | 4.1  | 3.4  | 1.1     | 1.0  | 30.4 | 27.3 | 28.4  | 19.0 | – | 5.9  |
| 25–29                         | 25.4    | 21.2 | 6.5  | 7.3  | –     | 9.5  | 21.5 | 23.1 | 10.9    | 6.4  | 54.5 | 49.4 | 42.6  | 34.5 | – | 20.1 |
| 30–34                         | 53.6    | 46.4 | 20.5 | 31.8 | –     | 35.7 | 41.0 | 45.3 | 31.8    | 27.9 | 72.3 | 63.9 | 48.4  | 52.6 | – | 55.1 |
| Living in other arrangements* |         |      |      |      |       |      |      |      |         |      |      |      |       |      |   |      |
| 20–24                         | 12.8    | 11.9 | 84.0 | 69.6 | –     | 8.3  | 40.7 | 15.6 | 12.2    | 6.2  | 9.7  | 8.2  | 38.6  | 45.5 | – | 7.3  |
| 25–29                         | 14.0    | 13.5 | 82.1 | 64.2 | –     | 12.6 | 43.4 | 19.3 | 29.7    | 12.6 | 8.0  | 7.2  | 32.9  | 28.4 | – | 9.8  |
| 30–34                         | 10.4    | 11.0 | 67.4 | 47.5 | –     | 13.1 | 34.5 | 18.0 | 23.9    | 15.8 | 6.3  | 6.6  | 23.0  | 23.0 | – | 8.7  |

Note: NMM: Nonmigrant Moroccans, NMS: Nonmigrant Spaniards. \*not living with parent(s), spouse, nor child(ren).

The two time points in Morocco and Spain are indicative of the recent changes in living arrangements. In Morocco, parental coresidence increased for both men and women of all age groups between 1994 and 2004, especially for women (8 percentage points in the 30–34 age group). Inversely, spousal and child coresidence has decreased significantly for both sexes. Nonmigrant Spaniards show similar trends. Gender differences in living arrangements among nonmigrant Moroccans are greater than among nonmigrant Spaniards. In 1994, 83.8% of Moroccan men aged from 20 to 24 lived with their parents, compared to 55.3% Moroccan women of the same age group, yielding a 28.5 percentage point difference, whereas the same gender gap among nonmigrant Spaniards shows a mere 4.9 percentage point difference. The gender gap in both populations has barely changed in the more recent censuses.

Moroccan migrants residing in Spain show remarkable generational differences in living arrangements when the first, 1.5, and second generations are compared. First generation Moroccans in Spain form a unique group that stands out from the other groups because migration acts as a disruptive force militating against family coresidence, especially among men. Up to 40.7% of first generation men aged from 20 to 24 and 43.4% of those aged from 25 to 29 in 2011 were living in households that did not include parents, spouses, or children (living in other arrangements). The

percentages of living in other arrangements among Spanish natives were only 6.2% (20 to 24) and 12.6% (25 to 29). Across generations of Moroccans in Spain, fewer women than men lived in other arrangements. A small proportion of first generation Moroccans coresided with parents. Compared with the extremely high figure of 91.2% for nonmigrant Spanish men aged from 20 to 24 in 2011 and 88.3% for nonmigrant Spanish women in the same age group, only 47.4% of first generation Moroccan men and 17.2% of first generation Moroccan women of this age group lived with parents in 2011.

In Spain, where multigenerational households are less common than in Morocco, coresidence with parents tends to decrease when adult children begin to live with spouses. Compared to nonmigrant Spanish men, higher numbers of Moroccan men in Spain resided with spouses, even at young ages. The stark contrast in spousal coresidence between Moroccan men and women, with 12.5% of Moroccan first generation men aged from 20 to 24 compared to 67.1% of Moroccan women of the same age group living with their spouse, highlights the fact that many Moroccan men arrived in Spain as single men while most Moroccan women arrived as spouses. As a result, coresidence with children is also much higher for Moroccan women than Moroccan men. Both spousal and child coresidence decreases by migrant generation (from first to 1.5 to second). However, with the exception of second generation men, Moroccan migrants and their descendants reside with spouse and children at higher rates than nonmigrant Spaniards.

When we compare coresidential patterns of Moroccans in Spain in the 2001 and 2011 censuses, more earlier migrants were living in nonnuclear households. The percentage of first generation migrants living in other arrangements was roughly twice as high in 2001 compared to 2011 for both men and women. The percentage of first generation individuals aged from 20 to 24 living with parents was 11.4% for both sexes in 2001. Even with the 1.5 generation, those who migrated as children were unlikely to live with parents at young ages: only 23.4% of men and 25% of women aged from 20 to 24. Similarly, fewer first generation migrants lived with spouses and children compared to the same groups in 2011.

## **4.2 Logistic regression**

Next, we use binomial logistic regression to analyze the living arrangements in Spain of Moroccans aged from 20 to 34 for both sexes separately. The dependent variable  $y$  is a binary of coresidence (1) or non-coresidence (0). Results are shown in Table 2. Coresidence with parent(s), spouse, and child(ren) are expressed in odds ratios, with nonmigrant Spaniards as the reference group. Values above 1 signify a higher

proportion of coresidence, and values below 1 show a lower proportion of coresidence than among nonmigrant Spaniards. Due to the noncollapsibility of logistic regression models (Karlson, Holm, and Breen 2012), we included the average marginal effects (see Table A-3) to aid the interpretation of our variables of interest. The average marginal effects show the influence of each covariate on the outcome and capture the variability in the fitted outcomes.

**Table 2: Logistic regression coefficients (odds ratios) of parental, spousal, and child coresidence by sex in Spain (2011) and Morocco (2004)**

