

Single Motherhood, Maternal Education, and Inequality of Educational Opportunity in 5 South American Countries

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Resumen (*el artículo está escrito en inglés, pero la presentación será en español*)

El objetivo de este artículo es investigar el papel de la prevalencia de hogares de madre soltera, en la desigualdad de oportunidades de obtener educación. En el estudio utilizamos datos del IPUMS (Integrated Public Use Micro Series) abarcando cuatro décadas (1970-2010), para Argentina, Brasil, Chile, Colombia y Venezuela. Presentamos los cambios en la prevalencia de vivir con una madre soltera para niños según el nivel educativo de sus madres. Los resultados demuestran que en los años 70 era más común entre madres menos educadas ser madre soltera, mientras que en la década del 2000 ser madre soltera era más común entre madres más educada. Por eso, la estructura familiar probablemente ya no aumenta la desigualdad de oportunidades según educación de madres en los 2000s. Al mismo tiempo, mostramos que vivir con una madre soltera está relacionado con una menor probabilidad de los niños de obtener educación primaria. No encontramos diferencias en estos efectos entre madres solteras que viven con otros familiares (padres o hermanos) y las que viven solas con sus hijos. Aunque no aumenta la desigualdad entre grupos sociales, los hijos de madres solteras experimentan una desventaja adicional en sus carreras educativas.

Palabras clave: *Desigualdad de Oportunidades; Educación; Familia; Madres Solteras;*

Social demographic research on Europe and North-America has documented increased differentials in opportunities by social background (Amato et al., 2015). A factor that has been marked as important in this regard is the changing prevalence of non-traditional family structures (Ellwood & Jencks, 2004; Esping-Andersen, 2007; McLanahan, 2004; McLanahan & Percheski, 2008). It has become increasingly common for children to spend (parts of) their

childhood living without one of their biological parents due to parental divorce and motherhood outside of partnerships (McLanahan, 2004; McLanahan & Percheski, 2008). Growing up without one biological parent, which is usually the father, has been identified as being negatively related to a wide range of desirable child outcomes such as cognitive ability, mental well-being, and educational attainment (Amato, 2010; Bernardi, Radl 2014; Dronkers, 1999; Furstenberg & Kiernan, 2001; Jonsson & Gähler, 1997; Kiernan, 1997; Kim, 2011; McLanahan & Sandefur, 1994; McLanahan & Percheski, 2008; Steele, Sigle-Rushton, & Kravdal, 2009; Strohschein, 2005). Besides being an additional risk factor that could put children in vulnerable positions, the increasing prevalence of single-parent families has also been argued to increase inequality of opportunity by social background. In several countries, children of lower social backgrounds are today more likely to experience single motherhood than their counterparts from higher backgrounds (Ellwood & Jencks, 2004; Härkönen & Dronkers, 2006; McLanahan, 2004; McLanahan & Percheski, 2008), which would increase class disparities in the possibilities to attain desirable outcomes such as education (McLanahan & Percheski, 2008), the outcome of interest in this paper.

Research on social stratification in South America has also identified single motherhood as an important factor reducing inequality of opportunity (Aldaz-Carrolli & Moran, 2001; Gindling & Oviedo, 2008). The prevalence of single motherhood has been historically higher compared to European and North American countries, with relatively high levels already present in figures from the 1960s and 1970s (Castro-Martin, 2002; Esteve et al., 2012). In addition, the lower educated have higher probabilities of being a single parent compared to higher educated parents in South America too (Esteve et al., 2012). There are, however, reasons to expect the South American case to be distinct from that of North American and European countries. While single motherhood might have been related to barriers in earlier periods, hence, being more common among the lower educated, the second demographic transition seems to gain ground in South America too (Esteve et al., 2012). Single motherhood related to increased personal autonomy is likely to have increased over time this can be expected to be more pronounced among the higher educated, possibly changing the educational gradient in single motherhood. The first aim of this paper is to look into this possibility: How has the prevalence of single motherhood developed over time in general, and by parental education?

Another difference between South America and other countries studied could lie in the consequences of single motherhood for child outcomes. Several studies have shown that among communities where single motherhood is traditionally high, its consequences on child

outcomes are smaller (Brown, 2010; Kalmijn, 2010; McLanahan & Bumpass, 1988). Given that this is the case in several South American countries, it could be that single motherhood is less relevant for child outcomes in these contexts. The second aim of this paper is therefore to answer the question: Is growing up in a single mother household related to lower educational outcomes?

The final aim of the paper is to bring the two parts together and get an indication of whether single motherhood is indeed a factor that increases group differences in the likelihood to attain education in South America, or whether this differs from the U.S. and Europe.

To address the three aims formulated, data from the IPUMS (Integrated Public Use Micro Series) (Minnesota Population Center, 2014) is used which provides harmonized census micro-data for a wide set of countries. We selected the five biggest South American countries in terms of population that provided data spanning four decades of time: Argentina (N = 2 628 193), Brazil (N = 7 165 771), Chile (N = 1 034 644), Colombia (N = 2 834 736) and Venezuela (N = 1 735 504). We identify single motherhood based on information about household structure, and distinguish between single mother and lone mother households to account for the relatively high prevalence of extended family households in South America (Esteve et al., 2012). Firstly, we document the trends over time and by maternal education. Secondly, we look at differences in the attainment of primary education by the 'normal' age in each country to investigate whether childhood household structure is associated to lower educational outcomes. We conclude by reflecting on how the role of single motherhood is likely to have changed over time in South America.

