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Mother's educational level and family structure: Comparing Spain and Italy

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Abstract

During the second half of the twentieth century, there has been a positive relationship between single parenthood and the mother's educational level in Spain and Italy. However, several important transformations contemplated in Goode's theory suggest that this relationship might have been inverted in Spain but perhaps not in Italy. The purpose of our study is to test this hypothesis using EU_SILC data from waves 2005 and 2011 and logistic regressions. We found the relationship between the mother's education and being a single mother is negative in Spain, while it is not significant in Italy. However, we found that for Italian mothers aged 40 and younger, and mothers from northwest Italy, this relationship is also negative. In contrast, for older mothers and mothers from the islands or southern Italy, this association is positive, while for mothers from the central and northeast regions, the relationship between education and single motherhood is not significant. These results show how Spain and some parts of the Italian society are moving towards family models similar to those in the northern European countries. As Sara McLanahan (2004) noted for United States, this social transformation in southern Europe cannot be considered without recognizing the potential negative consequence for future generations. The single-mother households dealing with the economic crisis which started in 2008 have lower socioeconomic backgrounds than single mothers who suffered through previous crises, and, therefore, the consequences of this crisis for children in single-parent families might be even more negative, especially in Spain.

Keywords

Family structure, EU-SILC database, Spain, Italy, socio demographic composition of single mothers, Spanish regions, Italian regions, economic crisis, family change in Mediterranean countries, educational level

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1. Introduction

On average, 15% of European children live in one-parent households, most of them headed by women, and this kind of household has a higher risk of poverty than couple-headed households (OECD; 2011). Furthermore, there is evidence that under some conditions, nurturing children in single-mother households has negative consequences on children's cognitive and emotional development which affects them throughout their entire lives (Sigle-Rushton and McLanahan 2004 for a review).In southern European countries, which are characterized as family-based welfare regimes (Esping-Andersen 1999), state protection for children is among the lowest in the European Union. However, when comparing poverty ratios between children nurtured in single-parent families and those in two-parent households, family-based regimes show smaller differences than other welfare regimes. In the mid-1990's, the risk of poverty among children residing in single-parent families was as much as twice the risk of poverty of children residing in two-parent households, while this ratio was much higher in the other Western nations (see Table #1). It seems paradoxical that the relative standard of living of children in single-parent households is better where state social investment is lower. However, this ceases to be such a paradox when we take into consideration the composition effect of single-parenthood in southern Europe. Previous studies with data from nineties or early 2000's on the relationship between single motherhood and education showed a positive relationship in southern Europe (Flaquer, Almeda, and Navarro 2006; Garriga 2010; McLanahan 2004), while this relationship is negative in northern Europe (McLanahan 2004; Kennedy & Thomson 2010). Furthermore, a high percentage of single mothers in southern Europe live with their parents in order to balance work and family life or escape from poverty (Treviño 2006; Flaquer and Garriga 2009).

The purpose of our study is to examine whether such a composition effect still exists in southern Europe, given the changing social context characterized by: a) a dramatic rise followed by a drop in the main economic indicators, b) huge changes in the ethnic composition of the younger population as a result of massive immigration waves, and c) deep-seated changes in family values affecting divorce and cohabitation patterns. Given that these changes have not happened equally intensely among all southern countries, we have selected Spain and Italy as two cases representing two different trends (Moreno and Marí-Klose 2013). Our results confirm that the relationship between education and single parenthood has been clearly inverted in Spain, where the risk of becoming single mother is now higher among the less educated. Similar changes, though lower in intensity, are happening in Italy among the younger women and in the wealthiest regions. All in all, these changes seem more related to cultural changes than to any effect derived from the economic cycle or migration.

The paper is organized as follows. The first section introduces the theoretical underpinning of predicting single parenthood trends in Western societies. Section 2 describes the database and method applied in the study. Section 3 analyses the results, while section 4 discusses the main implications.

Table 1. Risk of child poverty ratios and household structure by country in the mid-90's

Country	Two-parent (1)	Single-parent (2)	Ratio (2/1)
USA*	14.0	54.0	3.9
Sweden	1.5	6.6	4.4
Denmark	2.1	5.5	2.6
Norway	3.2	21.4	6.7
Netherlands**	6.6	26.6	4.0
United Kingdom	13.5	43.5	3.2
Ireland	11.8	48.6	4.1
Germany*	5.4	42.2	7.8
Austria	11.4	44.0	3.9
France*	6.1	25.7	4.2
Belgium	7.1	18.5	2.6
Greece	12.7	21.6	1.7
Italy	18.4	32.2	1.7
Spain	16.6	33.7	2.0

Source: Luxembourg Income Study, Key Figures.

Note: Data from 1995 except:*data from 1994 **data from 1993.

2. Theoretical framework

Divorce is the major source of one-parent households in most western countries, although during the 1980's the number of cases caused by divorce decreased in favor of out-of-wedlock births, most of them from informal cohabitation (Burns and Scott, 1994). In most European countries, divorced or separated individuals make up the bulk of one-parent households. About 20% of single parents are widowed and another 20% are 'accidental' or have chosen single motherhood. The group that has chosen single motherhood through adoption is growing in countries where single parents can adopt, such as Spain (Pailhé et al. 2014). In Spain, the percentage of births to unwed mothers rose significantly, from 3.9% in 1980 to 35% in 2010 (Dominguez-Folgueras and Castro-Martín 2013). Most births to unwed mothers occurred in cohabiting couples, implying that childbearing in cohabiting couples currently accounts for 24.1% of first births in Spain (Castro-Martín 2010). In contrast, the number of cohabiting women with children is extremely low in Italy (Creighton et al. 2013).

Hence, changes in the social distribution of divorce and separation are crucial for understanding the social distribution of single parenthood. Research on the patterns and evolution of more secularized standards of union formation and dissolution is rising in all southern European countries (Flaquer and Garriga 2009; Nazio and Blossfeld 2003; Solsona et al. 1999; Vignoli et al. 2011), but the results also show how Spain is an outlier among southern countries and has recently been moving towards models of marriage and divorce similar to the northern European countries (Moreno and Marie-Klose 2013).

Several studies have analyzed the effect of female education on the risk of family instability (see for a review Bernardi and Martínez-Pastor2011). It has been demonstrated that in countries and cohorts where the percentage of divorce is low, the relationship between divorce and education is positive, and when divorce becomes more common the educational gradient is negative (see Chan and Halpin 2008; Härkönen and Dronkers 2006). This change in the relationship between education and divorce was predicted 50 years ago by William Goode (Goode 1993), who developed a model of the spread of divorce that has received important empirical confirmation. He argued that the relationship between class and family instability depends on the extent to which divorce has become easily to get and widespread. When social and economic barriers to divorce are high and divorce is rare, it is more common in higher social strata because of economic reasons and because wealthier people have the cultural means to free themselves from the normative pressure to remain married. (Blossfeld et al.1995). In contrast, when divorce increases and economic, social and legal barriers fall, marital instability becomes more frequent among lower classes (Bernardi and Martínez-Pastor 2011).