|                               | Parent(s) |         |         | Spouse/Partner |         |         | Child(ren) |         |         |                 |
|-------------------------------|-----------|---------|---------|----------------|---------|---------|------------|---------|---------|-----------------|
|                               | M1        | M2      | M3      | M1             | M2      | M3      | M1         | M2      | M3      | M4 <sup>†</sup> |
| <b>Male</b>                   |           |         |         |                |         |         |            |         |         |                 |
| Migrant generation            |           |         |         |                |         |         |            |         |         |                 |
| NMM                           | 1.67***   | 1.87*** | 2.17*** | 1.21***        | 0.78*** | 0.67*** | 2.70***    | 1.48*** | 1.33*** | 2.66***         |
| 1 <sup>st</sup> Gen           | 0.17***   | 0.18*** | 0.14*** | 1.19***        | 0.95    | 1.21*** | 1.66***    | 1.16*** | 1.39*** | 1.44***         |
| 1.5 Gen                       | 0.73***   | 0.76*** | 0.64*** | 1.34***        | 1.09    | 1.37*** | 2.56***    | 1.79*** | 2.18*** | 2.52***         |
| 2 <sup>nd</sup> Gen           | 0.80*     | 0.82    | 0.71**  | 0.69**         | 0.60*** | 0.70**  | 1.06       | 0.83    | 0.96    | 1.28            |
| NMS                           | 1.00      | 1.00    | 1.00    | 1.00           | 1.00    | 1.00    | 1.00       | 1.00    | 1.00    | 1.00            |
| Educational attainment        |           |         |         |                |         |         |            |         |         |                 |
| Less than primary (ref)       |           | 1.00    | 1.00    |                | 1.00    | 1.00    |            | 1.00    | 1.00    | 1.00            |
| Primary completed             |           | 1.16*** | 1.05*** |                | 0.57*** | 0.63*** |            | 0.56*** | 0.60**  | 0.69***         |
| Secondary completed and above |           | 1.25*** | 1.20*** |                | 0.43*** | 0.42*** |            | 0.29*** | 0.28*** | 0.30***         |
| Work status                   |           |         |         |                |         |         |            |         |         |                 |
| Working (ref)                 |           |         | 1.00    |                |         | 1.00    |            |         | 1.00    | 1.00            |
| Not working                   |           |         | 2.62*** |                |         | 0.35*** |            |         | 0.43*** | 0.95***         |
| <b>Female</b>                 |           |         |         |                |         |         |            |         |         |                 |
| Migrant generation            |           |         |         |                |         |         |            |         |         |                 |
| NMM                           | 0.66***   | 1.23*** | 1.20*** | 1.58***        | 0.89*** | 0.86*** | 3.72***    | 1.63*** | 1.44*** | 2.14***         |
| 1 <sup>st</sup> Gen           | 0.07***   | 0.09*** | 0.09*** | 6.01***        | 4.35*** | 4.17*** | 6.60***    | 3.93*** | 3.30*** | 2.00***         |
| 1.5 Gen                       | 0.41***   | 0.53*** | 0.51*** | 2.73***        | 2.07*** | 2.02*** | 4.06***    | 2.48*** | 2.20*** | 1.85***         |
| 2 <sup>nd</sup> Gen           | 0.53***   | 0.61*** | 0.59*** | 1.61**         | 1.37**  | 1.34*   | 1.40**     | 0.98    | 0.86    | 0.72*           |
| NMS                           | 1.00      | 1.00    | 1.00    | 1.00           | 1.00    | 1.00    | 1.00       | 1.00    | 1.00    | 1.00            |
| Educational attainment        |           |         |         |                |         |         |            |         |         |                 |
| Less than primary (ref)       |           | 1.00    | 1.00    |                | 1.00    | 1.00    |            | 1.00    | 1.00    | 1.00            |
| Primary completed             |           | 1.82*** | 1.82*** |                | 0.64*** | 0.64*** |            | 0.68*** | 0.69*** | 0.85***         |
| Secondary completed and above |           | 2.74*** | 2.80*** |                | 0.39*** | 0.40*** |            | 0.24*** | 0.27*** | 0.29***         |
| Work status                   |           |         |         |                |         |         |            |         |         |                 |
| Working (ref)                 |           |         | 1.00    |                |         | 1.00    |            |         | 1.00    | 1.00            |
| Not working                   |           |         | 1.14*** |                |         | 1.15*** |            |         | 1.77*** | 1.79***         |

*Note:*  $p < 0.05^*$ ,  $p < 0.01^{**}$ ,  $p < 0.001^{***}$ . NMM: Nonmigrant Moroccan, NMS: Nonmigrant Spaniard. <sup>†</sup>M4 of child coresidence includes control for spousal coresidence. Age controlled for all models.

*Source:* Compiled by authors on the basis of IPUMS-I and INE census data.



We control for age in all models, as it has a positive effect on spousal and child coresidence and a negative effect on parental coresidence for young adults. In our base model (Model 1) we only consider the independent variable of the migrant generation, comparing first, 1.5, and second generation Moroccans in Spain with nonmigrant Spaniards and Moroccans who have remained in Morocco in their binary outcome of living or not living with their parents(s), spouse, and child(ren). In Model 1, Moroccans in Spain have lower odds of living with parents than both nonmigrant Spaniards and Moroccans in Morocco.

First generation women have high odds of living with their spouse and children, although the gap between nonmigrant Spanish women and Moroccan women in Spain narrows across generations. Moroccan men in Spain have higher odds of living with their spouse and children than nonmigrant Spaniards, except for the second generation, but the differences between generations are lower than among women.

In Model 2, we control for educational attainment, categorized as ‘less than primary’ (reference group), ‘primary completed,’ and ‘secondary completed and above.’ Moroccans who have migrated to Spain are, on average, better educated than Moroccan nonmigrants but remain less educated than nonmigrant Spaniards (see Table A-1). Table 2 shows that, at higher levels of education, both men and women at the ages of 20 to 34 have lower odds of living in a domestic partnership and with children. On the other hand, better educated individuals are more likely to coreside with their parents. This is especially evident in the case of women.

Model 3 introduces work status into the equation. Moroccans in Spain were less likely to be working at the time of the censuses compared to nonmigrant Spaniards, especially first generation women (see Table A-2). Although work status correlates with the likelihood of living with their parents, spouse, and children, the mechanism is different for men and women. Nonworking women are more likely than working women to coreside with their parents, spouse, or children. By contrast, nonworking men are less likely to coreside with their spouse or children but more likely to coreside with parents compared to working men. Model 3 reveals that compared with nonmigrant Spaniards, Moroccan men, regardless of their migrant generation, are less likely to coreside with parents despite the fact that their counterparts in Morocco are more than twice as likely as nonmigrant Spaniards to coreside with parents.

In comparison with nonmigrant Moroccans, Moroccan men in Spain emerge as a distinct set in terms of parental coresidence. Moroccan women in Spain, on the other hand, tend to show lower parental coresidence, which is consistent with our knowledge that a large number of first generation women arrived as spouses, while the women of the 1.5 and second generations marry younger than nonmigrant Spaniards and, accordingly, leave the parental home. Compared to nonmigrant Spaniards, few first generation women live with their parents.

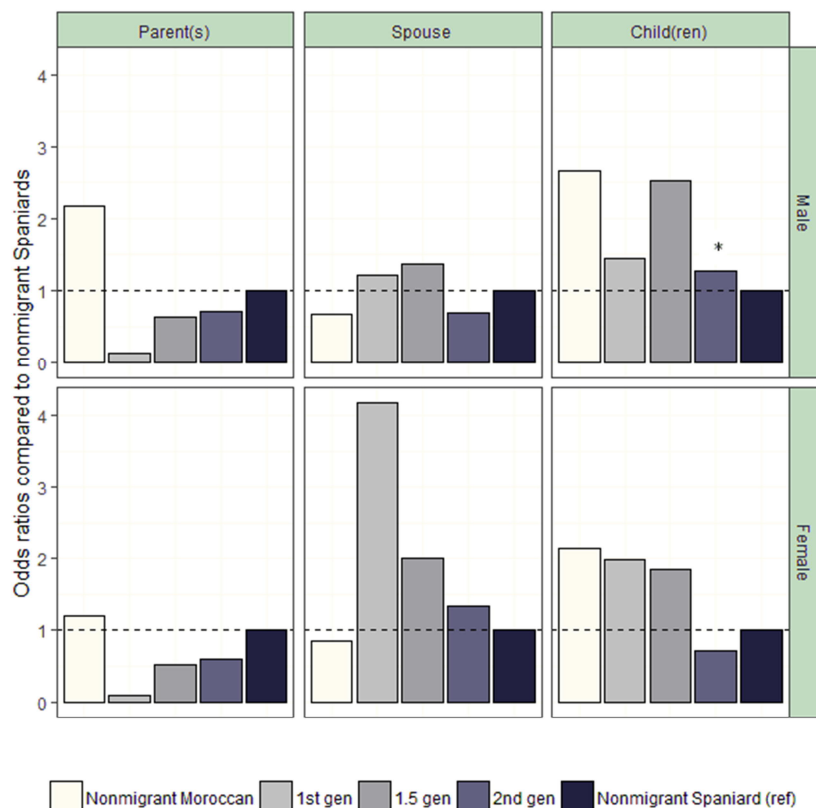
First and 1.5 generation Moroccan men are, respectively, 1.21 and 1.37 times more likely than nonmigrant Spanish men to be living with a spouse, after controlling for educational attainment and work status. Second generation men, on the other hand, are less likely than nonmigrant Spaniards to be living with a partner. Interestingly, by comparison with nonmigrant Spaniards, Moroccan men in Morocco are also less likely to live with a partner. Moroccan women in Spain, across all migrant generations, are more likely than nonmigrant Spanish women to live with spouses. First generation women stand out as having a far higher proportion than other groups for spousal coresidence (4.17 times higher), followed by the 1.5 generation, at 2.02 times higher, and then the second generation at 1.34 times higher by comparison with their nonmigrant Spanish counterparts after controlling for educational attainment and work status in Model 3.

