

## TWO

# Single-mother poverty: how much do educational differences in single motherhood matter?

*Juho Härkönen<sup>1</sup>*

Educational differences in family structure have received increasing attention in family demographic research ever since McLanahan (2004) coined the term ‘diverging destinies’ to describe educationally uneven trends in family formation and family structure, parental involvement and families’ attachment to the labour market. Her key finding was that highly educated women have been forming their families later in life and leading family lives characterised by stable marriage, high labour-force participation and husbands actively involved in childrearing, whereas less educated women’s family lives have become characterised by less marriage, more single motherhood and less father involvement. This combination of trends has increased educational disparities in family life, with the potential to increase inequalities in adults’ and children’s wellbeing and future life chances (McLanahan & Percheski, 2008; Putnam, 2015).

In this chapter, I focus on one aspect of such inequality: poverty rates in single-mother households, and the difference in poverty between single-mother and coupled-parent households (the **single-mother poverty gap**), from a cross-national viewpoint. The educational disparities in the prevalence of single motherhood mean that single mothers have, on average, lower levels of education than partnered mothers. This combination of low education and single parenthood often leads to very high poverty risks (Härkönen, 2017) and can, at the aggregate level, translate into larger single-mother poverty gaps than in the absence of these educational differences. Yet, both the educational gradients of single motherhood and educational differences in poverty levels can vary cross-nationally, meaning that the importance of educational differences in single motherhood for the single-mother poverty gap is likely to vary as well.

The remaining chapter is organised as follows. In the next section, I provide an overview of the educational differences in family structures. I then describe the Luxembourg Income Study (LIS) Database that I use. In the results section, I describe the educational gradients in single motherhood in the 2010s and the poverty rates among single and partnered mothers with different educational levels. I then proceed to analyse what the single-mother poverty gap would be in the absence of educational gradients of single motherhood, to give an account of how much these demographic differences matter for single-mother poverty. The last section concludes.

## **Education and single motherhood cross-nationally**

McLanahan's (2004) seminal article focused on the US, even though she presented comparative findings from Canada and European societies as well. A key finding in her article was that trends in US single motherhood – defined in that study as mothers who are not married or living with their husbands – have been increasingly differentiated by education (McLanahan 2004, pp 611–612). Low-educated US mothers were more likely than middle- or high-educated mothers to be single already in the 1960s, but this gap has grown even bigger since. From 1960 till 2000, the prevalence of single motherhood remained relatively stable among highly educated women (below 10%), but increased among both the medium educated (from below 10% to close to 30%) and especially the low educated (from around 15% to above 40%). Later studies have complemented these figures by showing how the gap in US single motherhood prevalence between the highest and lowest educational groups has remained, while single motherhood prevalence has increased among mothers with middle educational levels, approaching the figures of the low educated (Manning & Brown, 2014; McLanahan & Jacobsen, 2015).

Comparisons with other countries show both similarities and differences to the trends in the US. First, several countries have negative educational gradients of single motherhood, meaning that single motherhood prevalence decreases when moving up the educational distribution. Compared to the US, the educational differences in single motherhood prevalence are as large or even larger in the UK and Ireland, and clear also in the Nordic countries, many countries of Continental and Eastern Europe, as well as East Asia (even though the overall prevalence of single motherhood varies) (Härkönen, 2017; also, McLanahan, 2004).

Second, despite these similarities between the US and many other countries, the negative educational gradient of single motherhood is by no means universal. It is small or nonexistent in Southern Europe and Switzerland, but also in Russia, where single motherhood is otherwise common (Härkönen, 2017).

Third, the trends in the educational differences in single motherhood have not been in unison. In many European countries, educational differences in single motherhood were small until the 1980s or later, but subsequently began to widen. Since then, single motherhood prevalence has increased among middle-educated and, in particular, low-educated women in the Nordic countries, the UK, Ireland, France, Germany, Belgium and the Netherlands, as well as the Czech Republic, Estonia, Poland, Slovakia and Slovenia (Härkönen, 2017). For example, the probability that a Swedish child spent time in a single-mother family during her childhood increased from 20% to 30% from the 1970s to the 1990s for children of low-educated mothers, but remained at around 20% for children of highly educated mothers (Kennedy & Thomson, 2010; Thomson & Eriksson, 2013). Broadening the scope outside North America, Europe and East Asia, the trends in many Latin American countries have been the opposite: highly educated mothers are today more likely to be single, in contrast to the situation just some decades ago (Boertien, 2015).