Studies about the relationship between education and divorce suggest that Spain and Italy have experienced a similar evolution (see Matysiak, Styrc, and Vignoli 2014) These countries represent the Mediterranean model which is characterized by a very low level of social protection, strong family relationships and traditional values (e.g., Reher1998). Both countries approved their divorce laws later than most other European countries (Italy in 1970[1] and Spain in 1981). During the eighties and the beginning of the nineties, the relationship between education and divorce was positive and the gradient of marital disruption gradually weakened (Bernardi and Martínez-Pastor 2011; Gabrielli and Vignoli 2013). Nevertheless, in their meta-analysis of the relationship between education and divorce, Matysiak, Styrc, and Vignoli (2014) show that the positive educational gradient has changed in the most recent studies of both countries. However, it is important to note that neither of these recent studies on the relationship between divorce and education use data that has been collected the last eight years, and there have been several important transformations in Spanish society mentioned in Goode's theory which suggest that Spain and Italy might not be following the same pattern anymore.

First, there has been an increase in divorce and single-parent families in Spain during the last decade. In 1990, the Spanish and Italian divorce rates were very similar and lower than in other developed countries. In 2010, the Spanish divorce rate was much higher and more similar to Austria, Germany or Norway than to Italy (Creighton et al. 2013). The most important increases have occurred since 2000 (Spanish Institute of Statistics, http://www.ine.es). Second, the legal and social barriers associated with divorce and family instability have strongly declined during the last decade. In 2005, Spain moved from having one of the most restrictive divorce laws in the world to one of the most liberal ones. Research on attitudes towards divorce also show that acceptance of divorce has increased substantially over the last 10 years in Spain (Becerril 2008). In

[1] Law no. 898/01 December 1070 (La legge Fortuna-Baslini)

addition to that, Moreno and Marí-Klose (2013) show that most Spanish youth (58.3%) believe that divorce is acceptable always or in most cases, while this percentage was only 23.9% among Italian youth in 2008. The authors explain that young cohorts in Spain have clearly developed attitudes that are more similar to those found in central and northern Europe than in southern Europe.

Focusing on single motherhood, the percentage of respondents who disapprove of single motherhood is substantially lower in Spain than in Italy, and this percentage has, in fact, increased in Italy between 1990 (43.2%) and 2008 (54.8%), while in Spain it has decreased over the same period (23.4% in 1990 and 14% in 2008). In addition to these arguments, recent studies reveal that cohabitation has spread significantly among younger cohorts, even though the spread of cohabitation has been slow in Spain (see, Dominguez-Folgueras and Castro-Martín 2013). This change is important because cohabitation is associated with divorce and union dissolution (Creighton et al. 2013; Kiernan 2004).

Despite the rapid evolution of family changes in Spain, the increase in divorce rates has been less sharp in Italy and the Italian divorce laws have not changed, remaining one of the most restrictive divorce laws in the world. Cohabitation has also increased, but less than in Spain (Dominguez-Folgueras 2013). For this reason, in this paper we hypothesize that during the last decade in Spain the relationship between single motherhood and education has become negative, taking into account the rise in divorce and single motherhood, the increase in the social acceptance of new family structures and the liberalization of divorce laws. In contrast, the empirical evidence does not suggest a similar transformation in Italy. Several researchers have argued that in terms of divorce rates and number of cohabitators, Spain is moving from the Mediterranean model to the Nordic one (Martín-Garcia 2013; Creighton et al. 2013). We argue that this transformation is also revealed by the change in the relationship between education and single motherhood.

Most of the recent research on family instability has focused mainly on major changes in cohabitation and divorce, but less on the changing patterns of single-parent families. Focusing on divorce is not enough to understand single parenthood since the stock and social composition of single-parent households also depends on the net result of factors other than just the breakdown of couples.
Single parenthood is an option for very young girls who get pregnant out of wedlock, most of them from a working class or underclass background (Kearney and Levine 2012). This source of single parenthood is more frequent in the American continent than in Western Europe, with the exception of the United Kingdom and Ireland, and it is very rare in southern Europe (Part et al. 2013). Widowhood is another source of single parenthood, and for a long time it has been the main cause of single parenthood in societies where divorce has been forbidden or very restricted by law, as in pre-democratic Spain (Flaquer 1998). Furthermore, widowhood is more frequent among the lower social strata, given their shorter life expectancy. Hence, the proportion of widows is larger in countries where single parents are older, and the prevalence of unmarried

single parents is higher in countries where single parents are younger (Pailhé et al. 2014).

Last but not least, repartnering patterns affect the stock of single-mother households. Recent data on remarriage in the United States using figures from the mid-1990s suggest that more than two-thirds of women and three-quarters of men remarry after divorce (69% vs. 78%) (Schoen and Standish 2001). Most research during the eighties and nineties, as reviewed by De Graaf and Kalmijn (2003), showed negative or insignificant effects of education on remarrying, and in Spain today leaving single motherhood is more frequent among immigrants and lower-educated women (Treviño and Gumà 2013). Although repartnering can provide an additional income earner in the household and is the "surest path to economic recovery" after divorce (Smock, Manning, and Gupta 1999: 807), during times of uncertainty, such as the economic recession which started in 2008, more educated women should have higher chances of marrying and remarrying than poorer mothers (Oppenheimer 1988 and 1994), Likewise, a recent analysis of Spanish data confirms that the educational gradient in favor of less educated women repartnering was weakening in 2010 (Treviño and Gumà 2013).

The economic crisis may also affect single parenthood through changes in the divorce and separation patterns from married and cohabiting unions. The effects of unemployment on couples' stability are not easy to predict. On the one hand, unemployment puts stress on the family that increases the risk of divorce, but when unemployment is the result of widespread economic upheaval, it increases the 'cost of divorce'. Analyzing data from 50 American states, Amato and Beattie (2011) found evidence pointing to a positive correlation between unemployment and divorce in the period previous the eighties, but a negative one since then.

The economic cost of divorce dropped in the period previous to the financial crisis in both countries, but especially in Spain, where economic growth doubled the GDP per inhabitant as well as the number of employed women between 1995 and 2007, while this growth was lower in Italy (46% rise in GDP per inhabitant and 30% of women employed).[2] But the burst of the housing bubble in Spain increased this cost more than in Italy. From 2008 to 2011, the number of employed women decreased 3% in Spain but increased 2% in Italy. Hence, the effects of the economic cycle on single-mother households are predicted to be stronger and more contradictory in Spain than in Italy, in that their number increased in the period previous to 2008 but dropped during the crisis.

Furthermore, the sociodemographic and cultural composition of women in both countries has changed in different ways as a result of massive immigration waves that have multiplied the number of foreign-born inhabitants in Spain by 8.7 between 1998 and 2011, and while this figure was 4.6 in Italy[3]. Spain has had a higher influx of

[2] Data extracted from Eurostat Database, updated on April 10th, 2014.

[3] Data extracted from Eurostat Database, updated on April10th, 2014.

immigrants from Latin America (approximately 40% of total immigrants) (Fullin and Reyneri 2011), while in Italy most immigrants come from East Asia (mainly China, Philippines and India) (Azzolini, Schnell, and Palmer 2013). Immigrants from Latin America show a higher proportion of households led by single mothers compared to immigrants from Africa or Asia (Domingo and Parnau 2006). For these reasons, it is plausible to expect that the mothers born in a non-European country are more likely to be single mothers in Spain, while we do not hypothesize these differences for Italy. Esteve, García-Román, and Lestahaeghe (2012) also show that among women aged 25-29, the higher the education, the lower the incidence of single motherhood in most Latin American countries. In fact, the percentage of single motherhood in these countries (Esteve, García-Román, and Lestahaeghe 2012) is higher than the percentages of single motherhood that we have found in Italy and Spain (see Table 1). Hence, considering the high percentage of immigrants from Latin America in Spain, it is reasonable to predict that the negative relationship between education and single motherhood will be greater among Spanish non-European mothers than among Spanish mothers, while no differences are expected for Italy.