Since living with a spouse is highly correlated with living with a child for both sexes, we control for spousal coresidence in our child coresidence model to compare only partnered individuals. This is done in Model 4. The difference between Moroccan men in Spain and nonmigrant Spanish men is more apparent in child coresidence than spousal coresidence, although, in spousal coresidence, Moroccan women in Spain show a smaller difference with nonmigrant Spaniards than in child coresidence. First generation Moroccan men are 1.44 times more likely to live with children compared to nonmigrant Spanish men, and the 1.5 generation men 2.52 times. The result for second generation men is not significant at the  $p < 0.05$  level. Similarly, first generation Moroccan women are twice as likely and the 1.5 generation 1.85 times more likely to live with children by comparison with nonmigrant women of the same ages. Second generation women are less likely than nonmigrant Spanish women to live with children.

### **4.3 Origin, migrant generation, and time dimensions**

Figure 2 shows the odds ratios of coresidence with parent(s), spouse, and child(ren) by sex and origin for individuals aged from 20 to 34 on the basis of the Spain 2011 and Morocco 2004 censuses, with educational attainment and work status controlled for parental and spousal coresidence and an added control for spousal coresidence in the case of child coresidence. In other words, it summarizes Model 3 for parental and spousal coresidence and Model 4 for child coresidence from Table 2. The top three bar charts show the coresidential odds ratios for men aged from 20 to 34 compared to the reference group, nonmigrant Spanish men of the same age group. The bottom three bar charts depict the odds ratios for women, with nonmigrant Spanish women as the reference category.

**Figure 2: Odds ratios of coresidence with parent(s), spouse, and child(ren) by sex and migrant generation, in Spain 2011 and Morocco 2004 censuses<sup>3</sup>**



Note: \* not statistically significant at  $p < 0.05$  level.

Source: Compiled by authors on the basis of IPUMS-i and INE census data.

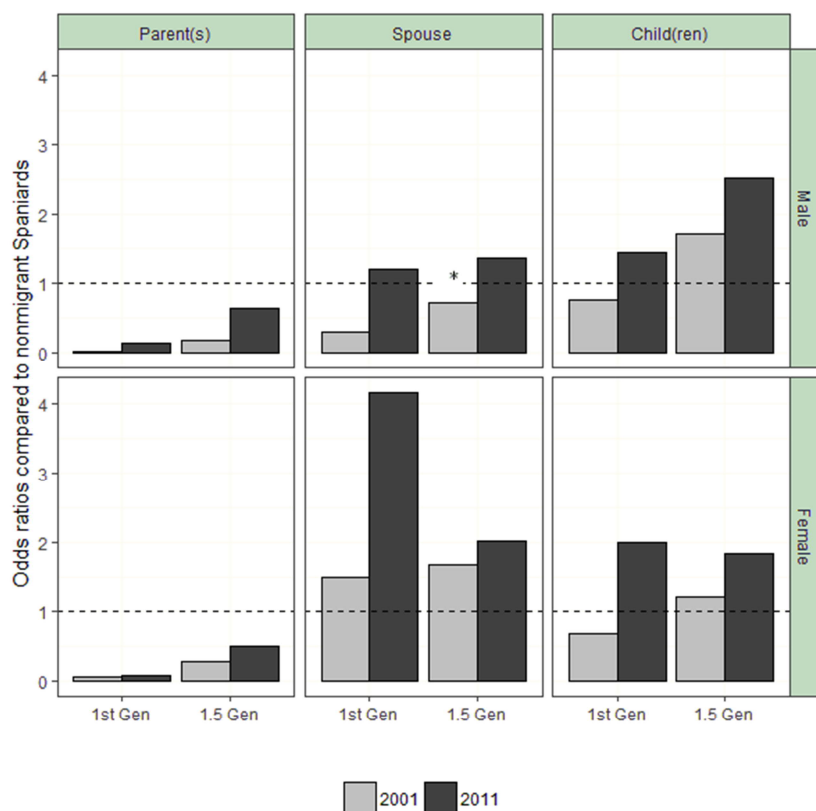
Both male and female Moroccans in Spain show lower parental coresidence than both nonmigrant Spaniards and nonmigrant Moroccans. In terms of spousal coresidence, first generation women are, remarkably, more than four times more likely to be living with a spouse than nonmigrant Spanish women, and the 1.5 generation women are twice as likely, whereas their male counterparts barely differ from

<sup>3</sup> Figure 2 and Figure 3 display Model 3 of Table 2 for parental and spousal coresidence and Model 4 of Table 2 for child coresidence. Age, work status, and educational attainment are controlled in all models.

nonmigrant Spanish men. All groups except second generation women show higher child coresidence when compared to nonmigrant Spaniards.

Next, we interpret the differences between Moroccans in Spain and nonmigrant Spaniards, focusing on the time dimension, as shown in Figure 3, which illustrates the differences in living arrangements of Moroccans in Spain in 2001 and 2011 compared to their nonmigrant Spanish male and female counterparts in 2001 and 2011. Since second generation individuals are unidentifiable in the 2001 census, Figure 3 only shows the living arrangements of the first and 1.5 generations. Once again, we analyze males and females separately.

**Figure 3: Odds ratios of coresidence with parent(s), spouse, and child(ren) by sex, migrant generation, and census years in Spain<sup>3</sup>**



Note: \* not statistically significant at  $p < 0.05$  level.

Source: Compiled by authors on the basis of IPUMS-i and INE census data.

Coresidence with kin, or parent(s), spouse, and child(ren), is comparatively higher across the board for both Moroccan men and women in both first and 1.5 generations in 2011 compared to 2001. The difference between the two censuses is particularly striking in spousal coresidence for the first generation women for whom the likelihood of living with a spouse was 1.5 times greater than that of nonmigrant Spanish women in 2001 and four times higher than that of nonmigrant Spanish women in 2011. On the other hand, parental coresidence remains far lower for all Moroccan migrant groups compared to nonmigrant Spaniards in both years, although, from 2001 to 2011 they have increased moderately for the 1.5 generation individuals of both genders. The first generation of both genders was less likely to live with their own children than nonmigrant Spaniards in 2001, but in 2011 both genders surpassed nonmigrant Spanish men and women in child coresidence. The first generation men had a far lower rate of spousal coresidence than nonmigrant Spaniards in 2001 but slightly surpassed their nonmigrant Spanish counterparts in 2011. This may be a sign that the growth of the Moroccan community in Spain by 2011, facilitated by the expansion of family reunification schemes, has meant higher possibilities of living with kin, which may have an offsetting effect on family processes.