BACKGROUND

In 2004 McLanahan published her influential study on 'diverging destinies' where she documented that the second demographic transition has had distinct consequences for higher and lower educated women. While higher educated mothers are likely to postpone motherhood and embark upon careers, the life courses of lower educated women are increasingly marked by family instability. Given that the former is likely to improve child outcomes, and the latter to deteriorate them, concerns were raised that these trends have led to diverging destinies for children from lower and higher educated backgrounds. In this paper we focus on the role of family structure, and whether this has been a factor leading to worsened class disparities in life chances (Amato et al., 2015).

Evidence in support of this perspective has accumulated for both Europe and the U.S. Negative associations of growing up in a household without an absent father and child outcomes such as behavioral problems, mental well-being, cognitive ability and educational outcomes have been reported in numerous studies (Amato, 2010; Bernardi, Radl 2014; Dronkers, 1999; Furstenberg & Kiernan, 2001; Jonsson & Gähler, 1997; Kiernan, 1997; Kim, 2011; McLanahan & Sandefur, 1994; McLanahan & Percheski, 2008; Steele, Sigle-Rushton, & Kravdal, 2009; Strohschein, 2005). Possible reasons for such effects are decreases in family income, changes in parenting styles, parental monitoring, and family conflict (Amato, 2010; Cavanagh & Huston, 2006; Dronkers, 1999; Jonsson & Gähler, 1997; Kiernan, 1997; McLanahan & Sandefur, 1994; Musick & Meier, 2010; Pryor, 2004). At the same time, more causally oriented studies disagree on whether these effects are causal or due to selection bias and other forms of endogeneity (McLanahan et al., 2013).

The negative correlation between maternal education and divorce and single motherhood has been widely documented for the US (Amato et al., 2015; Ellwood & Jencks, 2004; McLanahan, 2004; McLanahan & Percheski, 2008). In Europe the focus has been on divorce and separation of parents rather than single motherhood, given that compared to the U.S. very few mothers give birth without having a partner. Evidence on divorce has reported for many countries a negative correlation with women's education (Chan and Halpin 2005; Chen, 2012; De Graaf and Kalmijn 2006a; Härkönen & Dronkers, 2006; Hoem, 1997; Matysiak, Styrk & Vignoli, 2014; Park & Raymo, 2013; Ono, 2009; Raymo, Fukuda and Iwasawa 2013). In several countries this correlation is, however, positive (Härkönen & Dronkers, 2006; Stevenson & Wolfers, 2007; Matysiak, Styrk, and Vignoli, 2014). These are mostly countries where divorce rates have only started to rise recently.

This pattern is in line with predictions made by Goode in the 1960s (1962; 1963). Goode argued that in climates where divorce is widespread and 'easy' it are those from lower social classes who will divorce most. Reasons that Goode offered for this pattern were higher levels of marital strain due to economic pressures, less social control of peers, less dependency on income of the husband, and less common investments made by couples from lower social strata (Goode, 1962). Recent evidence points into the direction of the latter two factors (Boertien, 2012; Boertien & Härkönen, 2014). Key to his story, however, was that in climates where divorce is relatively uncommon and not 'easy' it are couples from the higher social strata that are more likely to divorce. Legal, social, and economic barriers to divorce are likely to exist in such

contexts that require resources to overcome. Only the higher social classes will have such resources available, hence, their higher levels of divorce in such settings. As divorce spreads, social, legal and economic barriers should go down, eventually leading to an 'easy' divorce climate where the lower classes are most likely to break up their marriages.

The evidence for Western countries thus supports the trends of these predictions. Not only is the correlation between socio-economic resources and divorce positive in countries with relatively low levels of divorce, the correlation used to be (more) positive in past periods with lower divorce rates in countries that now display a negative gradient (Härkönen & Dronkers, 2006).

Combining the trends on the prevalence of single motherhood by social background, and its effects on child outcomes, a relatively solid body of evidence exists showing that single motherhood is increasingly a childhood experience for children of lower social strata. Single motherhood can therefore be expected to be an additional obstacle for upward mobility of disadvantaged children in Western countries (but see Bernardi, Boertien & Popova, 2014). Whether this is also the case in other regions of the world, however, is less clear. In the next section the existing evidence for the region under study in this paper is presented: South America.

The South American Context

Existing research on South America can already give some indications on the role family structure could play in inequality of opportunities. Consensual unions that involved childbearing have historically been relatively common in many Latin American countries compared to Europe and the US (Castro-Martin, 2002; Kuznesof & Oppenheimer, 1985). The transition to marriage was often costly and therefore foregone by considerable parts of the population (Kuznesof & Oppenheimer, 1985). Empirical studies have recorded relatively high levels of single motherhood already in the 1970s from an international comparative perspective (Castro-Martin et al., 2011; Esteve et al., 2012). The lower stability of cohabiting unions in comparison to marriages and the lower legal protection provided by such unions to its members is presumably a major explanation of this high prevalence. Despite the relatively high initial levels of single motherhood which seem more related to historical family behavior in the region, levels have been rising over the last decades in South America too. Arguably these increases are partly due to the "Second Demographic Transition" having started to gain ground in these countries too

(Esteve et al., 2012; Parrado & Tienda, 1997), related to increased personal autonomy within relationships, especially for women. This possibly leads to the co-existence of two very different processes leading up to single motherhood, one being related to the costs or difficulties of getting married, and one being related to a quest for personal autonomy. The former could be more common among lower educated women, while the latter is likely to be vanguarded by higher educated women.