3. Analytical Plan

In this paper we use EU_SILC data from waves 2005 and 2011 to analyze the main characteristics associated with single motherhood just before and during the economic crisis in Spain and in Italy (2005 and 2011, respectively). First, *we tested our hypothesis that mother's educational level is negatively related to single motherhood in Spain, while in Italy this relationship is positive or insignificant*. In addition to that, we also analyzed the factors associated with single motherhood in Spain and Italy, along with how the effects of these factors have changed by country.

In the second step, we tested whether the effect of the mother's educational level on family structure is moderated by covariates that previous research has demonstrated to be related to single motherhood, such as: immigration status, degree of urbanization, age, region of residence and historical time, measured by the year of the survey. Historical time may affect single motherhood through two mechanisms working in opposite directions. First, the rising share of single mothers in recent decades in both Spain and Italy (Treviño 2006; Istat 2010) is consistent with the diffusion theory (Goode 1993; McLanhan 2004). Hence, education is expected to be more negative in 2011 than in 2005 in Spain, while not so much in Italy. Second, between the two surveys, there has been a dramatic u-turn in the economic cycle, increasing the costs of single motherhood and divorce, especially for less educated women. Thus, because the economic crisis has been deeper in Spain, the diffusion effects may be more restrained in this country.

Mother's age is negatively related to single-parent families because young mothers have had less time to experience family disruption or be pregnant outside a stable relationship

(Treviño 2006). However, some studies that follow a life-course trajectory show that single motherhood is more common among young cohorts (see for example Treviño 2006). It is plausible that the change in the relationship between education and single motherhood hypothesized in this paper has started among young women because they have fewer social and economic barriers to overcome. Young mothers have more liberal values and have more chances of being employed since the employment rate is higher among young female cohorts (Moreno and Marí-Klose 2013). McLanahan (2004) also showed that the differences in the mothers' median age between educational levels have increased over the last forty years. Mothers with a higher educational level have a higher median age.

Divorce and cohabitation are more common in urban areas than in rural areas since in cities the values are more individualistic and there is less stigma associated with new family forms (Jalovaara 2001; Snyder, Brown, and Condo 2004). It is therefore also reasonable to assume that single mothers that have a child outside a union are more urban than rural. In addition to that, differences in educational level between single mothers and mothers in two-parent families will be greater in urban than in rural areas, and single mothers in rural areas will also have a higher educational level than single urban mothers. In rural areas, only mothers that have enough economic resources may be able to deal with social stigma associated with single motherhood. Differences in family values between mothers from different educational backgrounds may also be higher in rural areas than in urban areas.

Our model is controlled for Spanish and Italian regions. In both countries, there are major economic and social differences between regions. There are substantial regional variations in the percentage of divorced and single-parent families (2011 Spanish Census by the National Statistical Institute, Gabrielle and Vignoli 2013). What is more, Gabrielle and Vignoli (2013) found that there are important regional differences in the relationship between divorce and education in Italy. We are not aware of any study on regional differences in the relationship between single motherhood and educational levels in Spanish and Italian regions. However, we expect that in regions such as northeast Italy and Catalonia, which are among those with the most liberal values and the highest levels of female employments rates, the relationship between education and single motherhood will be more negative (Andreottia, Mingione, and Pratschkeb 2013; INE *Encuesta Población Activa*).

4. Data and Methods

One of the main problems in studying Spain is the lack of appropriate databases. In this paper, we have not been able to use the Gender Generation Survey, which is one of the best comparative European surveys to study family formation, because Spain does not participate in it. In addition, the most recent Spanish data with information on changes of union formation over time is the Fertility, Family and Values Survey (FFVS) by the

Centre for Sociological Research. But these data were collected in 2006 and therefore there is no information on the characteristics of single-mother families during the economic crisis. For these reasons, and despite its limitations, the EU_SILC database is the only database that contains Spanish data on the characteristics of single-mother families in recent years and allows for cross-national comparability.

We used the 2005 and 2011 waves of the EU-SILC which include an inter-generational module containing information on attributes related to the family of origin and information from periods before and after the economic crisis. In addition, it is important to note that we have not included waves between 2005 and 2011 in order to increase the sample size since by "using pooled data from the EU-SILC cross-sectional files, some individuals and/or households will be present in the data for only one year, while for others there will be repeated observations" and "there is no means of determining which observations are repeated and which are not" (Iacovou, Kaminska, and Levy 2012).

We restricted our sample to mothers aged 25 to 59. Our working sample for Italy is 10,828 mothers, and with no missing cases in any variable it is 10,421 (3.7% missing cases), of whom 5,697 are from the 2005 wave and 4,724 from the 2011 wave. In Spain, the total number of mothers is 7,926, and excluding missing cases the sample size is 7,213; that is, 3,832 and 3,381 mothers taking part in the samples from wave 2005 and wave 2011, respectively. The number missing cases accounts for 9% of the original sample.

There are several important limitations to the EU_SILC database. The database provides two types of annual data: cross-sectional and longitudinal. Longitudinal data is limited to income information. The longitudinal component is also more limited in sample size compared to the primary, cross-sectional component. For this reason, we have not used the longitudinal component due to the low sample sizes of the different family types. When using a cross-sectional survey, we do not know the mother's characteristics before becoming a single mother. However, our main independent variable is education among mothers aged 25 to 59, and few mothers change their educational level at these ages. Another important weakness is that we do not have retrospective information about the date of entry or the duration of single motherhood. For this reason, we cannot perform an event history model.

4.1 Variables

4.1.1.

Outcome Variable: Family structure

The creation of our family structure variable is not straightforward. This variable comes from two sources. The EU-SILC database has a variable about household structure that

has no information on kinship, but other variables permit us to identify the father and mother of children when they live in the same household.

The household type variable has information about the number of adults and children who live at home, but these adults may be the children's parents, relatives or any other adults who are not related to the children. Consequently, this variable puts families made up of children and both parents together with families made up of a single mother who lives with another adult that is not her partner, such as a relative. For this reason, in order to create our family structure variable, we used the household type variable and also identified whether the adults living with the children are their father, mother or another relative. Using both sources of information, we have found that in Italy around 30% of single mothers live with another adult who is not their partner; in most cases these adults are the mother's parents, while in Spain this percentage increases to 46%.

To summarize, our family structure variable has two categories: 1- single mothers who live alone or with another adult; 2- mothers who live only with the children's father or stepfather or with other adults at home. Following EUROSTAT Guidelines, children aged 18 to 24 who are economically inactive are not considered another adult in our family structure variable.

4.1.2. Independent variables

The mother's educational level is the main independent variable and is measured using the highest ISCED level successfully completed. Levels of education grouped according to the International Standard Classification of Education (ISCED 1997) are: low level of education (ISCED 1 and 2), which is at most lower secondary education; medium level of education (ISCED 3 and 4), which is upper secondary education and post-secondary non-tertiary education; and high level of education (ISCED 5 and 6), which is first- and second-stage tertiary education. However, using this categorization of the level of education is especially problematic for Italy, since only 7% of Italian mothers have a low level of education, while 72% have a medium level of education, thus hindering the analysis. In Spain 19% of mothers have a low level of education, while 45% had a medium educational level. For this reason, we decided to categorize the mother's educational level variable as follows: 1- upper secondary education or less, which includes ISCED 0, 1, 2 and 3; 2- post-secondary education (ISCED 4) and tertiary education (ISCED 5 and 6).