## **5. Discussion**

Europe emerged as a new fertile ground for migration studies fairly recently by comparison with the United States, which has dominated the debate on migration theories since the turn of the twentieth century. Unlike the United States, a nation built on immigration, Europe faces a different set of demographic and social challenges and engages in another kind of political debate when it comes to incorporating migrants into the mainstream society. The need to provide better information for policy makers and to clarify political discourse has inspired a range of studies on the educational and employment outcomes of migrants and their descendants.

Spain is a unique case for various reasons. Large-scale Moroccan migration to Spain has occurred relatively recently compared to migration to the Netherlands and Belgium, resulting in a large number of first generation migrants in Spain. Additionally, compared to other Europeans, Spanish men and women experience relatively late transitions for leaving the parental home, union formation, and childbearing, which to some extent may amplify or mask the differences between Moroccans and nonmigrant Spaniards. Intergenerational coresidence between adult children and parents in Spain is higher than in many European countries. Family values and social cohesion in Spain remain strong compared to other European countries (Daatland and Lowenstein 2005; Reher 1998; Schwanitz and Mulder 2015), despite the fact that Spanish society

generally shows a high level of individualism (Dominguez-Folgueras and Castro-Martín 2013).

Our approach of comparing Moroccans in Spain to both nonmigrants in Morocco and nonmigrants in Spain is made possible with the availability of both Moroccan and Spanish censuses at various points in time in the IPUMS international database (Minnesota Population Center 2015). In addition, the recent inclusion of parental birth place in the Spanish 2011 census questionnaire facilitates identification of second generation Moroccans for the first time. A combination of these data sources provides a unique opportunity for enriching the debate on migrants' living arrangements in Spain.

This study focused on living arrangements, based on large-scale data sets, as an expression of marital and childbearing patterns of migrants and drew cross-border comparisons between the norms of the sending and receiving countries. We aim to illuminate the mechanisms behind family lives of migrants in Spain, a country that has only recently experienced a migration boom. Spain's small (but growing) pool of second generation individuals, compared to their German or Dutch counterparts, remains to be little understood. The nature of the Spanish family-centric social model, in which the family plays an essential role in ensuring the welfare of its members (Giuliano 2007), drives the issue of family living arrangements of migrants to the center stage.

We aim to contribute to migration studies in Europe with this inquiry into living arrangements of Moroccan migrants in Spain by migrant generation and time, using Spanish and Moroccan census microdata. Focusing on parental, spousal, and children coresidence, we compare Moroccan migrants with nonmigrant Spaniards and nonmigrant Moroccans. Our analysis has yielded several findings that expand the discussion of migrant family forms.

Our first hypothesis – the living arrangements of the 1.5 generation would be more similar to the nonmigrants in Morocco and the living arrangements of the second generations would reflect the levels of parental, spousal and child coresidence of the nonmigrant Spaniards – is confirmed. In general, the 1.5 generation Moroccans experience transitions to adulthood at younger ages than nonmigrant Spaniards, consistent with the socialization hypothesis, which stipulates that an individual's family-related behavior tends to be shaped by cultural norms internalized during childhood. The second generation individuals, on the other hand, have similar or even lower child coresidence levels compared to their nonmigrant Spanish counterparts, suggesting signs of the convergence with the host society according to the adaptation hypothesis. Across all migrant generations, coresidence of young adults with parents is lower than among nonmigrant Spaniards and even lower than among nonmigrant Moroccans.

Our second hypothesis – that 1.5 and second generation Moroccan females would observe a more ‘traditional’ timing for transition to adulthood, which includes leaving the parental home, marrying, and having children at younger ages, with the exception of highly educated females, and the convergence of living arrangements between Moroccan women in Spain and nonmigrant Spanish women would be more pronounced than their male counterparts – is only partially confirmed. Generational differences among migrant women show clear signs of assimilation with their nonmigrant Spanish counterparts in terms of living arrangements. The gap between Moroccan female migrants and nonmigrant Spanish women reduces as we move across generations. In terms of child coresidence, there are no statistically significant differences between second generation immigrant women and Spanish women. However, the 1.5 generation women, or ones who migrated as children, were twice as likely to be living with a spouse compared to nonmigrant Spaniards, even when education and work status are controlled for, inviting further exploration into the possibility of reactive ethnicity (Rumbaut 2008).

As predicted by our third hypothesis, first and 1.5 generation young adults captured in 2011 are relatively more likely to live with their parents than those surveyed in 2001. One of the most striking findings in our study is that the gap between living arrangements for migrants and the native population has widened in the past decade. Coresidence with a spouse and child(ren) has increased over the last decade for Moroccans in Spain by comparison with nonmigrant Spaniards. In the course of a decade, the Moroccan first and 1.5 generations men have gone from lower to higher spousal coresidence compared to nonmigrant Spanish men. As the Moroccan community grows, the demographic constraints affecting earlier migrants may have diminished.

Educational attainment and work status reduce the differences in living arrangements between individuals of Moroccan origin and nonmigrant Spaniards and widen the discrepancy between Moroccan migrants and nonmigrants. This is in part due to selective migration into Spain. Moroccan migrants have higher levels of education than nonmigrants but lower levels than Spaniards (Amaghouss and Ibourk 2016; Sajoux and Chahoua 2012). The gap between nonmigrant Spanish women and nonmigrant Moroccan women also closes when educational differences are taken into account, consistent with findings from prior studies on Turkish migrants in Europe (Baykara-Krumme and Milewski 2017; Milewski 2011).

We also find that once educational attainment and work status are controlled for, Moroccans in Morocco are less likely to live with a spouse, and Moroccan women are more likely to live with their parents than their Spanish counterparts. This finding challenges the common depictions of ‘Moroccan culture’ or ‘Muslim customs’ by showing that, under improved socioeconomic conditions, women do not necessarily

leave their parents and marry at young ages in Morocco. However, regardless of educational level and work status, Moroccans in Morocco are more likely to live with their children than nonmigrant Spaniards for both genders.

In our interpretation of the results, we need to bear in mind that we have held nonmigrant Spaniards as a reference group, which means that their demographic and behavioral changes are not reflected in the analysis. Spain's exceptionally delayed fertility and union formation in recent years (Giuliano 2007; Moreno 2012; Sobotka, Skirbekk, and Philipov 2011) may have partially contributed to the growing gap between the living arrangements of Moroccans in Spain and those of nonmigrant Spaniards, particularly in terms of spousal and child coresidence. Affordability and availability of housing, beyond the scope of this paper, undoubtedly influence decisions to leave the parental home. The economic crisis in Spain also pushed many young adults to stay in or return to their parental home (Moreno Mínguez 2016). This phenomenon, however, affects individuals with or without a migrant background.

Migrant self-selection plays a role in the degree to which movers and nonmovers behave distinctly on the aggregate level. The characteristics of first generation migrants may carry over to the next generation through intergenerational transmission of socioeconomic status, thus influencing the second generation's family processes. Some of the aforementioned characteristics, such as education level or profession, can be captured in surveys and register data. Other characteristics likely to be attached to migrants, such as high predisposition to take risks or move repeatedly, are unobservable in traditional data sources but might also influence behavior pertaining to family formation.

An additional limitation to the study is the mismatch of time points in our data, comparing Spain in 2001 and 2011 to Morocco in 1994 and 2004 respectively. The mean age of childbearing has remained fairly stable for Morocco and Spain from 1995 to 2010, but Morocco experienced a drop in the total fertility rate, 3.7 to 3.0 from 1995 to 2000 (UN 2017a). Therefore, although the data sets remain to be largely comparable, demographic changes that have taken place during the years of the gaps between the censuses of the two countries should be taken into account.