These patterns and trends are found in a large number of countries representing different welfare regime arrangements, as well as patterns of educational inequality in other outcomes. Yet, they are closely aligned with changes in the educational gradients of divorce and family dissolution. Single motherhood incidence depends on the non-partnered childbearing rate and the dissolution rate of families with children (Heuveline et al., 2003) – and, in more rare cases, widowhood. Of these, family dissolution is the more common pathway to single motherhood (Andersson et al., 2017), and the educational differences in single motherhood incidence are thus likely to be driven by educational differences in family dissolution (single motherhood prevalence is additionally affected by single mothers' re-partnering rate and children moving out).

Non-partnered parenthood is educationally patterned, and low-educated women are more likely to bear children outside partnership (Jalovaara & Fasang, 2015; Perelli-Harris et al., 2010). The available evidence does not suggest major shifts in this association (Perelli-Harris et al., 2010). Early childbearing, which is closely related to non-partnered parenthood and later family dissolution, also has a clear negative educational gradient, which has furthermore increased over

time in many countries (Raymo et al., 2015). There has been an evident change in the relationship between (female) education and divorce and union dissolution in several societies, with many European societies and Japan seeing a reversal in the association from a positive to a negative one during the last decades (Chan & Halpin, 2005; De Graaf & Kalmijn, 2006; Härkönen & Dronkers, 2006; Hoem, 1997; Raymo & Iwasawa, 2017). Although we lack a comprehensive understanding of the reasons behind these developments, the educational gradient of divorce tends to be more negative in countries and at times when the family patterns overall are less tightly formed around stable marriages (Härkönen & Dronkers, 2006; Matysiak et al., 2014), and they have been more negative in societies with less generous welfare states (Härkönen & Dronkers, 2006).

### **Do educational differences in single motherhood increase inequality?**

The widening educational gaps in single motherhood have led to widespread concerns of its implications for social inequality (McLanahan, 2004; McLanahan & Percheski, 2008; Putnam, 2015). Single mothers and their children face elevated poverty and other wellbeing risks, and growing up in a single-mother family can lead to lower educational attainment and psychological wellbeing in adulthood (Amato, 2000; Bradshaw et al., 2012; Maldonado & Nieuwenhuis, 2015; McLanahan & Sandefur, 1994). Poverty risks and other adverse outcomes can be particularly prominent among single mothers with low education. These mothers are often doubly disadvantaged in the labour market, as their employment situation is restricted by not only their low education but also the challenges of combining paid work with family responsibilities (for example, Härkönen et al., 2016). Low education and a weak employment situation combined with inadequate policies can create the ‘triple bind’ that hampers single-mother households’ wellbeing and that is central to this book (Chapter One by Nieuwenhuis and Maldonado, in this book).

Despite the intuitive appeal of the argument that the widening educational gradients in single motherhood increase inequality, there are surprisingly few empirical assessments of it. Together with Eevi Lappalainen and Marika Jalovaara (2016), I found that the increasingly negative gradient of single motherhood contributed to Finnish single mothers’ employment rates lagging behind those of partnered mothers. This effect was amplified by low-educated single mothers’ increasing difficulties in the labour market. In another paper, Bernardi

and Boertien (2016) found that educational differences in single motherhood did not widen inequalities in educational attainment by mother's educational background, partly because of the higher single-motherhood penalty among children of highly educated mothers. Finally, in a paper related to this study, I found that negative educational gradients in single motherhood can strengthen differences in child poverty by maternal education, but this was contingent on the size of the single-mother poverty gap (Härkönen, 2017). What mattered was not only how many more children of low-educated mothers lived in a single-mother household because single motherhood prevalence was higher in this educational group. What additionally mattered was how much higher these children's poverty risks were because they lived with a single parent, instead of two parents; if children of single and partnered mothers had the same poverty risks, it would not matter which household type they lived in.

These empirical analyses underline the more general fact that the implications of 'diverging destinies' for social inequality depend on not only how wide the gaps in family demography are but also the strength of its effects (cf. Cohen, 2015). The policy implication of this is that instead of trying to steer family demographic behaviours, which is difficult, one can try to reduce the effects of family structure and family dynamics on adults' and children's wellbeing and life chances.