Less is known about how single motherhood is distributed across the educational attainment of mothers, and especially how this has changed over time. The high historical costs to get married would suggest that historically it are those with few resources that forego marriage and are more likely to end up as a single mother. At the same time, numbers available for the 2000s suggest that among mothers aged 25-29 the risk of being a single mother is greater for higher educated mothers compared to lower educated mothers (Esteve et al., 2012). This would suggest a turnaround in the gradient of single motherhood from negative to positive, a pattern that is opposite to what happened to the gradient of divorce in the US and Europe (Härkönen & Dronkers, 2006). The first aim of this paper is to use comparable data over time to describe how the educational gradient in single motherhood has developed over time. An additional aim is to improve on estimates for the 2000s by taking a children's perspective, which is to say the percentage of children living with a single mother by mother's education (instead of the percentage of mothers). This has the additional benefit of avoiding later timing of parenthood to affect the estimates of how single motherhood is distributed by educational background (which is the case if one looks at the share of single mothers in a given age group, see Esteve et al., 2012).

Given that the motivation of the paper lies in identifying the possible role of single motherhood in determining life chances of children, a particularity of Latin American countries has to be taken into account. Many single mothers live together with extended kin, such as their own parents or siblings. Given that extended families can provide economic support and help with raising children, children growing up in such households might be less advantaged than their counterparts living in other types of households (Esteve et al., 2012). We therefore also present trends for lone mothers only, which we define here as single mothers who do not live with extended kin. In addition, to test the argument that such extended families can dampen the effect of having a single mother we also look at differences in educational outcomes between children living with both parents, a single mother with extended family, and a lone mother.

Less is known about this part of the research questions presented in this paper. While family structure has been identified as an important factor in determining child outcomes (Aldaz-Carrolli & Moran, 2001; Gindling & Oviedo, 2008), to our knowledge empirical tests of this argument are few. Several studies have documented the difficult position of single mother households and their increased risk of experiencing poverty (Aldaz-Carrolli & Moran, 2001; Chant 1985, 2002; Dominguez & Watkins, 2003). At the same time, to what extent this translates into worse child outcomes in South America is unclear.

Kalmijn (2010) studied the consequences of separation for the life courses of children of Caribbean origin in the Netherlands and concluded that they are affected to a lesser extent in comparison to White children in the Netherlands. A possible explanation is that in contexts where growing up with a single mother is historically relatively common, social institutions might have adapted and social stigma could be lower, enabling families to deal better with the situation they are in. From that perspective it could be that in the South American context effects of single motherhood are smaller than in Europe or the US given its historically higher prevalence. On the other hand, it could be that Caribbean children in the Netherlands are a disadvantaged group and therefore have less to lose given that poverty levels are already high and desirable child outcomes hard to achieve (Kalmijn, 2010). The analysis of this paper will aim to give a first insight in the association of childhood family structure with educational outcomes and to empirically distinguish between these two possibilities.

METHOD AND DATA

The data used in this paper come from the Integrated Public Use Micro Series a project that collects and harmonizes census data from countries across the globe.¹ With the aim of documenting trends over time in single motherhood we selected the five largest countries population wise that provided data covering several decades. This resulted in selecting the 1970, 1980, 1991, and 2001 census data for Argentina; the 1970, 1980, 1991 and 2000 censuses for Brazil; 1970, 1982, 1992, and 2002 for Chile; 1973, 1985, 1993 and 2005 for Colombia; and 1971, 1981, 1990 and 2001 for Venezuela.

¹ The data from Argentina originally come from the National Institute of Statistics and Censuses, for Brazil from the Institute of Geography and Statistics, for Chile from the National Institute of Statistics, for Colombia from the National Administrative Department of Statistics, and for Venezuela from the National Institute of Statistics.

The data provided are fractions of the complete censuses ranging from 2% in Argentina in 1970 to 10% in most other cases. For our samples we selected all children aged 16 or younger. Subsequently we dropped children from the analysis who did not have information on the key variables of the analysis: educational attainment, maternal education, and household composition. This led to children not living with their mother from being excluded from the sample, because information on education was only available for household members. These selection criteria led to overall sample sizes of 2 628 193 in Argentina, 7 165 771 in Brazil, 1 034 644 in Chile, 2 834 736 in Colombia, and 1 735 504 in Venezuela.

For parts of the analysis we focus on a sub-group of respondents who are at the age at which one normally has attained primary education, the sample sizes for these analyses are displayed in Table 1. For Brazil this age was 14, and for the other countries this was age 13. This age was determined based on the point in time where the majority of children attained primary education, and we only focused on the censuses from the early 2000s for this part of the analysis.

