# Childbearing within cohabitation and family stability: Testing the role of diffusion using data from 16 European countries, Canada and the US David Pelletier<sup>1</sup> and Christine Schnor<sup>2</sup>

It is often assumed and has been demonstrated in many studies that cohabitation is much less stable than marriage, also among parents with children (Lyngstad & Jalovaara 2010). It has also been shown that childbearing within cohabitation has increased, sometimes dramatically, in almost all Europeans and Western countries (Kiernan 2004; Perelli-Harris et al. 2012; Perelli-Harris & Sánchez-Gassen 2012; Sobotka & Toulemon 2008). Taken together, these two often-replicated findings suggest that the overall proportion of children who witness the separation of their parents has been increasing rapidly and continues to do so (Jensen and Clausen 2003; Osborne and McLanahan 2007).

The missing element in this reasoning is the trend of the dissolution risks among cohabiting families. Indeed, if cohabiting families stay (or become even more) highly unstable while the frequency of childbearing within cohabitation increases, then the overall rate of family disruption for children will rise rapidly. If, however, cohabiting families become increasingly stable over the course of the diffusion process, then we would observe, through a counterbalancing mechanism, a stabilisation or even a reduction of overall children risks of family dissolution.

It is for now difficult to assess clearly which alternative is emerging and in which countries because surprisingly little is known about the concurrent trends of cohabiting, married, and overall family dissolution risks for children. Even less is known about the association of those trends with the diffusion of childbearing within cohabitation. The purpose of this study is thus to describe the trends in family instability according to parents' union type and to make more explicit the role of cohabitation in generating stability differentials across different countries. We do so using retrospective data on union and fertility histories from 18 countries in Europe and North America.

# **Background**

In spite of the general spread of cohabitation, there still remains substantial variation across European countries and regions (Lappegard et al. 2014; Perelli-Harris et al. 2012; Sobotka & Toulemon 2008, see Figure 1). The changes in family patterns were addressed in a prominent theoretical framework, the Second Demographic Transition (SDT) model (Lesthaeghe & Van de Kaa 1986). Lesthaeghe and Van de Kaa predicted that, at the macro level, the rates of union dissolution would continue to increase because of rising divorce rates among married couples and high rates of separation among cohabiters (Lesthaeghe & Van de Kaa 1986, Van de Kaa 2002). The Second Demographic Transition can therefore be interpreted as "a trend toward less committed and more fragile relations between men and women" (Bernhard 2004: 25).

Demographers have compared levels of cohabitation and childbearing within cohabitation across countries (Heuveline & Timberlake 2004; Perelli-Harris et al. 2012) and regions (Lappegard et al. 2014; Klüsener & Goldstein 2012), but so far little attention has been paid to its potential linkage to the rate of family dissolution. Moreover, only a handful of studies have focused on the role of the diffusion of non-marital childbearing on family stability. These studies investigated differences between a few time points (Jensen & Clausen 2003), cohorts (Steele et

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al. 2006), countries (Clarke & Jensen 2004), or regions (Le Bourdais et al. 2000; Schnor 2014). Schnor (2014), for instance, showed that the strength of negative selection mechanisms into cohabitation in Germany decreases when non-marital families become standard, which in turn improves the union stability of cohabiting parents. Separation rates where not higher in the eastern German region, which showed substantially more births outside of wedlock. Still, indepth analyses of the association between the prevalence of cohabitation and union dissolution rates in a comparative perspective, across multiple cohorts and countries, are lacking.

From a SDT perspective, the rise in non-marital families and union dissolution has been triggered by changes in culture (process of secularization) as well as structure (rise of higher education) (Lesthaeghe 2010). However, on the micro level empirical research has shown a negative educational gradient of childbearing in cohabitation and of union dissolution, suggesting a "pattern of disadvantage" (Perelli-Harris et al. 2010; McLanahan 2004). This gradient can be sensitive to the educational composition of a population (Van Bavel 2012). Furthermore, being in cohabitation rather than marriage and having a secular background were linked to an increased risk of separation (Jensen & Clausen 2003; Lyngstad & Jalovaara 2010). Research also identified contextual effects on the risk of separation, but the empirical studies mainly focused on marriages (Kalmijn 2007). Divorce was found to be influenced by the level of regional secularisation (Mortelmans et al. 2009) and by the prevalence of premarital cohabitation in a society (Liefbroer & Dourleijn 2006).

We hypothesize that a linkage between the proportion of children born to cohabiting parents and the rate of family disruption exist. On the one hand, the decreasing role of marriage in family formation can be related to increases in the rates of union dissolution, as proposed in the SDT framework. According to Schnor (2014), another possibility is however that the overall rate of union dissolution is not affected by the increasing proportions of cohabiting families per se, because cohabitations become more stable and more similar to marriages.

To test our hypothesis we will look at differences across cohorts as well as across countries. We will first analyse changes in married and unmarried family dissolution risks between cohorts inside a given country and then compare patterns of cohort changes across different countries. This analytical strategy will allow us to estimate a general relationship between the diffusion of childbearing within cohabitation and family instability without setting aside country-specific patterns.