To my knowledge, even though many studies on family structure and poverty or other wellbeing outcomes control for educational attainment, no study has hitherto focused on how much educational gradients in single motherhood contribute to the single-mother poverty gap. I analyse 15 European and North American countries that align with well-known welfare state regime categories (for example, Esping-Andersen, 1990; 1999; Korpi, 2000). Denmark, Finland and Norway represent the Nordic countries; France, Germany, Luxembourg and the Netherlands the Continental ones; Australia, Canada, Ireland, the UK and the US the Liberal regime; and Greece, Italy and Spain represent Southern Europe.

The countries differ along two dimensions relevant for this study: 1) the prevalence of single motherhood and its educational gradient, and 2) the overall poverty rate, especially that among single mothers. As discussed earlier (cf. Härkönen, 2017), educational gradients in single motherhood have been prominently documented, particularly in the US but also in the other countries belonging to the Liberal regime. They are also found in the Nordic and Continental countries. Education and single motherhood are, hitherto, the least associated in Southern Europe, although recent findings indicate signs of an

opening up of a negative educational gradient in single motherhood and family dissolution also in (parts of) Italy and in Spain (Garriga et al., 2015; Härkönen, 2017; Salvini & Vignoli, 2011). Accordingly, one would expect that the educational gradient of single motherhood has the largest effect on single-mother household poverty and the single-mother poverty gap in the countries with the largest educational gradients, and the smallest effects in Southern Europe where the gradients are the weakest, or non-existing.

Single mothers' poverty rates likewise differ between these countries (for example, Bradshaw et al., 2012; Brady & Burroway, 2012; Maldonado & Nieuwenhuis, 2015). Although not completely stable over time, single-mother poverty has generally been the lowest in the Nordic countries, which have been characterised by generous and universal welfare policies and support for single mothers' employment, and higher in countries in which public support for single parents has been lower. Likewise, the single-mother poverty gap shows major cross-national variation. Would single mothers' poverty rates, and the single-mother poverty gap, be much smaller without educational differences in single motherhood?

## **Data, variables and method**

I used data for the 15 countries from the LIS database from the period 2010–14. Analysis was restricted to this period so as to include the most up-to-date data for a large range of countries. From the regimes covered in this chapter, Austria, Belgium, Sweden and Switzerland did not provide LIS data for this period. Otherwise, I used all the existing data available for this time period. For most countries, this meant that I used data from two LIS waves (usually collected in 2010 and 2013), which I combined into one file. The benefit of this was an increase in cell sizes.

The variables used in the analysis are education, single motherhood and poverty. Education was measured using the three-category LIS education variable, which distinguishes between low (less than secondary), middle (secondary) and high (tertiary) education. Because educational systems and educational distributions differ markedly between the analysed countries, there was no perfect solution available for classifying educational levels. The share of mothers with low education according to this variable is just 10% or less in Canada, Finland, the UK and the US. One could feasibly argue that with educational expansion, the meaning of having low education has changed. However, alternative classifications posed their own

problems, partly due to substantive issues (defining low education to include secondary education would have covered the majority of Southern European mothers) and differences in coding of the more detailed education variables between countries and waves. Likewise, constructions of relative educational measures (setting upper and lower thresholds in each country's educational distributions, cf. McLanahan 2004) are no panacea. Ranking specific educational levels is often not obvious, specifically in educational systems with parallel tracks (Germany being the most famous example). Furthermore, some educational groups can be very large, covering up to half of the population or more, which means that the size of relative educational groups varies widely between the countries. The potential limitations of the solution used here should nevertheless be kept in mind, and future studies using data from single countries would do well to use nationally validated educational measures.

**Single-mother households** were identified as households of non-widowed women who co-reside with their own minor (0–17 years) children and do not have a partner residing in the same household (although they may reside with other adults, such as their own parents). **Coupled-parent households** were defined as households of otherwise similar mothers, who co-reside with a partner (who can be the husband or cohabiting partner, and possibly the father of her children). **Poverty** was defined as incomes falling below 60% of the national median of equivalence-scaled disposable household incomes, using the square root of household size as the equivalence scale. Individual-level sample weights were used when estimating the prevalence of single motherhood, and household sample weights multiplied by the household size were used when estimating poverty rates.