Table 1. Descriptive Statistics of the Samples Used

	Argentina Mean (SD)	Brazil Mean (SD)	Chile Mean (SD)	Colombia Mean (SD)	Venezuela Mean (SD)
Male	0.51	0.51	0.51	0.51	0.51
Age	9.7 (3.8)	10.4 (3.4)	10.3 (3.4)	9.9 (3.6)	9.6 (3.7)
Maternal years of education	7.4 (4.2)	3.7 (3.8)	7.6 (5.1)	5.3 (4.1)	5.6 (4.0)
Living with lone mother	0.07	0.07	0.08	0.10	0.09
Living with single mother in extended family	0.07	0.05	0.10	0.13	0.13
Living with single mother	0.14	0.12	0.18	0.23	0.22
<i>N</i>	2 628 193	7 165 771	1 034 644	2 834 736	1 735 504
<i>Respondents aged 13</i>					
Attainment of primary education	0.82	0.53*	0.94	0.88	0.81
<i>n</i>	61 730	193 148	23 637	79 618	38 949

Note. *Primary education for respondents aged 14 in Brazil. Sample weights used to calculate averages. Respondents aged 13 only taken from censuses of the early 2000s.

Variables

The main variable of interest in this paper is single motherhood. The data on household composition was used to determine whether the father of the child lives in the same household. Households were marked as single mother households if the child lived with the mother, but not with the person identified as the father at the time of the census. This group of single mother households comprises a heterogeneous group of household types that can be categorized into

those who live with extended family members and those who do not. In some parts of the analysis, the focus is on the latter group of single mothers, labelled 'lone mothers'. Table 1 gives an overview of the prevalence of these different types of household arrangements in the different countries.

To look at trends in single motherhood by social background we used two different measures of maternal education (given that paternal education is not available in single mother households). Initially, for descriptive purposes we distinguish between mothers who did not complete any level of education (less than primary), those who completed primary education but not more, and those who completed at least secondary education. To make the measure of maternal education more comparable over time and space (given that educational expansion will make completing secondary school have a different meaning across periods), also a measure based on the standardized years of schooling received by the mother was used (the variable years of schooling was provided directly in the data). By standardizing the variable we assure that in all periods and countries the coefficients reflect a one standard-deviation change in education of the mother. In Table 1 the original distribution of years of schooling is displayed for each country.

In the last part of the analysis we look at the association of single motherhood with educational outcomes of children. To this end we used a measure of whether the child attained primary education by age 13 (age 14 in Brazil). Given that the majority of children did so by this usual age of attainment, children not having attained primary education by that age could not have done so due to dropping out or due to moving slow through the educational system. The measure therefore reflects effects on a combination of educational performance and choice.

Procedure

The empirical analysis of this paper is primarily descriptive. The analysis starts out by answering the question how the prevalence of single and lone motherhood has developed over time and by maternal education. To this end, descriptive graphs are presented based on weighted averages.

In a second step, the aim is to make the differences in single motherhood and lone motherhood prevalence by maternal education comparable over time and space. To this end sets of Logistic Regressions were estimated for each time period and country (including sample weights). The first of these models had as the dependent variable single motherhood in general, and the

second one only looks at lone motherhood. The standardized years of maternal education were included as the independent variable in both models. The Odds Ratios for maternal education resulting from these models are subsequently reported in the paper.

In the final step of the analysis Logistic Regressions (including sample weights) are estimated to look at the effects of growing up in different types of households on the attainment of primary education. For this final step of the analysis we create three mutually exclusive categories of household structure: 0) living with both parents; 1) living with a single mother and extended family members; 2) living in a lone mother family.

RESULTS

The results section starts by outlining trends in single and lone motherhood over time and by maternal education. Figure 1 shows the general trends in single motherhood for the four time periods under study in Argentina, Brazil, Chile, Colombia and Venezuela. The results show that in all countries single motherhood has become an increasingly common experience for children. The biggest increase in the experience of single motherhood can be observed for Brazil where its prevalence went up with 11.1 percentage points. The smallest increase is recorded in Colombia where its percentage share went up from 21.7% to 25.8%.

Another observation that can be made is that country differences have become smaller over time. In the 1970s single motherhood was relatively common in Colombia and Venezuela already, relatively uncommon in Brazil, and Argentina and Chile took an intermediate position. The difference between the highest (Colombia) and smallest (Brazil) proportion of children living with a single mother was 16 percentage points in that period. By the 2000s Chile had joined Colombia and Venezuela as the group of countries with the highest prevalence, while Argentina looked more similar to Brazil. The largest difference between countries was, however, only 9 percentage points in the 2000s (between Colombia and Brazil). It can be argued that convergence across countries has been due to countries with a low prevalence of single motherhood 'catching up'.

The two main observations of increases over time and convergence across countries can also be made when excluding children whose mother is single but live with extended family members. Figure 2 shows the development over time of the prevalence of 'lone mothers'. One remarkable difference with single motherhood in general is that its prevalence declined in all

countries between the 1970s and 1980s, except Brazil, before increasing in the later two time periods.