In the analysis and main hypothesis section, we justified the inclusion of several sociodemographic variables of the mother at the time of the interview, namely: urban or rural area, country of birth, age and year of the interview. Urban or rural area measures the degree of urbanization of the area where the mother lives: 1- densely populated; 2- intermediate; 3- thinly populated. Country of birth is defined as the country of residence of the mother at the time of birth: 1- born in the respondent's

country of residence (Italy or Spain); 2- born in another European country; 3-born outside of Europe. Mother's age is categorized as 1- under 40; 0- older than 40. The year of interview takes the value of 1 for 2011 0 for 2005. Another control variable is the number of children at home. Single mothers tend to have fewer children than mothers in two-parent families since the former have had less time to live in a couple and have other children (Treviño 2006). Therefore, the number of children will be negatively associated with the probability of being a single mother.

A second group of variables takes into account the sociodemographic characteristics of the mother's family of origin that are associated with single motherhood when the mother was 14 years old. First, several studies show that there is an intergenerational transmission of divorce and family structure (Dronkers and Härkönen 2008; Musicka and Mare 2006). For this reason, it is expected that the mother's family structure in the family of origin will be positively associated with the probability of being a single-mother family. The family structure variable has two categories: living with both parents at age 14 (value 0) or living with only the mother at the same age (value 1).

Secondly, previous studies have shown that women in highly educated families have been socialized in liberal values and norms and therefore they are more likely to cohabit and divorce (Lyngstad 2004; Schröder 2008). Previous studies have shown that the parents' education is positively associated with the probability of divorce (see Lyngstad2004 for a review). In Italy, cohabitation is also more common among women with highly educated parents (Schröder 2008), which is associated with divorce and separation (Kiernan 2004). We have found no study that shows the relationship between parents' educational level and cohabitation in Spain, but it is likely that the results would be similar to those in Italy given that women's educational level is positively associated with cohabitation (Domínguez-Folgueras and Castro-Martín 2008). In our model, the educational level of the mother in the family of origin has the value of 0 for less educated and 1 for more educated.

It is expected that of the activity status of the mother in the family of origin is associated with the probability of being a single-mother family. The mother's activity status is also associated with the daughter's activity status, and several studies show that both married and cohabiting women who are working have more chances of union disruption (see for a review Lyngstad and Jalovaara 2010). This variable has a value of 1 when the mother in the family of origin was working and 0 when she was not. Information about the father is not included since most mothers who lived only with their mother at age 14 did not answer the questions about the father in the intergenerational module.

5. Results-

5.1. What are the main characteristics of Spanish and Italian single mothers compared to mothers in two-parent families?

Table 2 shows different family types by the mother's educational level and year. The first column of the table is the total percentage of single mothers and the second column is the total percentage of mothers in two-parent families. Contrary to what was expected, no growth in single motherhood was found in Spain, but there was a 30% increase in single-mother families in Italy between 2005 (9%) and 2011 (12%). These divergent trends are surprising taking into account that, as mentioned above, divorce rates have increased more in Spain than in Italy (Creighton et al. 2013). However, using the EU-SILC 2007, Iacovou and Skew (2010) found similar differences between these countries. Several reasons may explain this result. First, the impact of the economic crisis has been stronger in Spain than in Italy, and the total number of divorces and separations dropped during of the early years of recession, although it has increased again since 2010 (Spanish Statistical Institute, http://www.ine.es), while it has not dropped in Italy (National Statistical Institute, http://www.istat.it). Secondly, the EU-SILC is a cross-sectional dataset and unfortunately does not distinguish between fathers and stepfathers. It is reasonable to argue that if single-mother families and stepparent families were considered, there would not be differences between countries or the percentage of new family types might be even higher in Spain because social values are more liberal in this country (Moreno and Marí-Klose 2013) and mothers who repartner may be less stigmatized. Furthermore, in the context of the economic crisis, Spanish mothers may repartner in order to escape poverty, just as in other countries (see Sweeney 2010). In fact, Treviño and Gumà (2013) found that in 1999 only 11% of single mothers in Spain repartnered, while in 2010 this percentage had increased to 25%.

Unlike previous studies (Flaquer, Almeda and Navarro 2006; Garriga 2010)), we found that Spanish mothers with the highest educational levels are those who tend to live in two-parent families. Thirty-five percent of mothers with tertiary education live in two-parent families, while this figure is 26% in single-mother families. In Italy, mothers in two-parent families have a lower educational level (21% with tertiary education) than women in single-mother families (24% with tertiary education).

Additionally, family structures with another adult living at home who is not the parent have a lower educational level than family structures with only the parents in both countries. This finding demonstrates that the household structure variable created by the EU_SILC is not appropriate for studying the relationship between the mother's educational level and single motherhood in Mediterranean countries. As mentioned, this variable considers families made up of a single mother and another adult who is not the partner, and families made up of two parents in the same group, that is, a household structure made up of two adults and children.

Table 2. Percentages of mother's education and year by family types.

	Spain						
	Single mother all	**Two-parent all**	**Single mother alone**	**Single mother with another adult**	**Two-parent**	**Two-parent with another adult**	**Entire sample**
Total	9(797)	91 (6,418)	5(425)	5(369)	77(5,336)	13(1,080)	100(7,213)
2005	9	91	4	5	75	15**	
2011	9	91	5	4	80	11**	
Mother's education							
Upper secondary or less	51	42***	41	59***	39***	59***	42
Vocational education	23	23***	26	22***	23***	26***	24
Tertiary education	26	35***	34	19***	38***	15***	34
Total	9 (797)	91 (6,418)	5 (425)	5 (369)	77 (5,336)	13 (1,080)	100 (7,213)
	Italy						
	Single mother all	**Two-parent all**	**Single mother alone**	**Single mother with another adult**	**Two-parent**	**Two-parent with another adult**	**Entire sample**
Total	10 (N=1,150)	90 (N= 9,275)	7 (N=832)	3 (N=316)	77***(N=7,948)	12***(N=1,327)	100 (N=10,425)
2005	9	91***	7	2	78***	13***	
2011	12	88***	9	3	77***	11***	
Mother's education							
Upper secondary or less	36	41*	31	50***	37	62***	40
Vocational education	40	38*	44	26***	40	27***	39
Tertiary education	24	21*	25	24***	23	11***	21
Total	10 (N=1,150)	90 (N= 9.275)	7(N=832)	3 (N=316)	77***(N=7,948)	12***(N=1,327)	100 (N=10,425)

Note: + p < 0.10 *p < 0.05 **p < 0.01 * < 0.001**

Mothers in two-parent families who live with another adult have also lower educational levels than mothers in two-parent families without another adult. However, the proportion of two-parent families who live with another adult compared with two-parent families who live alone is 16% in Spain and 14% in Italy, which is, as previously shown, lower than the percentage of single-mother families who live with another adult in these countries (around 46% and 30% in Italy and Spain, respectively). Unfortunately, we have no information on the evolution of family structures since we do not have longitudinal data, but it is reasonable to hypothesize that a large proportion of single mothers who live with another partner were not living with other adults at home, such as their parents, before being a single mother. Instead, this family arrangement was triggered by single motherhood as a way to escape poverty and to balance work and family life (Treviño 2006; Flaquer and Garriga 2009). Besides, among all single mothers, those with a low educational level tend to be more in need of this family arrangement since they are presumably poorer and have fewer resources to pay for non-family childcare arrangements than single mothers with a higher educational level.