I used simple demographic standardisations to recalculate counterfactual poverty rates in single-mother and coupled-partner households in the hypothetical absence of educational differences in single motherhood, holding the poverty rates in each education–family structure cell constant (for example, Das Gupta, 1993). In practice, I used the educational distribution of all mothers as the standard; if no educational group has a higher prevalence of single motherhood than any other, then single and partnered mothers would have the same educational distribution – that is, that of all mothers. An implication of this is that in countries with a negative educational gradient of single motherhood, not only would single mothers have a higher average level of education under this counterfactual scenario but partnered mothers would also have a lower average educational level. Though

crude, this standardisation exercise provides a general idea of how much educational gradients in single motherhood matter for the single-mother poverty gap.

I performed two sets of standardisations. In the first set, I estimated standardised poverty rates for each country, using that country's poverty rates and mothers' educational distributions as the input. These tell what the poverty rates would be in the absence of educational differences in single-motherhood prevalence. In the second set of standardisations I used each country's educational distributions, but Dutch poverty rates as input. This standardisation was done to illustrate that the level of poverty matters for how much educational differences in single motherhood affect single-mother poverty rates, and is explained in more detail in the results section.

## Results

### *Educational differences in single-mother prevalence*

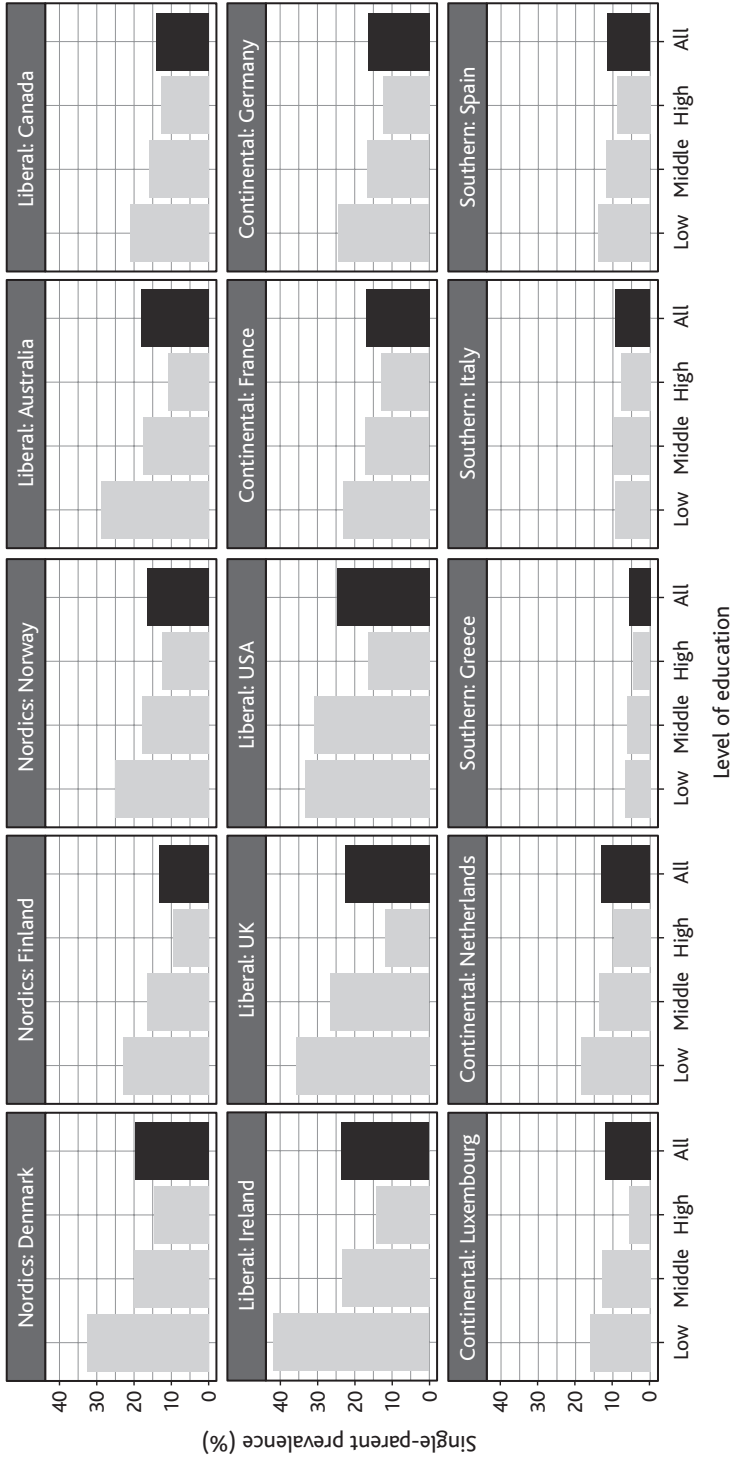
Figure 2.1 presents the prevalence of single motherhood by the mother's educational level in each country. The overall prevalence of single motherhood varies greatly between the countries. It is the least common in Italy and Greece (around 5–10%), and most common in Ireland, the UK and the US (20–25%); the Nordic and Continental countries, as well as Canada and Australia, fall in between.