The second aim of the analysis is to show how these trends have developed by educational background. Figures 3-6 show the developments of both single and lone motherhood over time by education of the mother of the child. The numbers display more pronounced increases in single and lone motherhood for children with higher educated mothers. Only in Brazil did single motherhood increase with more than 10 percentage points for children of mothers without education, and lone motherhood with 3 percentage points. At the same time such increases were observed for higher educated mothers in all countries (except for single motherhood in Argentina). In fact, the prevalence of single and lone motherhood in the early 2000s did barely exceed levels from the early 1970s in Colombia and Venezuela among children with lower educated mothers. An additional remark that can be made is that the drops in lone motherhood observed between the 1970s and 1980s in Figure 2, seem to be caused by reductions in its prevalence among children of lower educated mothers.

The question arises to what extent these trends observed might have led to changes in the association between maternal education and the experience of single motherhood. Figures 7 and 8 display the odds ratios of living with a single and lone mother respectively depending on maternal education. To make the effect sizes more comparable over time periods a standardized measure of maternal years of education has been used, so that effect sizes refer to differences associated with one standard deviation in maternal education years. The odds ratios are taken from Logistic Regression models explaining single motherhood and lone motherhood respectively for each time period and country separately.

In all countries, and for both lone motherhood and single motherhood in general, the association with maternal education has become more positive over time. In the 1970s single motherhood was still relatively more prevalent among children of mothers with lower levels of education in all five countries. By the 2000s this was only still the case in Argentina where the odds ratio of education changed from 0.82 to 0.94. In the other four countries the odds ratios displayed

Figure 1. Percentage of children living with a single mother in 5 South American Countries

