"Cross-National Differences in Early Family Instability by Socioeconomic Status"

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Extensive research has shown that family disruption and instability have negative consequences for children's well-being and development (McLanahan, Tach, & Schneider, 2013). At the same time, there is growing evidence that differences in children's experience of family instability by parental socioeconomic status (SES) are growing—at least in the United States. Highly-educated individuals are more likely to marry (Goldstein & Kenney, 2001) and less likely to divorce (Martin, 2006) than their less-educated counterparts—and increasingly so, and the gap by education in nonmarital childbearing is growing as well (Ellwood & Jencks, 2004). Taken together, these family patterns portend a growing gap in children's family experiences by SES, described by Sara McLanahan (2004) as "diverging destinies": children of highly-educated parents are more likely to live with their (highly-involved) biological parents over time than are children of less-educated parents. To the extent that parental investment and socialization during childhood have important implications for individuals' long-run attainment, these trends suggest that inequality in family instability may be fueling broader societal inequality both within and across generations (McLanahan & Percheski, 2008).

While the growing inequality in U.S. family patterns is by now well-known, less well understood is the extent to which this bifurcation may also be occurring across industrialized countries more broadly. Certainly, we know that overall family demography has changed across many industrialized countries – including later age at marriage, and rising cohabitation, divorce and nonmarital childbearing (although there is notable variation across countries), but whether inequality in family behaviors by socioeconomic status is growing has received only limited attention in the literature. Several studies have explored educational gradients in demographic behaviors such as childbearing within cohabitation (Perelli-Harris, Sigle-Rushton, et al., 2010), marriage (Kalmijn, 2013), and divorce (Härkönen & Dronkers, 2006), but to our knowledge, only one study outside the U.S. has explored the changing socioeconomic gradient in *children's* experiences of family instability (which arises from fertility in the context of union instability): Kennedy and Thomson (2010) examined Sweden and found that while there is some evidence of a growing gap in family instability by parental education from the 1970s to the 1990s, the magnitude of the gradient is far less than that observed in the U.S.

In this paper, we add to the literature on family change and inequality by evaluating the extent to which the gap by education in family instability during early and middle childhood appears to be growing in cross-national context. We use data for 17 industrialized countries: Australia, Austria, Belgium, Bulgaria, Estonia, France, Hungary, Italy, Lithuania, Netherlands, Norway, Poland, Romania, Russia, Spain, Sweden and the United States. For the majority of countries, data come from the first round of the UN Generations and Gender Surveys (GGS) conducted between 2003 and 2005. The GGS was developed by the United Nations Economic Commission for Europe as a key element of the Generations and Gender Programme, launched in 2000. The GGS uses comparable survey designs, definitions, and questionnaires across countries and is designed to improve understanding of demographic and social patterns across

Europe and factors that may influence their development, including public policy (United Nations, 2000; Vikat et al., 2007). The GGS collects nationally-representative samples of non-institutionalized men and women between the ages of 18 and 79 (Simard & Franklin, 2008). The GGS surveys we use have been harmonized according to the procedure outlined in Perelli-Harris, Kreyenfeld, and Kubisch (2010). Since GGS data are currently available only for a sub-set of countries, we use alternative data sources for the Netherlands, Poland, Spain, Sweden, and the U.S.,[1]and we have harmonized these date sources in similar fashion.

We consider children's exposure to and time spent in several mutually-exclusive and exhaustive family structures (living with two biological parents, living with an unpartnered mother, and living in a stepfamily) by mothers' education level and across multiple time periods. We use three categories of mothers' education – low (less than secondary school), moderate (completed secondary school or some college), and high (completed tertiary education or higher); comparable measures have been created across countries according to the International Standardized Classification of Education (ISCED). Three time periods are considered based on children's ages – those ages 0-10 in the 1970s, 1980s, and 1990s.

In terms of our analytic strategy, we follow the approach of prior work (Bumpass & Lu, 2000; Kennedy & Thomson, 2010) on children's living arrangements and exposure to parental separation. Our aim is to describe children's family structure experiences by using period (synthetic cohort) multi-state life table estimates. We start by limiting our sample to women respondents who reported having at least one child by the interview. We treat each birth as a unit of analysis. Using the mother's retrospective union history, we calculate annual transition probabilities between each family structure state (i.e., two-biological parents, unpartnered mother, and stepfamily) by children's age. Children are considered at risk of any family structure transition from birth through age 10 (or age 15, as the sample allows) or when the calendar year of the observation period ends (i.e. 1979, 1989, 1999). We then use these estimates to construct life tables of children's family structure experiences from birth through age 10 (15). All life tables are country-period-education specific.

Multi-state life-table procedures allow us to estimate the cumulative proportion of children ever exposed to each family structure type by age, as well as the proportion of person years through age 10 (15) spent in two-biological parent, unpartnered mother, and stepfamily families. With the assumption that a child experiences the observed age-specific period transition probabilities throughout his or her childhood, these estimates provide summary indicators of the distribution of children's experiences across family structure types in the cross-section in each time period. They are useful measures for describing how children's family structure experiences vary across countries, time periods, and mothers' education.