The countries also differ with regard to the educational differences in single motherhood. There are almost no educational differences in single motherhood prevalence in Italy and Greece, and a weak negative educational gradient in Spain. In the other countries, less-educated mothers are clearly more likely to be single than better-educated mothers, and single-mother prevalence among the low educated is between two and three times as high as among the highly educated. Mothers with middle education are found in between. The educational gradients are the starkest in Australia, Ireland, the UK and Luxembourg, where single-mother prevalence is up to three times higher among low-educated than high-educated mothers. In Ireland, around 40% of low-educated mothers are single. In the US, single motherhood is almost as common among the middle educated as it is among the low educated, which corresponds to earlier findings showing that college-educated American women are pulling apart from the rest by sticking to 'traditional' family behaviours (Härkönen, 2017; Manning & Brown, 2014; McLanahan & Jacobsen, 2015). Another finding worth remarking on is the relatively small cross-



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Figure 2.1: Educational differences in single-mother prevalence in 15 countries



national differences in highly educated women's single-motherhood prevalence. In most countries, around 10–15% of highly educated mothers are single (and less than that in Luxembourg and Southern Europe). There is much more cross-national variation in single motherhood among the middle and (particularly) the low educated.

Most of the countries presented here have clearly negative educational gradients of single motherhood. It is likely that the single-mother poverty gap in these countries is larger than it would be without these educational differences. Yet how wide these educational differences are varies cross-nationally, from almost none (Greece and Italy) to clearly negative (for example, Ireland), suggesting that the contribution of these differences to the single-mother poverty gap is also likely to vary. Next, I look into poverty rates among single-mother and coupled-parent families in the different educational groups and cross-nationally. Finally, I estimate how different poverty rates in single-mother and coupled-parent households would be if educational differences in single motherhood were eradicated.

### *Education, single motherhood and poverty*

It is well known that single-mother households have higher poverty rates than coupled-parent households, and the results reported in Table 2.1 confirm this pattern for each of the 15 countries. Yet, both the single-mother household poverty rate and the single-mother poverty gap vary cross-nationally (Maldonado & Nieuwenhuis, 2015). Single-mother households are the least likely to be poor in Denmark, Finland, France and the Netherlands (<30%), and have the highest poverty rates in Australia, Canada, Italy and the US (40–50%). Likewise, the difference in poverty rates between single-mother and coupled-parent households varies from around 20 percentage points in Denmark, Finland, France, Greece, Ireland, the Netherlands, the UK and Spain, to 35 percentage points in Australia. Worth noting is that the variation in the single-mother poverty gap results from cross-national variation in the poverty rates of both single-mother and coupled-parent households.

One obtains a more refined picture of poverty in the two household types when examining them by the mother's educational attainment levels. It is hardly a surprise that low-educated single-mother households have high poverty risks. Nevertheless, the extremely high poverty rates in these households are striking: with the exception of the Netherlands, they range between 40% and 75% in each country, being the highest (>70%) in Canada and the US but hovering around