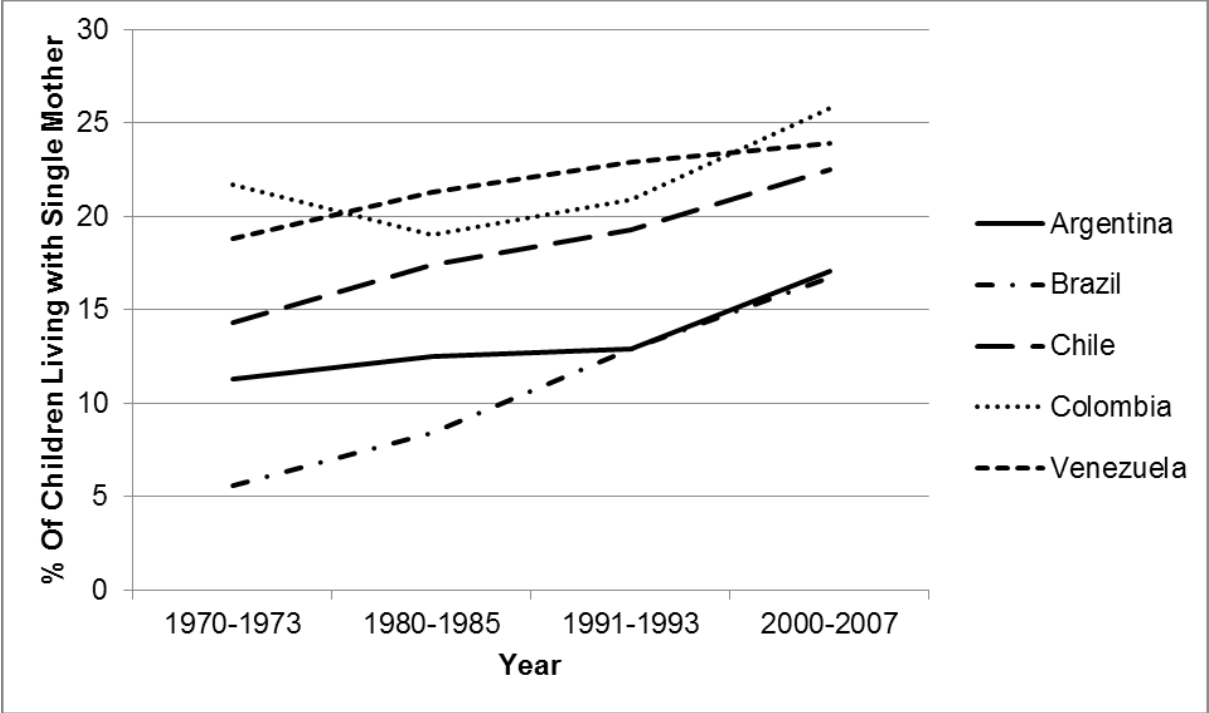
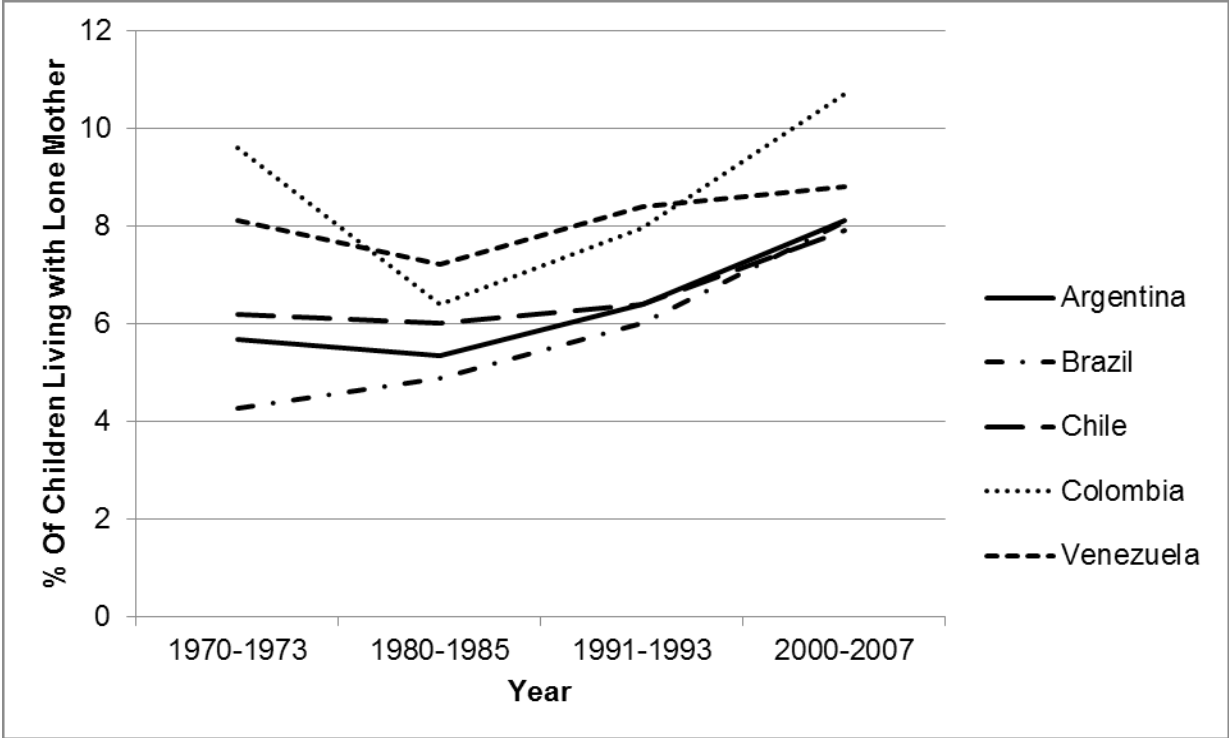
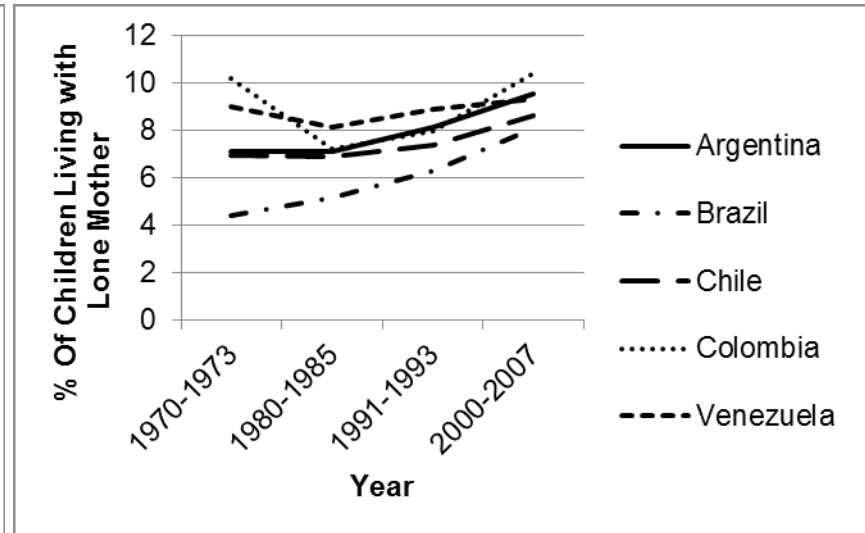
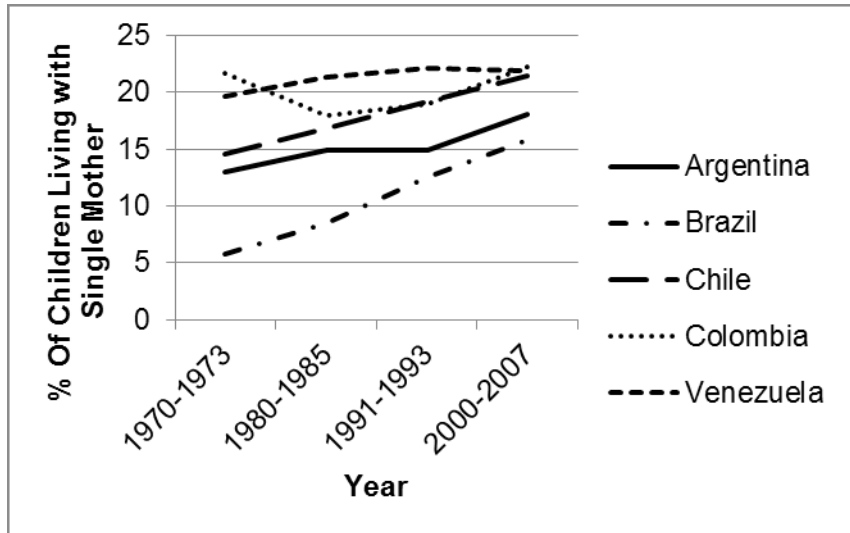