We then pool all children to estimate country-specific hazard models to assess the generality of the pattern of growing divergence by education discussed by McLanahan (2004). In our first set of models, we limit our sample to all children born to partnered mothers and estimate

[1] Data for the Netherlands come from the 2003 Family and Fertility Survey; data for Poland come from the Polish Employment, Family and Education Survey; data for Spain come from the Spanish Survey of Fertility and Values; data for Sweden come from the Swedish Level of Living Survey; and data from the U.S. come from the combined 1995 and 2006-2008 rounds of the National Survey of Family Growth.

a hazard model predicting parental separation. In our second set of models, we focus on children living with unpartnered mothers and estimate a hazard model predicting entering a stepfamily. Each set of models includes mothers' education, mothers' birth cohort, the child's birth order, and parental union status at birth (and children's age for the second set). In each of these analyses, we first examine the association between mothers' education and the hazard of parental separation (entering a stepfamily). We then add interactions between mothers' education and cohort. The first model (within each set) allows us to estimate the direction and strength of educational differences in children's family structure experiences and to observe similarities and differences in these relationships across countries. Results from the second model (within each set) describe the extent to which differences in educational attainment in children's family structure experiences have changed over time.

In Table 1, we present preliminary descriptive data on the proportion of time children spent in each family structure type over ages 0-5 in five countries – the U.S., France, Belgium, Norway and Estonia. For this preliminary analysis, we limit our focus to children who are observed through age 5 during the observation period in order to adjust for age and period censoring. Overall, we observe that across all countries, children born in the 1970s spent the majority of their first five years living with their two biological parents, although the proportions range from 62-69% in the U.S. to 88-94% in Estonia. Also, differences by education were not especially large and did not follow a particular gradient – in the U.S., the group spending the highest proportion of time with their two biological parents was the moderately-educated (69%), while in Estonia it was the highly-educated (94%); the gap in proportions across education groups ranged from 2 percentage points (France and Norway) to 6-7 percentage points (Estonia and the U.S.). By the 1990s, while the overall level of family stability had not dramatically changed, an educational gradient had grown or emerged across all five countries shown. For children born in this decade, those born to highly-educated mothers were notably more likely to experience family stability compared to those born to low-educated mothers. The magnitude of the gaps by education had grown over the period from the 1970s to the 1990s to 5 percentage points in France, 8-9 percentage points in Belgium and Norway, 12 percentage points in Estonia, and fully 21 percentage points in the U.S. Thus, these preliminary estimates suggest that while the level of inequality is much higher in the U.S., the educational gradient in family instability is growing across a broader range of industrialized countries, consistent with Kennedy and Thomson's (2010) findings about Sweden.

To the extent that these very preliminary results hold true as we examine a wider array of countries and use more sophisticated analytic techniques, this research suggests that inequality in children's family experiences may be an important feature of life across the Western industrialized world. Since these countries have diverse public policy regimes, it will be useful to consider the degree to which such inequality is (or is not) offset by more egalitarian social policies or is driven by more fundamental economic forces. Protecting child wellbeing for those born to less advantaged parents may be a growing concern within many nations in order to enhance the life chances of the next generation.

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Table 1. Children's family structure experiences by mother's educational attainement across selected countries

	Proportion of children's lives from age 0 to age 5 spent in each family structure														
	United States			France			Belgium			Norway			Estonia		
	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High
1970s															
Two-biological parents	.62	.69	.62	.88	.89	.87	.86	.90	.91	.89	.91	.91	.88	.92	.94
Unpartnered mother															
At birth	.20	.15	.19	.09	.08	.10	.12	.08	.07	.08	.06	.06	.06	.03	.02
Following union dissolution	.06	.05	.07	.02	.02	.01	.01	.01	.01	.01	.01	.02	.03	.03	.02
Stepfamily (cohabiting or married)	.12	.12	.12	.01	.01	.02	.02	.01	.01	.03	.02	.02	.03	.02	.01
Number of children	375	617	331	1,185	600	215	461	199	181	506	1,025	456	503	727	404
1980s															
Two-biological parents	.61	.73	.81	.89	.93	.92	.87	.91	.93	.84	.91	.94	.85	.90	.92
Unpartnered mother															
At birth	.22	.13	.08	.07	.04	.05	.09	.06	.04	.08	.05	.03	.05	.03	.04
Following union dissolution	.08	.06	.05	.02	.01	.03	.02	.01	.02	.03	.02	.02	.05	.04	.02
Stepfamily (cohabiting or married)	.09	.09	.06	.01	.02	.01	.02	.02	.01	.05	.02	.01	.05	.03	.02
Number of children	1,284	2,538	1,940	712	596	325	415	272	316	425	969	688	249	982	754
1990s															
Two-biological parents	.58	.68	.79	.87	.92	.92	.82	.93	.91	.84	.90	.92	.79	.88	.91
Unpartnered mother															
At birth	.25	.17	.10	.07	.03	.05	.12	.04	.06	.08	.05	.04	.07	.05	.04
Following union dissolution	.08	.07	.06	.03	.02	.02	.04	.02	.02	.04	.03	.03	.05	.04	.03
Stepfamily (cohabiting or married)	.09	.08	.05	.03	.02	.01	.03	.01	.01	.05	.03	.02	.09	.03	.03
Number of children	1,482	2,542	2,478	524	658	478	330	424	427	514	1,111	1,109	186	1,004	693

Note: Analysis is restricted to children who reached age 5 in the 1970s, 1980s, or 1990s. Data for France, Belgium, Norway, and Estonia come from the GGS. Data for the United States come from the NSFG-1995, 2006-2008 cycles. Mothers in the NSFG are between ages 15 and 44, whereas mothers in the GGS sampes are between 18 and 79. Children's family structure experiences are estimated using mother's retrospective union histories.