Table 2.1: Poverty rates by mother's education and household type, %

	Denmark		Finland		Norway	
	Single mother	Coupled parents	Single mother	Coupled parents	Single mother	Coupled parents
Low	52	14	47	24	55	13
Middle	25	5	31	9	34	5
High	11	2	13	3	18	3
All	27	5	26	7	34	5
	Australia		Canada		Ireland	
	Single mother	Coupled parents	Single mother	Coupled parents	Single mother	Coupled parents
Low	57	19	73	41	40	27
Middle	50	17	64	23	34	12
High	30	10	33	13	16	6
All	49	14	47	18	32	12
	UK		US		France	
	Single mother	Coupled parents	Single mother	Coupled parents	Single mother	Coupled parents
Low	42	32	72	54	41	18
Middle	31	15	54	24	23	7
High	15	7	30	7	13	2
All	30	14	51	20	27	8
	Germany		Luxembourg		Netherlands	
	Single mother	Coupled parents	Single mother	Coupled parents	Single mother	Coupled parents
Low	52	10	52	12	26	6
Middle	29	4	23	6	21	3
High	17	2	7	3	15	2
All	32	4	36	8	21	3
	Greece		Italy		Spain	
	Single mother	Coupled parents	Single mother	Coupled parents	Single mother	Coupled parents
Low	41	33	65	31	42	32
Middle	34	17	37	12	31	17
High	19	6	13	5	18	7
All	32	17	44	18	34	19

50% even in the Nordic countries, which are generally known for their low single-mother poverty rates. Although single-mother households are more likely to be poor at each educational level, the single-mother poverty gap is generally larger the lower the mother's level of education. Single motherhood thus affects poverty most for low-educated mothers, who are generally in the economically most

vulnerable situation to begin with. Partial exceptions to this pattern are the US and Canada, but also Greece, Italy, Spain and the UK, where poverty rates are high even in the households of low-educated partnered mothers. Even though single motherhood poses a clear poverty risk in these countries, it is low education that is the strongest risk factor for poverty.

*What if there were no educational differences in single motherhood prevalence?*

Table 2.2 presents the results from the first standardisation exercise, in which I re-estimated single-mother and coupled-parent households' poverty rates assuming no educational differences in single motherhood. As explained in the methods section, this means equal educational distributions among single and partnered mothers.

In almost all countries, the single-mother poverty gap would be smaller. Worth noting is that the poverty rate among coupled-parent households increases in Ireland and the US. This at-first-sight puzzling finding is due to the fact that fewer low-educated single-mother households would also mean more low-educated coupled-parent households.

Even if the single-mother poverty rates and the poverty gap would decrease in the hypothetical scenario of no educational gradients in single motherhood, this change is perhaps smaller than one would expect. Unsurprisingly, because of the small educational differences in single-mother prevalence, single-mother poverty – both in absolute terms and relative to partnered mothers – is next to unchanged in Italy. In Canada, Germany, Greece, the Netherlands and Spain, single-mother households' poverty rates would be reduced by around 5–10% in the absence of educational differences in single motherhood, and the difference in poverty rates between single-mother and coupled-parent households would be reduced by around 10% (20% in Spain). In the other countries, single-mother households' poverty rates would be 10–20% lower without single mothers' overrepresentation among the low educated; likewise, the single-mother poverty gap would be 15–25% lower. Educational gradients in single motherhood had the biggest effects on single-mother households' poverty rates in Denmark and Luxembourg, where these poverty rates would be around 15–20% lower. Relative to partnered mothers, the poverty gap would be reduced most in Luxembourg, Ireland and the UK (by one fourth). These are by no means small reductions, but they are not big enough that educational gradients in single motherhood would qualify as

**Table 2.2: Poverty rates (%), actual and standardised by assuming the single motherhood prevalence of highly educated mothers, and the difference between the actual and standardised single-mother poverty rates and the poverty gap**

	Actual poverty rates		Standardised poverty rates		Difference (%)	
	Single mother	Coupled parents	Single mother	Coupled parents	Single-mother poverty	Poverty gap
<b>Nordic</b>						
Denmark	27	5	23	5	-16	-10
Finland	26	7	23	7	-13	-19
Norway	34	5	30	5	-11	-14
<b>Liberal</b>						
Australia	49	14	44	14	-10	-14
Canada	47	18	44	18	-6	-10
Ireland	32	12	28	13	-13	-26
UK	30	14	27	14	-12	-24
US	51	19	45	20	-11	-20
<b>Continental</b>						
France	27	8	24	8	-13	-18
Germany	32	4	29	4	-9	-11
Luxembourg	35	8	29	8	-20	-25
Netherlands	20	3	19	3	-5	-7
<b>Southern</b>						
Greece	32	16	31	16	-5	-9
Italy	43	17	42	17	-3	-4
Spain	33	19	31	19	-9	-20

the smoking gun that explains why single-mother households have elevated poverty rates.