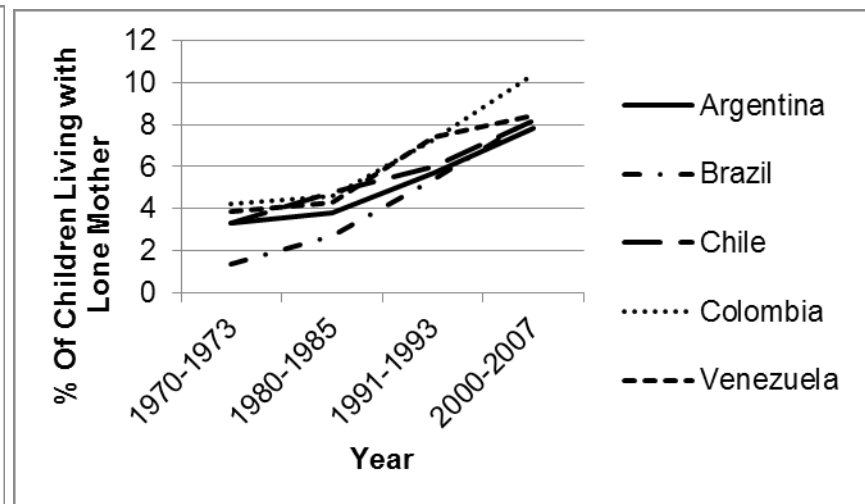
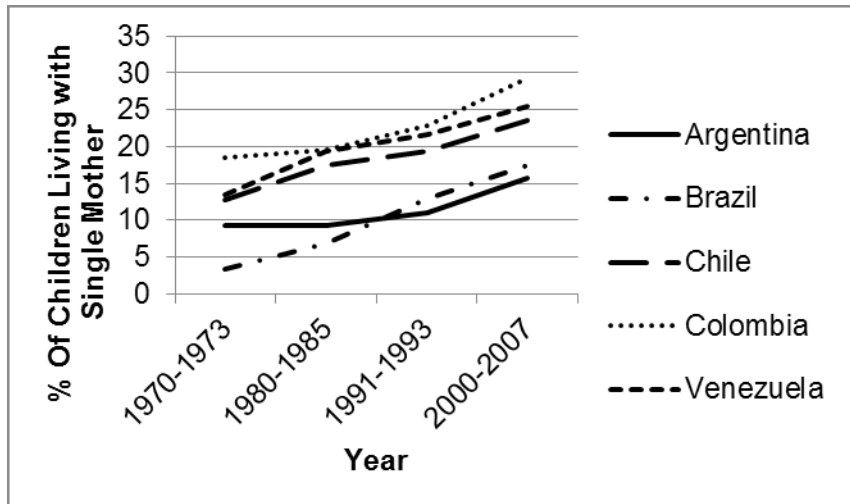
Figure 2. Percentage of children living with a lone mother in 5 South American Countries



Figures 3 & 4. Prevalence of single and lone motherhood among children of mothers who did not complete primary education



Figures 5 & 6. Prevalence of single and lone motherhood among children of mothers with secondary education completed or higher



positive effects in the 2000s, with the largest association recorded in Colombia with a ratio of 1.13. The trends are similar for lone motherhood, but there the associations did not yet reach positive levels. The clear negative associations of maternal education with lone motherhood observed in the 1970s in all five countries disappeared entirely by the 2000s in Brazil, Chile and Colombia, and almost did so in Argentina and Venezuela.

Single Motherhood and Educational Outcomes of Children

The results thus show that maternal education has decreasingly become a predictor of the experience of single and lone motherhood over time in these five South American countries. This suggests that single motherhood is likely to have become a less relevant factor in explaining inequality of opportunity by social background. At the same time, this does not mean that single motherhood has no influence on children's life chances in general. On the individual level single motherhood is still likely to affect child outcomes. To check for this possibility we looked at the association of single and lone motherhood with the attainment of primary education of children aged 13 (14 for Brazil), the age at which the majority of children completed this stage of education. Table 2 displays how the odds of attaining primary education depend on childhood family structure in the censuses of the early 2000s.

As expected, education of the mother is a very strong predictor of whether the child completed primary education or not, increasing our confidence in the results. The numbers for family structure show that in Argentina, Brazil, and Chile children growing up with a single mother are less likely to have completed primary education. This is both the case for children living with extended family and those living with a lone mother. The effects for lone mothers are slightly smaller than for single mothers living with extended families in these three countries. This could indicate that living with extended family could be out of economic necessity. While many lone mothers might not have the possibility to live with extended family, many will have chosen to not live with other family members, hence, having the means to do that.