Table 3. Percentages of marital status of the mother by family types.

	Spain			**Italy**		
Mother's marital status	**Single mother**	**Two-parent**	**All**	**Single mother**	**Two-parent**	**All**
Never Married	23	5	7	23	4	6
Married	10	94	86	16	94	86
Widow	11	0	1	11	0	1
Legally separated or divorced	56	1	6	50	2	7

The relationship between family structure and the mother's education may diverge between the two countries due to different causes of single motherhood in Spain and Italy. Unfortunately, our data does not provide information on the reasons behind single motherhood, but it does provide information about the marital status of single mothers. As shown in Table 3, in Spain around the half the single mothers come from divorce or legal separation. Twenty-three percent of single mothers are single, and a large percentage of this group comes from cohabiting couples since, as mentioned above, there has been a sharp increase in this family type, and cohabiting couples are more likely to divorce than married couples (Dominguez-Folgueras and Castro-Martín 2013; Kiernan 2004). Although all single mothers in our sample said that they did not live with a partner, around 10% of single mothers are married. As other researchers have shown, most married single mothers have entered single motherhood more recently than other single mothers, and this is one of the reasons that may explain why they are not legally separated or divorced (Treviño 2006). Italy has similar results as Spain. The main difference is that in Italy there is a higher percentage of married single mothers since it is more difficult to obtain a divorce or legal separation in Italy than in Spain.

Table 4: Coefficients from logistic regressions comparing single-mother family versus two-parent family.

	SPAIN		ITALY	
	Bivariate models	**All model**	**Bivariate models**	**All model**
	1	2	3	4
Mother's education				
Upper secondary or less	Ref	Ref	Ref	Ref
Vocational education	-0.20+	-0.31**	0.16+	0.08
Tertiary education	-0.48***	-0.57***	0.29**	0.19
Mother's type of area				
Densely populated area	Ref	Ref	Ref	Ref
Intermediate area	-0.24*	-0.34*	-0.13	-0.14
Thinly populated area	-0.36**	-0.38**	-0.13	-0.04
Mother's birth country				
Country of residence	Ref	Ref	Ref	Ref
European country	-0.31	-0.36	0.40+	0.29
Non-European country	0.41*	0.33+	-0.16	-0.21
Number of children at home	-0.49***	-0.47***	-0.63***	-0.59***
Younger than 40	-0.12*	-0.09	-0.35***	-0.26***
Year=2011	-0.05	-0.00	0.37***	0.33***
Characteristics of the mother of the family of origin				
Living only with the mother at age 14	0.52**	0.32	0.44**	0.42*
High educational level	0.28+	0.43*	0.24*	-0.08
Working mother	0.26**	0.17+	0.17+	0.02
Spanish regions				
Catalonia	Ref	Ref		
Galicia	-0.22	-0.12		
Asturias	-0.03	0.08		
Cantabria	0.00	-0.04		
Navarra	-0.48*	-0.42+		
Basque Country	-0.95***	-0.86**		
La Rioja	-0.41	-0.37		
Aragón	-1.09***	-1.01**		
Madrid	-0.31	-0.32		
Castille and León	-0.96***	-0.80**		
Castille and-La Mancha	-0.73**	-0.46		
Extremadura	-0.17	0.12		
Valencia	-0.29	-0.29		
Balearic Islands	-0.02	0.02		
Andalusia	-0.32+	-0.19		
Murcia	-0.12	0.13		
Ceuta and Melilla	0.01	-0.00		
Canary Islands	0.39*	0.34+		
Group of Italian regions				
Northwest			Ref	Ref
Northeast			0.14	0.20+
Center			0.14	0.15
South			-0.20	-0.11
Islands			-0.56**	-0.50**
Constant		-0.69**		-1.33***
Pseudo r2		0.04		0.04
N	7,215	7,215	10,417	10,417

Note: + p < 0.10 *p < 0.05 **p < 0.01 * < 0.001**

These findings suggest that differences in the mother's education by family structure are not due to different reasons for entering single motherhood in the two countries. However, with the descriptive results we cannot determine whether the lower educational level of Spanish single mothers or the higher educational level of Italian single mothers compared with those in two-parent families is due to differences in other family characteristics. For this reason, in Table 4, logistic regressions are performed to test the effect of the mother's education while controlling for other independent variables.

Bivariate analysis (column 1) shows that the effect of the mother's education is negative in Spain and increases when control variables are introduced in the model in column 2. Mothers with a higher educational level have lower chances of living in a single-mother family than in a two-parent family. This is quite surprising since as mentioned above, previous studies (Flaquer, Almeda, and Navarro 2006; Garriga 2010) using data from the early 2000's found the opposite relationship between education and family types in this country.

Moreover, as hypothesized, the mother's residence in an urban or rural area is an important predictor of single motherhood. Mothers in intermediate and thinly populated areas are less likely to be single mothers. The effect of this variable is not reduced when other independent variables are introduced in the multivariate model (column 2).

The effect of the mother being from another European country is not significant in the multivariate model. In contrast, as hypothesized, mothers who were born in a non-European country are more likely to live in a single-mother family in Spain. This main effect is not reduced when control variables are taken into account. Having more children at home has negative effects on the probability of living in a single-mother family. Conversely, as predicted, being a mother younger than age 40 is not associated with being a single mother, and the year of the survey does not have a significant impact.

The next group of variables is the characteristics of the family of origin. Mothers who had a mother with a high educational level at age 14 are much more likely to have a single-mother family (column 2). Our results show that the direction of the effect of the mother's education is negative, while the effect of the education of the mother of the family of origin is positive. In other words, the group of mothers who are at a higher risk of being single mothers are those who have a low educational level but whose mothers had a high educational level. This finding should be explored in future research.

In addition, the effect of living with only the mother at age 14 is significant in the bivariate models but is not significant in column 2. Additional analyses have shown that the effect of living with only the mother at age 14 is mediated by the mother's educational level. In accordance with this finding, although to our knowledge there is no study on mechanisms that explain the intergenerational transmission of family structure, several American studies have found that parental divorce increases the probability of children's divorce through children's educational level, since divorce has a negative effect on children's educational level and people with a lower educational level have higher chances of divorce (Amato and Cheadle 2005). Having a working mother at age 14 is also positively associated with being a single mother, but this effect is reduced to 10% of significance when control variables are considered.

Multivariate analysis shows that mothers from the Basque Country, Aragón and Castille and León have fewer chances of being single mothers than those in Catalonia. In contrast, the probability of being a single mother is much higher in the Canary Islands than in Catalonia. There are no significant differences between mothers from Catalonia and mothers from the other eleven regions.

The relationship between the mother's education and single motherhood is significant in Spain. However, in Italy, although the bivariate analysis shows that the mother's education is positively associated with single-motherhood, the multivariate analysis shows no significant effects of education. Additional deep analyses have shown that the effect of the mother's education is reduced when the education of the mother's family of origin, Italian regions and year of the survey are taken into account.