To understand these effects, one can consider the Danish case, where the negative educational gradient in single motherhood is among the largest. There, the hypothetical elimination of educational differences in single motherhood would reduce the single-mother poverty rate from 27% to 23% – a reduction of 4 percentage points, or 16% (Table 2.2). Abolition of educational differences in single motherhood would mean that both single mothers and partnered mothers would have the same educational levels, namely those of all Danish mothers. This would mean that 15%, instead of the current 25%, of single mothers would have low education. Likewise, the share of single mothers with high education would increase from 32% to 43%, while the share of middle-educated single mothers would remain

very similar at 41–42%. One could think of this as moving 10% of single mothers from low education (and a poverty rate of 52%) to high education (with a poverty rate of 11%). This corresponds to the observed change in the single-mother poverty rate ( $10\% \times (52\% - 11\%) \approx 4$  percentage points).

More generally, how much educational disparities in single motherhood contribute to single-mother households' poverty rates depends on not only how large these educational disparities are but also the general educational level (that is, what share of single mothers have low, middle, or high education) and the educational differences in poverty rates. Because poverty rates are most sensitive to policy, we can consider their role more closely. In the above illustration, for instance, the observed change in the poverty rate would have been less if the educational differences in single mothers' poverty rates had been smaller; in that scenario, moving the same 10% of single mothers from low to high education would have meant a smaller decrease in the single-mother poverty rate.

To further illustrate this point, I conducted a second set of standardisations in which single-mother and coupled-parent households' poverty rates were estimated using the Dutch poverty rates instead of each country's actual ones (from Table 2.1). The Dutch education–family structure specific poverty rates were used as the standard because single-mother households' poverty rates were the lowest in the Netherlands. The underlying idea is to analyse whether each country's educational differences in single motherhood would matter less for single-mother poverty, and the single-mother poverty gap, if each country's poverty rates were lower than they actually are.

Findings from this standardisation are presented in Table 2.3. The first two columns show estimates of single-mother and coupled-parent households' poverty rates if each country had their actual educational differences in single motherhood, but the Dutch poverty rates in each of the education–family structure cells. The third and fourth columns show estimates of these poverty rates additionally assuming that all educational groups had the single motherhood prevalence of the highly educated in that country. In other words, I performed the same standardisation exercise as in Table 2.2, but now using Dutch poverty rates instead of each country's actual ones.

The first two columns of Table 2.3 show that although the educational gradients in single motherhood are quite different between these countries, the poverty rates would be cross-nationally very similar, and often very different (much lower) from the actual ones in each country. More crucially for the point made here, the hypothetical elimination

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of educational differences in single-motherhood prevalence would in most countries have a much smaller effect on reducing single-mother households' poverty rates than was the case when each country's actual poverty rates were used instead. This illustrates that the importance of educational family structure differences for inequality is contingent on this inequality itself. What matters is not only how many households would be moved to family structures with smaller poverty risks but also how much smaller poverty risks these households would have as a result. This intuitively obvious point can be easily forgotten when considering how family structures and other compositional differences affect poverty rates.

**Table 2.3: Poverty rates (%), standardised assuming the Dutch poverty rates in each education–family structure cell**

	Actual family structure		No family structure difference		Difference (%)	
	Single mother	Coupled parents	Single mother	Coupled parents	Single-mother poverty	Poverty gap
Netherlands	20	3	19	3	-5	-7
<b>Nordic</b>						
Denmark	20	3	19	3	-6	-8
Finland	19	3	18	3	-6	-7
Norway	20	3	19	3	-6	-7
<b>Continental</b>						
France	21	3	19	3	-5	-6
Germany	21	3	20	3	-4	-5
Luxembourg	22	4	21	4	-6	-8
<b>Liberal</b>						
Australia	22	3	20	3	-8	-10
Canada	18	2	16	2	-11	-13
Ireland	21	3	19	3	-9	-11
UK	21	3	19	3	-6	-8
US	20	3	19	3	-5	-7
<b>Southern</b>						
Greece	20	3	20	3	-3	-3
Italy	22	4	21	4	-1	-1
Spain	21	4	21	4	-4	-4

*Note:* Poverty rates assuming each country's actual family structure, no family structure difference and the difference between the actual and standardised single-mother poverty rates and the poverty gap.