The young and dynamic community of 1.5 and second generations of Moroccans has experienced considerable population growth in the recent years while still facing a plethora of social constraints that hamper full realization of their ideal family scenario. Patterns of living arrangements are deeply embedded in the availability of kin and potential mates. With the ebb and flow of Moroccan migration prior to and after the onset of the economic crisis in Spain (Domingo and Sabater 2013; González-Ferrer 2013), it is difficult to predict what the future holds for the family lives of Moroccans who choose to put down roots in Spain. Although we observe a decreasing tendency for young migrants and migrant descendants to live with their spouse and children,



unpredictable changes in the stock of Moroccan migrants in Spain may activate either coping or preference-expressing mechanisms in terms of living arrangements. Our work serves to inform and expand the discussion of migrant life in Europe, bearing in mind the key ingredients of generation, gender, and time in family formation and transition to adulthood.

## References

- Adamopoulou, E. (2016). Living arrangements of the youth: Determinants and gender differences. *Estudios de Economía Aplicada* 34(1): 35–44.
- Alarcón, A., Parella, S., and Yiu, J. (2014). Educational and occupational ambitions among the Spanish ‘second generation’: The case of Barcelona. *Journal of Ethnic and Migration Studies* 40(10): 1614–1636. doi:[10.1080/1369183X.2013.831550](https://doi.org/10.1080/1369183X.2013.831550).
- Alders, M. (2000). *Cohort fertility of migrant women in the Netherlands: Developments in fertility of women born in Turkey, Morocco, Suriname, and the Netherlands Antilles and Aruba*. Paper presented at the BSPS-NVD-URU Conference, Utrecht, the Netherlands, August 31–September 1, 2000.
- Amaghouss, J. and Ibourek, A. (2016). Les inégalités dans le domaine de l’éducation au Maroc: Une approche spatiale. *The European Journal of Development Research* 28(5): 783–807. doi:[10.1057/ejdr.2015.43](https://doi.org/10.1057/ejdr.2015.43).
- Aneas, A., Garreta, J., and Molina Luque, F. (2012). Moroccans in Spain: So near, yet so far: A long history of meeting while not meeting. In: Landia, D. and Albert, R.D. (eds.). *Handbook of ethnocultural conflict*. New York: Springer: 439–483. doi:[10.1007/978-1-4614-0448-4\\_17](https://doi.org/10.1007/978-1-4614-0448-4_17).
- Aparicio, R. (2007). The integration of the second and 1.5 generations of Moroccan, Dominican and Peruvian origin in Madrid and Barcelona. *Journal of Ethnic and Migration Studies* 33(7): 1169–1193. doi:[10.1080/13691830701541713](https://doi.org/10.1080/13691830701541713).
- Arpino, B., Muttarak, R., and Vitali, A. (2015). Comparing living arrangements of immigrant young adults in Spain and the United States. In: Aybek, C.M., Huinink, J., and Muttarak, R. (eds.). *Spatial mobility, migration, and living arrangements*. Cham: Springer International: 161–187. doi:[10.1007/978-3-319-10021-0\\_8](https://doi.org/10.1007/978-3-319-10021-0_8).
- Baykara-Krumme, H. and Milewski, N. (2017). Fertility patterns among Turkish women in Turkey and abroad: The effects of international mobility, migrant generation, and family background. *European Journal of Population* 33(3): 409–436. doi:[10.1007/s10680-017-9413-9](https://doi.org/10.1007/s10680-017-9413-9).
- Bayona-i-Carrasco, J. and Achebak, H. (2016). Diversidad y concentración territorial de la población marroquí en España. In: Domingo, A. (ed.). *Inmigración y diversidad en España: Crisis económica y gestión municipal*. Barcelona: Icaria Editorial: 187–209.

- Bertran Tarrés, M., Ponferrada-Arteaga, M., and Pàmies Rovira, J. (2016). Gender, family negotiations and academic success of young Moroccan women in Spain. *Race Ethnicity and Education* 19(1): 161–181. doi:10.1080/13613324.2014.946486.
- Billari, F.C. and Liefbroer, A.C. (2007). Should I stay or should I go? The impact of age norms on leaving home. *Demography* 44(1): 181–198. doi:10.1353/dem.2007.0000.
- Bordone, V. and de Valk, H.A.G. (2016). Intergenerational support among migrant families in Europe. *European Journal of Ageing* 13(3): 259–270. doi:10.1007/s10433-016-0363-6.
- Bradatan, C.E. and Sandu, D. (2012). Before crisis: Gender and economic outcomes of the two largest immigrant communities in Spain. *International Migration Review* 46(1): 221–243. doi:10.1111/j.1747-7379.2012.00885.x.
- Campani, G. and Chiappelli, T. (2013). Migrant women and the gender gap in Southern Europe: The Italian case. In: Anthias, F. and Pajnik, M. (eds.). *Contesting integration, engendering migration: Theory and practice*. London: Palgrave Macmillan: 202–220. doi:10.1057/9781137294005\_11.
- Cebolla, H. and Requena, M. (2010). Marroquíes en España, los Países Bajos y Francia: Gestión de la diversidad e integración. Madrid: Real Instituto Elcano (Documento de Trabajo 11).
- Cebolla-Boado, H. and López-Sala, A. (2015). Transnational Latin American immigrant associations in Spain during the economic recession: A top-down model of integration and transnationalism at stake? In: Aysa-Lastra, M. and Cachón, L. (eds.). *Immigrant vulnerability and resilience*. Cham: Springer International: 163–180. doi:10.1007/978-3-319-14797-0\_9.
- Cortina Trilla, C., Esteve, A., and Domingo, A. (2008). Marriage patterns of the foreign-born population in a new country of immigration: The case of Spain. *International Migration Review* 42(4): 877–902. doi:10.1111/j.1747-7379.2008.00151.x.
- Crul, M. and Doomernik, J. (2003). The Turkish and Moroccan second generation in the Netherlands: Divergent trends between and polarization within the two groups. *International Migration Review* 37(4): 1039–1064. doi:10.1111/j.1747-7379.2003.tb00169.x.
- Crul, M. and Vermeulen, H. (2003). The second generation in Europe. *International Migration Review* 37(4): 965–986. doi:10.1111/j.1747-7379.2003.tb00166.x.