As predicted, in Italy, mothers from non-European countries do not have a higher chance of being single mothers than mothers born in Italy, and the effect of mothers born in other European countries is not significant in the multivariate model. The number of children at home and being a young mother are negatively associated with single motherhood, but the year of the survey and living with a single mother at age 14 are positively related to single motherhood. Compared to mothers from the northwest, those from the northeast regions of Italy are more likely to be single mothers, while those from the islands are less likely.

Contrary to our expectations, the effects of rural or urban area are not significant. In Italy, the probability of being a single-mother family is similar in both densely and thinly populated areas. The effects of the mother's educational level and having a working mother at age 14 are significant in the bivariate model, but they are not significant in the multivariate model. Additional analyses show that mother's education explains the effects of these characteristics of the mother's family of origin.

5.2. How does single motherhood differ between Spain and Italy?

In Table 5 we compare two groups: mothers in single-mother families and mothers in two-parent families. Spain and Italy are pooled in the same sample and several interactions between independent variables and country are performed[4].

As results using separate samples, there is significant interaction between education and country (Model 1), showing that the effect of education is nonexistent in Italy while it exists and is negative in Spain. It is important to note that these results are not due to the differences in of the reasons behind entering single motherhood in Spain and in Italy, since descriptive findings have shown that the marital status of single mothers is similar in both countries.

Even though the models in separate samples show that rural or urban area is significant in Spain but not in Italy, the interaction between this variable and country is not significant in Model 2 of Table 5. However, the magnitude of the effect of living in a thinly populated area is greater in Spain (-0.33) than in Italy (-0.01). It is reasonable to think that with a higher percentage of single-mother families, the differences would be significant.

In accordance with the results found in the separate models, the interaction between country of birth and country is significant (Model 3). The magnitude of the effect of a mother born in a European country is greater in Italy than in Spain, but this effect is not significant in the multivariate model with the Italian sample. In contrast, mothers born in a non-European country have greater chances of being single mothers in Spain than in Italy because this effect is not significant. These results are in accordance with the studies that show that immigrants from Latin America are more common in Spain than in Italy and that the frequency of single-mother families among immigrants from this region is higher compared to immigrants from other regions (Azzolini, Schnell, and Palmer 2013; Fullin and Reyneri 2011; Domimgo and Parnau 2006).

The effect of the number of children at home is similar in both countries (Model 4).There is not a significant (p-value 0.11) interaction between age and country (Model 5). We use the cut-off point of 40 because the half of the sample is older than 40 and the other half is younger. However, if we consider 35 as a cut-off point this interaction is significant, which indicates that Italian single mothers are older than Spanish single mothers compared to mothers in two-parent families. We have predicted that young mothers have fewer chances of being single mothers in both countries, but as shown in separate models, young Spanish mothers have similar chances of being single mothers as older ones. These findings may indicate that mothers in Spain are more prone to separating without waiting for the end of a relationship. Model 6 shows that the year of the survey does not have a significant effect in Spain, while it does in Italy. The interactions between characteristics of the family of origin and country are not significant in either case (models not shown in Table 5).

[4] In this test, we do not consider regions for several reasons: 1- there is a problem of multicollinearity between regions and country, and; 2- the Italian sample only has five groups of regions while the Spanish sample contains all the Spanish regions.

Table 5: Interaction coefficients between independent variables and country from logistic regressions comparing mothers in single-mother families versus mothers in two-parent families

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Mother's education						
Upper secondary or less	Ref	Ref	Ref	Ref	Ref	Ref
Vocational education	-0.28**	-0.05	-0.05	-0.05	-0.05	-0.05
Tertiary education	-0.55***	-0.16+	-0.15+	-0.15+	-0.16+	-0.14+
Mother's type of area						
Densely populated area	Ref	Ref	Ref	Ref	Ref	Ref
Intermediate area	-0.18*	-0.26*	-0.17*	-0.17*	-0.17*	-0.17*
Thinly populated area	-0.22**	-0.33**	-0.20*	-0.20*	-0.20*	-0.20*
Mother's birth country						
Country of residence	Ref	Ref	Ref	Ref	Ref	Ref
European country	0.14	0.13	-0.39	0.13	0.13	0.13
Non-European country	0.07	0.07	0.38*	0.07	0.07	0.07
Number of children at home	-0.55***	-0.55***	-0.55***	-0.46***	-0.55***	-0.55***
Younger than 40	-0.20**	-0.21***	-0.21***	-0.21**	-0.09***	-0.20**
Year=2011	0.18**	0.18**	0.17**	0.17**	0.17+	-0.15+
Country=Italy	-0.16	0.07	0.18*	0.36*	0.24**	-0.05
Mother's education* Country						
Upper secondary or less	Ref					
Vocational education	0.39*					
Tertiary education	0.74***					
Mother's type of area *Country						
Densely populated area		Ref				
Intermediate populated area		0.13				
Thinly populated area		0.25				
Mother's birth country * Country						
Country of residence			Ref			
European country			0.70+			
Non-European country			-0.53*			
Number of children at home * Country				-0.15		
Younger than 40 * Country					-0.20	
Year=2011 * Country						0.38**
Constant	-1.09***	-1.16***	-1.24***	-1.34***	-1.28***	-1.11***
Pseudo r2	0.03	0.02	0.03	0.04	0.03	0.03
N	17,630	17,630	17,630	17,630	17,630	17,630

Note: Variables on the characteristics of the family of origin are included in the model, but they are not shown.+ p < 0.10 *p < 0.05 **p < 0.01 * < 0.001**

In spite of the fact that previous studies have not found socioeconomic differences between Spanish and Italian single mothers (Flaquer, Almeda, and Navarro 2006; Garriga 2010; McLanahan 2004)), our findings go in the opposite direction. Compared to mothers in two-parent families, Spanish single mothers have lower socioeconomic characteristics than their Italian counterparts. They have a lower level of education and a higher likelihood of having been born in a non-European country. In addition, Spanish single mothers tend to be younger than Italian single mothers. Consequently, our findings suggest that Italian single mothers have been able to deal with the economic crisis in a stronger socio-economic position than Spanish single mothers.

5.3. Does the main effect of the mother's education diverge by other characteristics of the mother?

From a policy standpoint, it is useful to know whether the effect of education is moderated by the mother's characteristics. Contrary to expectations, the negative effect of education on the probability of living in a single-mother family is the same for mothers who were born in Spain and mothers who were born in other countries. Interactions between the mother's education and Spanish regions were not significant either, though these estimates could be inefficient since the sample size was low in most regions.

Model 1 of Table 6 shows that the interactions between education and rural or urban area are not significant, with the exception of the interaction between tertiary education and living in thinly populated areas, which is significant at a 10% level (Model 1). For mothers living in densely populated areas, the effect of having tertiary education is b=-0.67, while for mothers living in thinly populated areas it is b=-0.18. The direction of the effect is negative in both cases, but the magnitude is stronger for mothers living in densely populated areas than in thinly populated ones. This finding may indicate that there are fewer social barriers for urban single mothers than for single mothers living in rural areas.