## Conclusions and discussion

The negative educational gradients of single motherhood have gained increasing interest among social scientists, not least because of the possibility that they can strengthen social inequalities between educational groups, by family structure and among adults and children alike. The discussion on these trends and their effects has been prominent in the US, where educational differences in single motherhood and family demography more generally have been widely documented (Manning & Brown, 2014; McLanahan, 2004; McLanahan & Jacobsen, 2015). Low educational attainment has also long been highlighted as a central feature of single mothers' disadvantage in the UK (Gregg et al., 2009). Increasing evidence is building regarding similar trends in other European countries and Asia. Yet, despite the overall attention given to these trends and the concerns of their inequality-exacerbating effects, there has been little empirical analysis of how much, and under what conditions, educational cleavages in family demography strengthen social inequality.

In this study, I have presented up-to-date estimates of educational differences in single motherhood in 15 societies, and analysed their effects on single-mother poverty and the single-mother poverty gap (the difference between single-mother and coupled-parent households' poverty rates). In line with accompanying work (for example, Härkönen 2017), the findings presented here support the view that educational differences in single motherhood are not a solely US phenomenon. With the exceptions of Greece and Italy (and to some extent Spain), single motherhood is today more common among low-educated mothers than highly educated mothers, and mothers with middle levels of education are found in between. Indeed, it is striking how little cross-national variation there is in single motherhood among the highly educated, and single motherhood prevalence in this educational group is roughly between 10% and 15% (or below, in Southern Europe). Middle- and (especially) low-educated mothers are much more likely to be single, and the cross-national differences are much more prominent. In Ireland, single-motherhood prevalence among the low educated is as high as 40%, and between 20% and 30% in many other societies. Indications of 'diverging destinies' (McLanahan, 2004) are thus a reality in many current societies.

Single motherhood combined with low education is poison for poverty risks, which reach above 70% in Canada and the US and between 40% and 50% in many countries (such as the Nordics) generally considered single-mother-friendly societies. The combination



of educational differences in single motherhood and very high poverty among low-educated single mothers leads to the expectation that educational differences in single motherhood have become a key explanation for understanding why single-mother-household poverty remains persistently high. To assess this question, I used a simple demographic standardisation to estimate poverty rates among single-mother and coupled-parent households in the hypothetical scenario of no educational differences in single motherhood prevalence. As expected, the standardised and actual poverty rates were very similar in Greece and Italy, where single motherhood is not strongly patterned according to education. In all other countries, single-mother households' poverty rates would be lower were single motherhood equally common in all educational groups. Yet the reductions in poverty rates are not generally mind-blowing, and generally range from 5% to 15%. Although the impact of the educational gradients in single motherhood should not be undermined, these reductions in single-mother poverty can be considered relatively modest considering the theoretical importance that socioeconomic differences in family demography have received in the literature (McLanahan & Percheski, 2008; Putnam, 2015). These findings are in line with corresponding results on the relatively modest effects of educational differences in single motherhood for inequalities in child poverty risks (Härkönen, 2017) and for intergenerational inequalities in educational attainment (Bernardi & Boertien, 2016).

When considering the sizes of the effects, one should pay attention to the factors that condition these effects. This has attracted less attention in the literature than the size of the educational differences in single motherhood prevalence (for an exception, see Cohen 2015). Here, I illustrated how educational differences in poverty rates among single mothers condition how much educational gradients in family structures matter for single-mother poverty and the single-mother poverty gap. When poverty rates and educational differences in poverty rates are higher, educational differences in family structure matter more than when educational differences in poverty rates are smaller. Negative educational gradients of single motherhood mean that single mothers are more likely to have low education than partnered mothers. The more single mothers' low education increases their poverty risk, the more these educational differences matter for the poverty rates of single mothers as a group.

The educational divergence in family demography is happening in many countries. These trends can be hard to tackle with conventional policies. Those interested in the inequality consequences

of socioeconomically uneven family change should instead consider reducing poverty rates in all families. As a side effect, these reductions would also attenuate the inequality consequences of family change characterised by ‘diverging destinies’.

## Note

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