- Daatland, S.O. and Lowenstein, A. (2005). Intergenerational solidarity and the family–welfare state balance. *European Journal of Ageing* 2(3): 174–182. doi:10.1007/s10433-005-0001-1.
- De Haas, H. (2014). Morocco: Setting the stage for becoming a migration transition country? [electronic resource]. Washington, D.C.: Migration Policy Institute. <https://www.migrationpolicy.org/article/morocco-setting-stage-becoming-migration-transition-country>.
- De Miguel-Luken, V. and Solana-Solana, M. (2016). Immigrants in the educational system in Spain: Who persists? *Social Indicators Research* 2: 1–23. doi:10.1007/s11205-016-1323-4.
- De Valk, H.A.G. and Billari, F.C. (2007). Living arrangements of migrant and Dutch young adults: The family influence disentangled. *Population Studies* 61(2): 201–217. doi:10.1080/00324720701340129.
- De Valk, H.A.G. and Liefbroer, A.C. (2007). Timing preferences for women’s family-life transitions: Intergenerational transmission among migrants and Dutch. *Journal of Marriage and Family* 69(1): 190–206. doi:10.1111/j.1741-3737.2006.00353.x.
- De Valk, H.A.G. and Schans, D. (2008). ‘They ought to do this for their parents’: Perceptions of filial obligations among immigrant and Dutch older people. *Ageing and Society* 28(1): 49–66. doi:10.1017/S0144686X07006307.
- Diehl, C. and Schnell, R. (2006). ‘Reactive ethnicity’ or ‘Assimilation’? Statements, arguments, and first empirical evidence for labor migrants in Germany. *International Migration Review* 40(4): 786–816. doi:10.1111/j.1747-7379.2006.00044.x.
- Domingo, A. and Sabater, A. (2013). Emigración marroquí desde España en contexto de crisis. *Revista Internacional de Estudios Migratorios* 3(1): 29–60. doi:10.25115/riem.v3i1.388.
- Dominguez-Folgueras, M. and Castro-Martín, T. (2013). Cohabitation in Spain: No longer a marginal path to family formation. *Journal of Marriage and Family* 75(2): 422–437. doi:10.1111/jomf.12013.
- Ennaji, M. (2014). *Muslim Moroccan migrants in Europe: Transnational migration in its multiplicity*. New York: Palgrave Macmillan. doi:10.1057/9781137476494.
- Esteve, A. and Bueno, X. (2010). Tras el rastro estadístico de las uniones de inmigrantes en España. *Estadística Española* 52(173): 91–125.

- Esteve, A. and Bueno, X. (2012). Marrying after migration: Assortative mating among Moroccans in Spain. *Genus* 68(1): 41–63.
- Esteve, A. and Cortina, C. (2012). ¿Y en qué lugar se enamoró de ti? Inmigración internacional y endogamia conyugal. *Revista de Sociología* 97(1): 39–59. doi:10.5565/rev/papers/v97n1.281.
- Esteve, A. and Jiménez, E. (2010). La formación de la pareja entre marroquíes en España. *Migraciones* 27: 83–110.
- Eurostat (2019). Mean age first marriage by sex [electronic resource]. Luxembourg: Eurostat. <https://ec.europa.eu/eurostat/web/products-datasets/product?code=tps00014>.
- Ferrari, G. and Pailhé, A. (2017). Transition to adulthood in France: Do children of immigrants differ from natives? *Advances in Life Course Research* 31: 34–56. doi:10.1016/j.alcr.2016.10.001.
- Fokkema, T. and de Haas, H. (2015). Pre-and post-migration determinants of socio-cultural integration of African immigrants in Italy and Spain. *International Migration* 53(6): 3–26. doi:10.1111/j.1468-2435.2011.00687.x.
- Gabrielli, L. (2015). Corridor report on Spain: The case of Ecuadorian and Moroccan immigrants. Florence: Migration Policy Centre. doi:10.2870/02623.
- Galeano, J. and Sabater, A. (2016). Inmigración internacional y cambio demográfico en el nuevo milenio. In: Domingo, A. (ed.). *Inmigración y diversidad en España: Crisis econòmica y gestión municipal*. Barcelona: Icaria Editorial: 13–48.
- Garssen, J. and Nicolaas, H. (2008). Fertility of Turkish and Moroccan women in the Netherlands: Adjustment to native level within one generation. *Demographic Research* 19(33): 1249–1280. doi:10.4054/DemRes.2008.19.33.
- Giuliano, P. (2007). Living arrangements in Western Europe: Does cultural origin matter? *Journal of the European Economic Association* 5(5): 927–952. doi:10.1162/JEEA.2007.5.5.927.
- González-Ferrer, A. (2013). La inmigración por motivos familiares durante la crisis. *Anuario de la Inmigración en España* 2013: 109–134.
- Grzymała-Kazłowska, A. (2005). From ethnic cooperation to in-group competition: Undocumented Polish workers in Brussels. *Journal of Ethnic and Migration Studies* 31(4): 675–697. doi:10.1080/13691830500109787.

- Hushek, D., De Valk, H.A., and Liefbroer, A.C. (2011). Does social embeddedness influence union formation choices among the Turkish and Moroccan second generation in the Netherlands? *Journal of Comparative Family Studies* 42(6): 787–808. doi:10.3138/jcfs.42.6.787.
- Karlson, K.B., Holm, A., and Breen, R. (2012). Comparing regression coefficients between same-sample nested models using logit and probit: A new method. *Sociological Methodology* 42(1): 286–313. doi:10.1177/0081175012444861.
- Kulu, H. and González-Ferrer, A. (2014). Family dynamics among immigrants and their descendants in Europe: Current research and opportunities. *European Journal of Population* 30(4): 411–435. doi:10.1007/s10680-014-9322-0.
- Lievens, J. (1999). Family-forming migration from Turkey and Morocco to Belgium: The demand for marriage partners from the countries of origin. *International Migration Review* 33(3): 717–744. doi:10.1177/019791839903300307.
- Meier, S. (2013). Housing market integration of migrants: Moroccans in Spain. *Tijdschrift voor Economische en Sociale Geografie* 104(3): 308–321. doi:10.1111/tesg.12006.
- Merz, E.M., Özeke-Kocabas, E., Oort, F.J., and Schuengel, C. (2009). Intergenerational family solidarity: Value differences between immigrant groups and generations. *Journal of Family Psychology* 23(3): 291–300. doi:10.1037/a0015819.
- Milewski, N. (2011). Transition to a first birth among Turkish second-generation migrants in Western Europe. *Advances in Life Course Research* 16(4): 178–189. doi:10.1016/j.alcr.2011.09.002.
- Minnesota Population Center (2015). Integrated public use microdata series, international: Version 6.4 [machine-readable database]. Minneapolis: University of Minnesota. doi:10.18128/D020.V6.4.
- MIPEX (2015). Spain [electronic resource]. Barcelona: Migrant integration policy index. <http://mipex.eu/spain>.
- Moreno, A. (2012). The transition to adulthood in Spain in a comparative perspective: The incidence of structural factors. *Young* 20(1): 19–48. doi:10.1177/110330881102000102.
- Moreno Mínguez, A. (2016). Economic crisis and the new housing transitions of young people in Spain. *International Journal of Housing Policy* 16(2): 165–183. doi:10.1080/14616718.2015.1130604.