The effect of vocational education diverges by year of the survey in Spain (Model 2). Compared to mothers with upper secondary education or less, the effect of vocational education was greater in 2011 (-0.45) than in 2005 (b=0.08). This finding may also indicate a diffusion pattern, since in 2011 the probability of being a single mother among mothers with vocational education was more similar to mothers with tertiary education than to mothers with secondary or lower education, while in 2005 the opposite was true. Additionally, Model 3 shows that the interaction between the mother's education and age is significant. The effect of tertiary education is b=-0.09 among old mothers, which is low and non-significant, while the effect is b=-0.98 among young mothers.

In Italy, interactions between education and other independent variables are not significant with the exception of the mother's age and region (Model 4 and 5, respectively). Different patterns were found for younger and older mothers. For mothers older than 40, the effect of education is positive (b=0.52 for tertiary education), while for young mothers this effect is negative (b=-0.26 for tertiary education).

Table 6: Interaction coefficients between independent variables and mother's education from logistic regressions for Spain and Italy (separate samples).

	SPAIN			ITALY	
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**
Mother's education					
Upper secondary or less	Ref	Ref	Ref	Ref	Ref
Vocational education	-0.43*	-0.08	-0.01	0.33*	-0.10
Tertiary education	-0.67***	-0.62***	-0.09	0.52**	-0.28
Mother's type of area					
Densely populated area	Ref	Ref	Ref	Ref	Ref
Intermediate area	-0.40*	-0.35*	-0.34*	-0.13	-0.14
Thinly populated area	-0.57**	-0.38+	-0.37**	-0.03	-0.04
Younger than 40	-0.09	-0.10	0.31*	-0.16	-0.25**
Year=2011	-0.01	0.09	-0.01		
Italian regions					
Northwest				Ref	Ref
Northeast				0.20+	0.05
Center				0.14	-0.03
South				-0.10	-0.33
Islands				-0.50**	-1.12***
Mother's type of area * Mother's education					
Densely populated area*					
Intermediate area *Vocational education	0.22				
Thinly area* Vocational education	-0.10				
Intermediate area *Tertiary education	0.32				
Thinly area* Tertiary education	0.49+				
Year (2011)* Mother's education					
Year (2011)*Vocational education		-0.45+			
Year (2011)*Tertiary education		0.07			
Younger than 40* Mother's education					
Younger than 40*Vocational education			-0.60*	-0.55**	
Younger than 40*Tertiary education			-0.98***	-0.78***	
Italian regions					
Northwest * Vocational education					
Northeast * Vocational education					0.21
Center * Vocational education					0.17
South * Vocational education					0.20
Islands * Vocational education					0.72+
Northwest * Tertiary education					
Northeast * Tertiary education					0.48
Center * Tertiary education					0.47
South * Tertiary education					0.64+
Islands * Tertiary education					1.44**
Constant	-0.64**	-0.73***	-0.81***	-1.47***	-0.76***
Pseudo r2	0.04	0.04	0.04	0.04	0.04
N	7,215	7,215	7,215	10,417	10,417

Note: Models of the non-significant interactions are not included. Independent effects of the variables of not significant interactions are not showed. + p < 0.10 *p < 0.05 **p < 0.01 * < 0.001.**

Figure 1. Predicted probabilities for the interaction between mother's age and education for Spain.

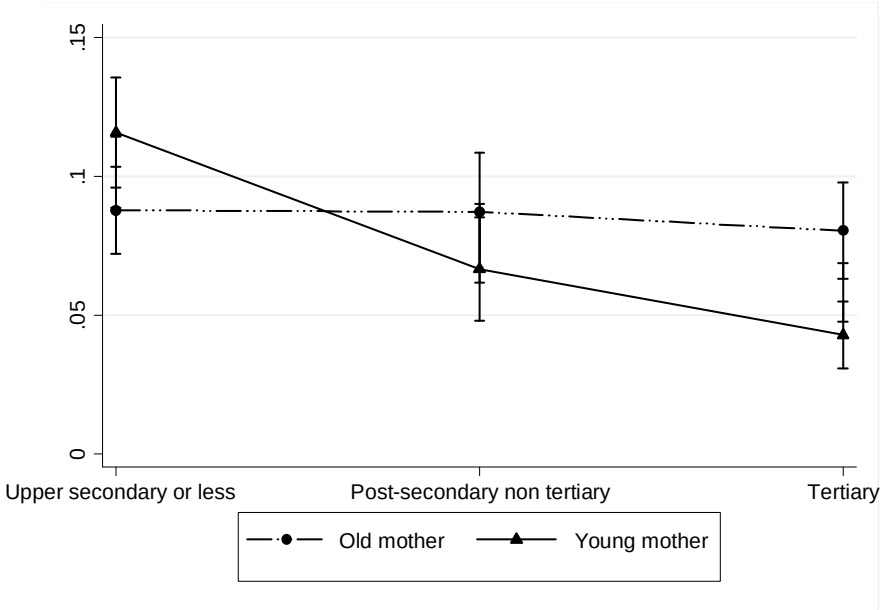


Figure 2. Predicted probabilities for the interaction between mother's age and education for Italy

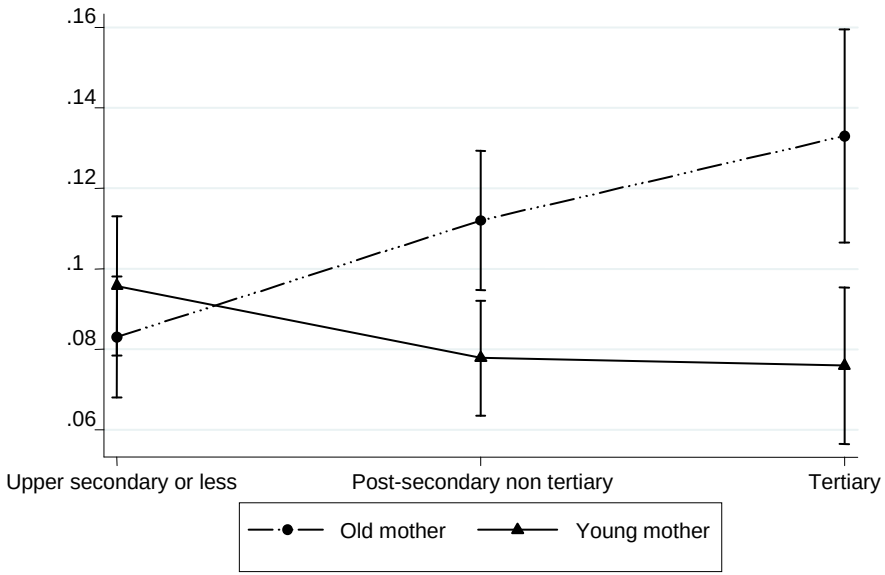
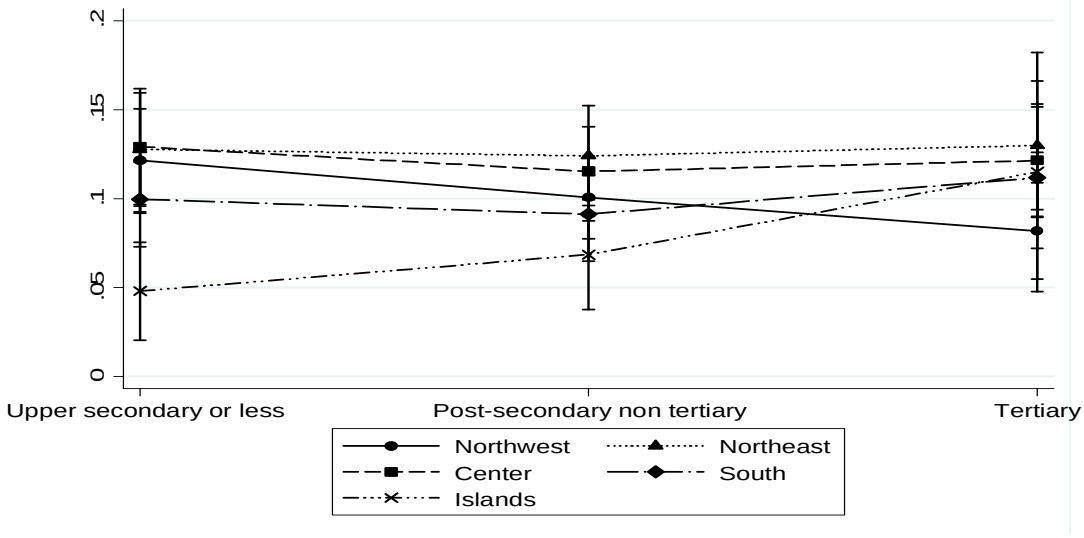