In Colombia and Venezuela no statistically significant effects of family structure on educational attainment were found. These results are relatively stable over time with odds ratios for family structure having been above 0.90 in these two countries since the 1980s, but effects similar to the current coefficients in Argentina, Brazil and Chile during the 1970s. Colombia and Venezuela are the two countries where single motherhood was already relatively common in the 1970s. This is congruent with earlier research that has shown that among ethnic groups with

Figure 7. Odds of living with a single mother by standardized years of education of the mother

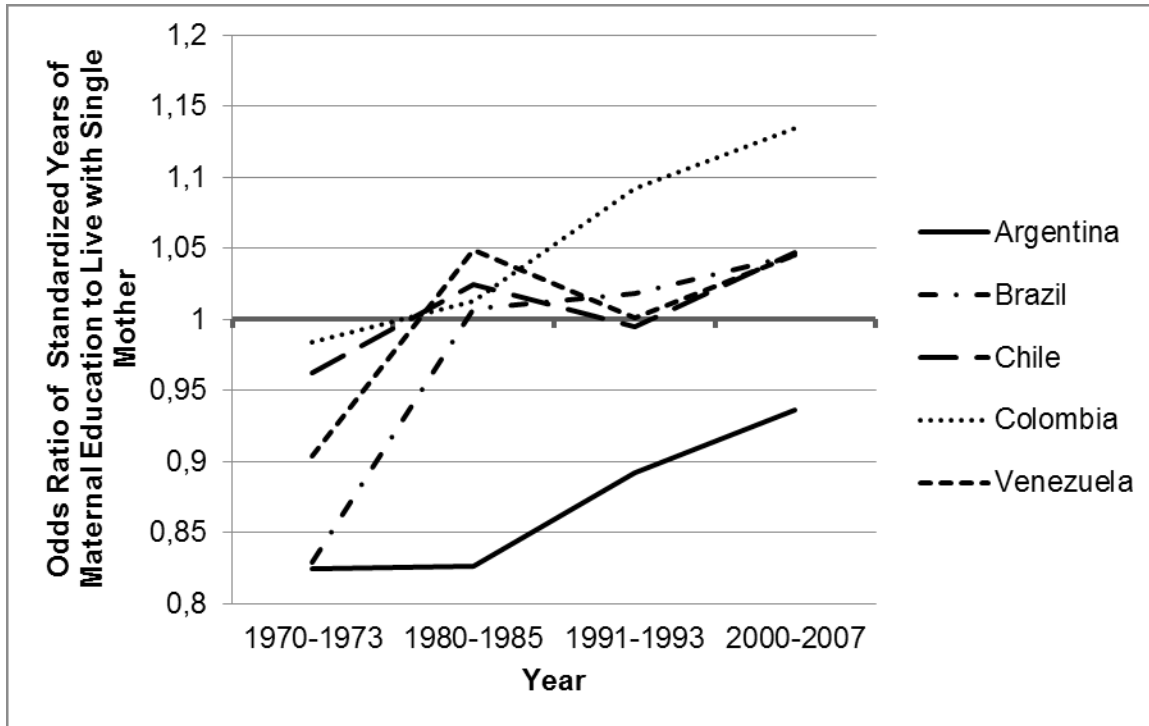


Figure 8. Odds of living with a lone mother by standardized years of education of the mother



Table 2. Logistic Regressions Explaining Attainment of Primary Education for Children Aged 13 in the early 2000s

	Argentina OR (SE)	Brazil OR (SE)	Chile OR (SE)	Colombia OR (SE)	Venezuela OR (SE)
St(education of mother) <i>Family structure (ref. intact)</i>	2.57 (0.03)	2.86 (0.02)	1.88 (0.054)	3.80 (0.11)	2.33 (0.05)
Single mother in extended family	0.69 (0.03)	0.71 (0.02)	0.71 (0.05)	0.94 (0.06)	0.99 (0.04)
Lone mother	0.79 (0.03)	0.85 (0.02)	0.78 (0.06)	0.91 (0.05)	0.98 (0.04)
Constant	6.51 (0.09)	1.33 (0.01)	12.5 (0.07)	6.88 (0.18)	3.00 (0.04)
N	61 730	193 148	23 637	79 618	38 949

Note. Sample weights included in the analysis. Children aged 14 in Brazil.

high levels of non-intact families, its effects are relatively smaller (Brown, 2010; Kalmijn, 2010; McLanahan & Bumpass, 1988).

DISCUSSION

The aim of this paper was to give insight in the role of single motherhood in the intergenerational transmission of educational advantage in 5 South American countries. We found the correlates of single motherhood to develop a very different pattern compared to Europe and the United States (Härkönen & Dronkers, 2006; McLanahan, 2004). We find that a relatively strong negative correlation between maternal education and single motherhood that already existed in the 1970s in all five South American countries under study. By the 2000s this negative correlation had reversed to a positive one in Brazil, Chile, Colombia and Venezuela, and almost disappeared in Argentina. This trend was primarily driven by steady increases in the prevalence of single motherhood among the higher educated.

Single motherhood has become a central concern in the debate on class disparities in opportunities for children in the U.S. and Europe (Amato et al., 2015; McLanahan & Percheski, 2008). The results of this paper show that such a role seems less clear in the 2000s for South American countries. Maternal education is no longer a clear predictor of single motherhood, and if so it has become a positive determinant (except in Argentina).

A second main contribution of this paper has been to show the association between single motherhood and children's educational attainment. In Argentina, Brazil, and Chile growing up in a single mother family was associated with lower odds of attaining primary education by age 13

(age 14 in Brazil). This was the case regardless of whether single mothers lived with extended family members or not. In these countries single motherhood is therefore likely to still play a role on the individual level regarding life chances.

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