- Nydell, M.K. (2018). *Understanding Arabs: A guide for modern times*. Boston: Hachette.
- Ouali, N. (2003). Les Marocaines en Europe: Diversification des profils migratoires. *Hommes et migrations* 1242: 71–82. doi:[10.3406/homig.2003.3975](https://doi.org/10.3406/homig.2003.3975).
- Pailhé, A. (2015). Partnership dynamics across generations of immigration in France: Structural vs. cultural factors. *Demographic Research* 33(16): 451–498. doi:[10.4054/DemRes.2015.33.16](https://doi.org/10.4054/DemRes.2015.33.16).
- Phalet, K. and Schönplflug, U. (2001). Intergenerational transmission of collectivism and achievement values in two acculturation contexts: The case of Turkish families in Germany and Turkish and Moroccan families in the Netherlands. *Journal of Cross-Cultural Psychology* 32(2): 186–201. doi:[10.1177/0022022101032002006](https://doi.org/10.1177/0022022101032002006).
- Pham, T.T. (2013). *Moroccan immigrant women in Spain: Honor and marriage*. Lanham: Lexington Books.
- Phinney, J.S., Ong, A., and Madden, T. (2000). Cultural values and intergenerational value discrepancies in immigrant and non-immigrant families. *Child Development* 71(2): 528–539. doi:[10.1111/1467-8624.00162](https://doi.org/10.1111/1467-8624.00162).
- Portes, A., Aparicio, R., and Haller, W. (2016). *Spanish legacies: The coming of age of the second generation*. Berkeley: University of California Press. doi:[10.1525/california/9780520286290.001.0001](https://doi.org/10.1525/california/9780520286290.001.0001).
- Reher, D.S. (1998). Family ties in Western Europe: Persistent contrasts. *Population and Development Review* 24(2): 203–234. doi:[10.2307/2807972](https://doi.org/10.2307/2807972).
- Ruiz-Román, C. and Rascón, M.T. (2016). Between two shores: Crises of values and upbringing practices among Moroccan immigrant families in Andalusia, Spain. *Children's Geographies* 15(2): 177–192. doi:[10.1080/14733285.2016.1214683](https://doi.org/10.1080/14733285.2016.1214683).
- Rumbaut, R.G. (2008). Reaping what you sow: Immigration, youth, and reactive ethnicity. *Applied Development Science* 12(2): 108–111. doi:[10.1080/10888690801997341](https://doi.org/10.1080/10888690801997341).
- Sajoux, M. and Chahoua, S. (2012). Transition de la fécondité et développement au Maroc: Un lien complexe et spatialement différencié. *Les Cahiers d'EMAM* 21: 33–62.
- Sayahi, L. (2005). Language and identity among speakers of Spanish in Northern Morocco: Between ethnolinguistic vitality and acculturation. *Journal of Sociolinguistics* 9(1): 95–107. doi:[10.1111/j.1360-6441.2005.00283.x](https://doi.org/10.1111/j.1360-6441.2005.00283.x).

- Schoenmaeckers, R.C., Lodewijckx, E., and Gadeyne, S. (1999). Marriages and fertility among Turkish and Moroccan women in Belgium: Results from census data. *International Migration Review* 33(4): 901–928. doi:10.1177/019791839903300404.
- Schwanitz, K. and Mulder, C.H. (2015). Living arrangements of young adults in Europe. *Comparative Population Studies* 40(4): 367–398. doi:10.12765/CPoS-2015-14en.
- Serret, J., Esteve, A., and López-Gay, A. (2013). Revelaciones de una década de matrimonios entre españoles y extranjeros en España. *Revista de Estadística Española* 5(181): 213–229.
- Sobotka, T., Skirbekk, V., and Philipov, D. (2011). Economic recession and fertility in the developed world. *Population and Development Review* 37(2): 267–306. doi:10.1111/j.1728-4457.2011.00411.x.
- United Nations (2015). World marriage data [electronic resource]. New York: United Nations, Department of Economic and Social Affairs, Population Division. <http://www.un.org/en/development/desa/population/theme/marriage-unions/WMD2015.shtml>.
- United Nations (2017a). World population prospects 2017: Data query [electronic resource]. New York: United Nations, Department of Economic and Social Affairs, Population Division. <https://population.un.org/wpp/DataQuery/>.
- United Nations (2017b). Household size and composition around the world 2017: Data booklet [electronic resource]. New York: United Nations, Department of Economic and Social Affairs, Population Division. [http://www.un.org/en/development/desa/population/publications/pdf/ageing/household\\_size\\_and\\_composition\\_around\\_the\\_world\\_2017\\_data\\_booklet.pdf](http://www.un.org/en/development/desa/population/publications/pdf/ageing/household_size_and_composition_around_the_world_2017_data_booklet.pdf).
- Van Heelsum, A. and Koomen, M. (2016). Ascription and identity: Differences between first-and second-generation Moroccans in the way ascription influences religious, national and ethnic group identification. *Journal of Ethnic and Migration Studies* 42(2): 277–291. doi:10.1080/1369183X.2015.1102044.
- Van Hook, J. and Glick, J.E. (2007). Immigration and living arrangements: Moving beyond economic need versus acculturation. *Demography* 44(2): 225–249. doi:10.1353/dem.2007.0019.
- Vitali, A. and Arpino, B. (2015). Living arrangements of second-generation immigrants in Spain: A cross-classified multilevel analysis. *Regional Studies* 49(2): 189–203. doi:10.1080/00343404.2012.759649.



- Zarazaga, J.E., Roman, C.R., and Gomez, M.T.R. (2008). La construcción de la identidad en los hijos de inmigrantes marroquíes. *Revista Española de Pedagogía* 66(241): 489–508.
- Zorlu, A. and Mulder, C.H. (2011). Ethnic differences in leaving home: Timing and pathways. *Demography* 48(1): 49–72. doi:[10.1007/s13524-010-0012-1](https://doi.org/10.1007/s13524-010-0012-1).
- Zorlu, A. and Van Gaalen, R. (2016). Leaving home and destination of early nest leavers: Ethnicity, spaces and prices. *European Journal of Population* 32(2): 267–291. doi:[10.1007/s10680-016-9375-3](https://doi.org/10.1007/s10680-016-9375-3).

## Appendix

**Table A-1: Distribution of educational attainment of individuals aged 20–34 by sex, age, year, and origin**

|                             | Spain 2011 and Morocco 2004 |                 |      |                 |      |        |                 |      |                 |      | Spain 2001 and Morocco 1994 |                 |      |                 |      |        |                 |      |                 |      |
|-----------------------------|-----------------------------|-----------------|------|-----------------|------|--------|-----------------|------|-----------------|------|-----------------------------|-----------------|------|-----------------|------|--------|-----------------|------|-----------------|------|
|                             | Male                        |                 |      |                 |      | Female |                 |      |                 |      | Male                        |                 |      |                 |      | Female |                 |      |                 |      |
|                             | NMM                         | 1 <sup>st</sup> | 1.5  | 2 <sup>nd</sup> | NMS  | NMM    | 1 <sup>st</sup> | 1.5  | 2 <sup>nd</sup> | NMS  | NMM                         | 1 <sup>st</sup> | 1.5  | 2 <sup>nd</sup> | NMS  | NMM    | 1 <sup>st</sup> | 1.5  | 2 <sup>nd</sup> | NMS  |
| Aged 20–24                  |                             |                 |      |                 |      |        |                 |      |                 |      |                             |                 |      |                 |      |        |                 |      |                 |      |
| Less than primary completed | 45.0                        | 21.7            | 9.2  | 1.1             | 1.5  | 60.6   | 24.0            | 12.0 | 0.0             | 1.3  | 57.9                        | 35.0            | 28.8 | –               | 2.2  | 71.4   | 29.9            | 17.4 | –               | 1.7  |
| Primary completed           | 36.0                        | 58.8            | 72.5 | 51.1            | 39.8 | 23.0   | 55.5            | 55.7 | 33.7            | 24.7 | 25.1                        | 52.8            | 58.3 | –               | 44.6 | 17.0   | 50.3            | 60.2 | –               | 32.4 |
| Secondary completed         | 19.0                        | 19.5            | 18.3 | 47.8            | 58.7 | 16.5   | 20.5            | 32.3 | 66.3            | 74.0 | 17.0                        | 12.2            | 12.9 | –               | 53.2 | 11.6   | 19.8            | 22.5 | –               | 65.9 |
| Aged 25–29                  |                             |                 |      |                 |      |        |                 |      |                 |      |                             |                 |      |                 |      |        |                 |      |                 |      |
| Less than primary completed | 53.2                        | 21.3            | 18.3 | 9.4             | 1.5  | 67.2   | 29.6            | 15.1 | 16.7            | 1.2  | 62.5                        | 33.0            | 23.8 | –               | 2.4  | 75.8   | 32.7            | 35.7 | –               | 1.8  |
| Primary completed           | 29.6                        | 52.6            | 63.4 | 50.0            | 41.6 | 18.9   | 45.8            | 58.6 | 44.9            | 26.9 | 18.2                        | 52.0            | 58.8 | –               | 42.7 | 12.0   | 43.1            | 41.1 | –               | 32.9 |
| Secondary completed         | 17.2                        | 26.1            | 18.3 | 40.6            | 56.9 | 13.9   | 24.6            | 26.4 | 38.5            | 71.9 | 19.3                        | 15.0            | 17.5 | –               | 54.9 | 12.2   | 24.3            | 23.2 | –               | 65.3 |
| Aged 30–34                  |                             |                 |      |                 |      |        |                 |      |                 |      |                             |                 |      |                 |      |        |                 |      |                 |      |
| Less than primary completed | 59.9                        | 23.3            | 19.3 | 14.8            | 1.4  | 72.1   | 33.2            | 24.8 | 14.5            | 1.3  | 70.3                        | 32.0            | 17.2 | –               | 3.0  | 82.6   | 33.6            | 20.3 | –               | 2.6  |
| Primary completed           | 22.4                        | 51.0            | 57.8 | 52.3            | 39.0 | 15.6   | 41.7            | 47.4 | 43.5            | 26.3 | 12.0                        | 48.7            | 50.0 | –               | 47.0 | 7.5    | 44.8            | 39.0 | –               | 41.4 |
| Secondary completed         | 17.8                        | 25.7            | 23.0 | 33.0            | 59.6 | 12.3   | 25.1            | 27.8 | 42.0            | 72.4 | 17.7                        | 19.3            | 32.8 | –               | 50.0 | 9.9    | 21.6            | 40.7 | –               | 56.0 |