Figure 3. Predicted probabilities for the interaction between mother's education and Italian regions



Interpreting the pattern of being a single mother by the mother's education and age is simplified by examining the predicted probabilities found in Figure 1 for Spain and in Figure 2 for Italy. In Spain, for young mothers the cumulative predicted probability of being a single mother decreases as the mother's education increases, but among older mothers the predicted probabilities do not diverge based on the mother's education. In contrast, in Italy the cumulative predicted probability of being a single mother declines for young Italian mothers and rises for older ones when the level of education rises. Comparing Spain and Italy, older women follow different patterns depending on the country, while for young women from both countries there is a drop in the cumulative predicted probability of being a single mother when the mother's education increases. However, this decline is stronger in Spain.

The effect of education also diverges by Italian regions. Figure 3 reveals that the cumulative probability of being a single mother decreases when the mother's education increases in the northwest. In this region, the effect of education is negative. The cumulative predicted probabilities of being single mother are not substantially different by educational level in the northeast and center. In contrast, the effect of the mother's education is positive in the south and especially in the islands. The cumulative predicted probability of being a single mother declines as the mother's education also grows in these regions. In brief, these interactions suggest that young Italian mothers and mothers from the northwest of Italy follow the same pattern as Spanish mothers.

5.4. Robustness checks

The main results presented here seem robust to a number of alternative specifications. Robustness is tested by determining whether similar results are obtained for 2011 and 2005. By comparing single mothers versus mothers in two-parent families, we found that in both years the interaction between education and country is significant for tertiary education and vocational education but not for vocational education in 2005. Interaction between education and mother's age in Spain is significant in both samples, but it is not significant in Italy for 2011. However, using another cut-off point of the mother's age (35 years old), this interaction turns to be significant for Italian mothers in 2011. The interaction between education and Italian regions is significant for the islands and south in 2005, but it is only significant for the islands in 2011, perhaps because differences between regions are dropping.

Another robustness check was made by excluding mothers not born in the country of residence from our main sample. As mentioned, mothers from Latin America have higher chances of becoming single mothers than mothers from other countries of origin, and Latin American mothers are more common in Spain. Therefore, differences between countries in the relationship between the mother's education and family structure may be due to the differences in the mothers' home countries (Domimgo and Parnau 2006; Fullin and Reyneri 2011; Azzolini, Schnell, and Palmer 2013). Our data does not provide information on the country of origin, but if we exclude mothers not born in the country of residence from the sample, the substantial findings do not change.

Since widowed single mothers have different sociodemographic characteristics than single mothers who are separated or divorced (Treviño 2006), we have excluded widows from our sample, and the substantial findings are very similar with the exception of the effect with tertiary education, which is positively significant in the Italian sample.

Finally, as mentioned, age is considered a dichotomous variable with the cut-off point of 40 years old in our models because the half of the sample is older than 40 and the other half is younger. It is important to note that with another cut-off point younger than 40 years, the interactions between this variable and education remain significant. The same is true when age is measured as a continuous variable. Consequently, the higher negative relationship between education and family structure among young women is very robust.

6. Discussion

Previous research performed using data from nineties or early 2000's showed that single mothers had a higher educational level than mothers in two-parent families in both Spain and Italy (Flaquer, Almeda, and Navarro 2006; Garriga 2010; McLanahan, 2004).

However, our estimates reveal that this relationship has been inverted in Spain. This negative relationship has not been triggered by the economic crisis, since it already existed in 2005 before the economic downturn, as well as after its onset in 2011. Our findings also show that this change is more intense among younger Spanish generations, since the magnitude of the effect is greater in the younger cohort.

Is Italy following the same pattern as Spain? The effect of the mother's education on the likelihood of being a single mother is not significant in Italy. However, this may be changing, since younger Italian mothers with low educational levels now have more chances of being single mothers than younger Italian mothers with higher educational levels. However, it is important to note that the negative effect of education is stronger among younger Spanish mothers than among their Italian counterparts. Additionally, northeast Italy is also following the same pattern as Spain.

This social transformation in southern Europe cannot be considered without recognizing the potential negative consequences for future generations. Single-mother households that are dealing with the economic crisis which started in 2008 have lower socioeconomic backgrounds than single mothers who suffered through previous crises, and, therefore, the consequences of this crisis for children in single-parent families might be even more negative, especially in Spain. In her famous article, McLanahan (2004) warned that under the Second Demographic Transition, children born to the least educated women are losing resources in terms of money and time with their parent, while those born into the most educated families are gaining resources. The main explanation for this increase in the disparities of children's resources is the concentration of single motherhood among less educated women. In other words, less educated women, who already have the fewest opportunities and resources, are those who separate more frequently (McLanahan 2004). One of the potential consequences of this demographic shift is increased inequality among children from different socio-economic backgrounds and family types in terms of wellbeing and life chances (McLanahan and Perscheki 2008; Härkönen 2014). Future research should explore whether the reversal of the relationship between education and single motherhood has effectively increased children's inequalities.

7. References

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8 Appendix

Table 1: Percentages and number of cases by Spanish regions.

		Total
Galicia	%	5.17
	N	408
Asturias	%	1.88
	N	238
Cantabria	%	1
	N	206
Navarra	%	4
	N	349
Basque Country	%	1.438
	N	239
La Rioja	%	0.66
	N	245
Aragón	%	3
	N	330
Madrid	%	13.04
	N	552
Castille and León	%	4.73
	N	412
Castille and-La Mancha	%	4.55
	N	428
Extremadura	%	2.48
	N	316
Catalonia	%	15.99
	N	
Valencia	%	11.51
	N	635
Balearic Islands	%	2
	N	269
Andalusia	%	19.5
	N	986
Murcia	%	3.63
	N	381
Ceuta and Melilla	%	0.2635
	N	148
Canary Islands	%	4.51
	N	365
Total		100

Table 2: Percentages and Number of cases by Italian groups of regions.

		All
Northwest	**%**	25.59
	N	2328
Northeast	**%**	18.38
	N	2423
Center	**%**	18.77
	N	2409
South	**%**	25.04
	N	2335
Islands	**%**	12.22
	N	930