*Note:* NM: Nonmigrant Moroccans, NS: Nonmigrant Spaniards.  
*Source:* Compiled by authors on the basis of IPUMS-I and INE census data.

**Table A-2: Percentage of individuals working at the time of census by sex, age, year, and origin**

|            | Spain 2011 and Morocco 2004 |                 |      |                 |      |        |                 |      |                 |      | Spain 2001 and Morocco 1994 |                 |      |                 |      |        |                 |      |                 |      |
|------------|-----------------------------|-----------------|------|-----------------|------|--------|-----------------|------|-----------------|------|-----------------------------|-----------------|------|-----------------|------|--------|-----------------|------|-----------------|------|
|            | Male                        |                 |      |                 |      | Female |                 |      |                 |      | Male                        |                 |      |                 |      | Female |                 |      |                 |      |
|            | NMM                         | 1 <sup>st</sup> | 1.5  | 2 <sup>nd</sup> | NMS  | NMM    | 1 <sup>st</sup> | 1.5  | 2 <sup>nd</sup> | NMS  | NMM                         | 1 <sup>st</sup> | 1.5  | 2 <sup>nd</sup> | NMS  | NMM    | 1 <sup>st</sup> | 1.5  | 2 <sup>nd</sup> | NMS  |
| Aged 20–24 | 60.7                        | 23.3            | 26.6 | 25.6            | 31.1 | 19.8   | 9.8             | 21.7 | 22.1            | 28.5 | 58.7                        | 68.7            | 67.4 | –               | 49.3 | 15.6   | 30.9            | 36.7 | –               | 34.3 |
| Aged 25–29 | 76.3                        | 43.7            | 39.0 | 56.3            | 60.1 | 21.9   | 15.9            | 28.9 | 35.9            | 59.6 | 73.9                        | 76.5            | 68.8 | –               | 70.8 | 18.2   | 35.5            | 30.4 | –               | 54.0 |
| Aged 30–34 | 83.5                        | 48.3            | 47.8 | 54.6            | 73.7 | 21.2   | 22.8            | 31.6 | 36.2            | 67.5 | 85.5                        | 77.4            | 76.6 | –               | 79.9 | 19.6   | 36.2            | 44.1 | –               | 53.4 |

*Note:* NM: Nonmigrant Moroccans, NS: Nonmigrant Spaniards.  
*Source:* Compiled by authors on the basis of IPUMS-I and INE census data.

**Table A-3: Average marginal effects of migrant generation (origin), educational attainment, and work status on parental, spousal, and child(ren) coresidence**

|                               | Parent(s) |        |    | Spouse/Partner |        |    | Child(ren) |        |        |
|-------------------------------|-----------|--------|----|----------------|--------|----|------------|--------|--------|
|                               | M1        | M2     | M3 | M1             | M2     | M3 | M1         | M2     | M3 M4* |
| <b>Male</b>                   |           |        |    |                |        |    |            |        |        |
| Migrant generation            |           |        |    |                |        |    |            |        |        |
| NMM                           | 0.097     | 0.117  |    | 0.032          | -0.039 |    | 0.122      | 0.045  | 0.062  |
| 1 <sup>st</sup> Gen           | -0.340    | -0.329 |    | 0.029          | -0.008 |    | 0.056      | 0.016  | 0.023  |
| 1.5 Gen                       | -0.063    | -0.053 |    | 0.049          | 0.015  |    | 0.114      | 0.070  | 0.059  |
| 2 <sup>nd</sup> Gen           | -0.045    | -0.040 |    | -0.057         | -0.078 |    | 0.006      | -0.019 | 0.016  |
| Educational attainment        |           |        |    |                |        |    |            |        |        |
| Primary completed             |           | 0.028  |    |                | -0.097 |    |            | -0.079 | -0.023 |
| Secondary completed and above |           | 0.042  |    |                | -0.142 |    |            | -0.149 | -0.076 |
| Work status                   |           |        |    |                |        |    |            |        |        |
| Not working                   |           |        |    |                |        |    |            |        | -0.003 |
| <b>Female</b>                 |           |        |    |                |        |    |            |        |        |
| Migrant generation            |           |        |    |                |        |    |            |        |        |
| NMM                           | -0.085    | 0.042  |    | 0.097          | -0.025 |    | 0.251      | 0.088  | 0.087  |
| 1 <sup>st</sup> Gen           | -0.415    | -0.356 |    | 0.362          | 0.293  |    | 0.371      | 0.261  | 0.079  |
| 1.5 Gen                       | -0.179    | -0.124 |    | 0.213          | 0.152  |    | 0.269      | 0.169  | 0.070  |
| 2 <sup>nd</sup> Gen           | -0.128    | -0.098 |    | 0.101          | 0.067  |    | 0.057      | -0.004 | -0.036 |
| Educational attainment        |           |        |    |                |        |    |            |        |        |
| Primary completed             |           | 0.117  |    |                | -0.095 |    |            | -0.079 | -0.019 |
| Secondary completed and above |           | 0.202  |    |                | -0.196 |    |            | -0.265 | -0.142 |
| Work status                   |           |        |    |                |        |    |            |        |        |
| Not working                   |           |        |    |                |        |    |            |        | 0.066  |

Note: NMM: Nonmigrant Moroccans. Reference groups are the same as Table 2. \*M4 for child coresidence includes control of spousal coresidence. Age is controlled for all models. Italicized coefficients not significant at  $p < 0.05$  level.

Source: Compiled by authors on the basis of IPUMS-I and INE census data.