# Data and methods

In this study, the union dissolution behaviour of married and unmarried couples with children will be compared across different cohorts in 18 countries. Union behaviours will be linked with the prevalence of childbearing within cohabitation for those countries and cohorts. As Figure 1 demonstrates, there is presently a significant degree of variation across European and North American countries and regions on that matter. In general, spatial patterns of nonmarital childbearing are closely linked to national borders (Klüsener et al., 2013, Klüsener 2015), but some countries, such as Germany and Canada, exhibit substantial internal regional variation in non-marital fertility levels. These have in part historical origins that go far back in time (Klüsener 2015; Laplante 2006). For this reason, Eastern and Western Germany on the one hand, and Quebec and the rest of Canada on the other, will be analysed as separate entities, on the same level as countries.

The data source consists of the Harmonized Histories that were constructed for the most part from the Generations and Gender Programme (GGP) but also from other similar national surveys. The GGP is an international survey that focuses on the private life course, covering

topics such as fertility and partnership. It is accompanied by a contextual database that holds data on legal norms and includes several cultural and economic indicators. The Harmonized Histories include survey data from 16 European countries (Austria, Belgium, Bulgaria, Estonia, France, Germany, Hungary, Italy, Netherlands, Norway, Poland, Romania, Russia, Spain, Switzerland, United Kingdom) as well as from the United States, and offer a comparative database of union and fertility histories. For Germany, we will use data from the German Family Panel (pairfam) instead of the GGS data, because the latter have been subject to concerns about their representativeness. Canadian data taken from the 2006 General Social Survey (GSS) will also be added to the harmonized dataset. The Canadian GSS is a retrospective survey with a similar content to that of the GGP's first wave and is representative at the provincial level.

Switzerland Poland Russia Canada w/o Quebec Italy Western Germany Romania Canada Germany **United States** Spain Austria Hungary Netherlands **United Kingdom** Belgium Norway France Estonia Bulgaria Eastern Germany Quebec 0 10 60 70 20 30 40 50 Percentage of live births outside marriage

Figure 1: Percentage of births outside marriage in the Harmonized Histories countries, Canada, and Canadian and German regions, 2013

Source: Sobotka et al. (2015), except Canada (Statistics Canada, 2013) and Germany (Federal statistical office, 2015a,b).

Note 1: All data for 2013, except Canada and regions (2011), Estonia, Belgium and United Kingdom (2012).

Note 2: Data for German regions exclude Berlin (51% births outside marriage).

Note 3: Data for Canada and regions exclude 9.6% of cases with unknown marital status at birth.

Using these data, we will build a multilevel survival model that will allow us to estimate inter-cohort and inter-country changes in family instability during the last decades. We will look into the evolution of married and cohabiting parents' separation risks separately as well as together.

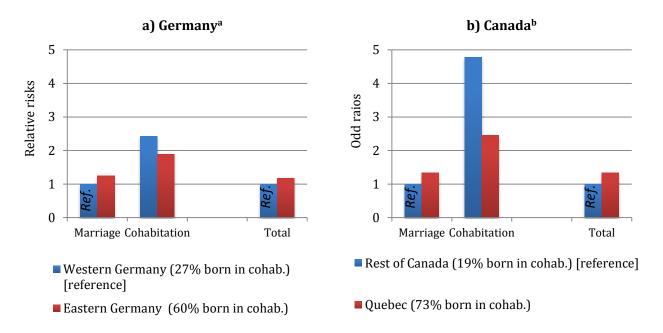
In trying to explain these evolutions, we will mainly focus on the role of the diffusion of childbearing within cohabitation during the same period, but the role of the educational attainment of mothers and fathers will also be carefully investigated. We will also include other individual- and contextual-level covariates that could act as confounders in these relationships. The model will comprise three nested levels of analysis: individuals, country-cohorts, and countries. This multilevel design will allow us to disentangle country-specific patterns of temporal evolution from the single pooled pattern that a simpler (unilevel) model would have provided. As the unexplained heterogeneity in multilevel models is divided into level-specific components, it will also be possible to estimate what share of the between-cohort and between-country variation in family dissolution risks can be explained by differences in the proportion of childbearing within cohabitation and what share remains unexplained.

# **Preliminary findings**

As a first descriptive test of our hypothesis, we compared the union stability of cohabiting and married parents in two types of context; a first in which childbearing within cohabitation is a minority phenomenon and a second in which it is a majority phenomenon. Canadian and German regions provide good examples of these two types of contexts and thus, our preliminary findings will refer to these two countries, distinguishing between eastern and western Germany and Quebec and the rest of Canada. Compared to the rest of Germany the post-socialist eastern part shows structural and attitudinal particularities that are manifested amongst others in the level of secularization, of female employment and also in the family behaviour. The Canadian province of Quebec differs in cultural, religious, and linguistic terms from the remaining country and has shown a distinct fertility and union behaviour throughout the country's history.

While not entirely comparable, the results for Germany and Canada presented in Figure 2 tell a very consistent story. The four bars on the left-hand side of each sub-graph compare the family instability of union and context types relative to its level among married parents in the low-prevalence region (western Germany in sub-graph a and the rest of Canada in sub-graph b). Whatever the region, we observe much more family instability among cohabiting couples than among married ones. Inside each country however, family instability is lower for cohabiting parents living in regions where childbearing within cohabitation is a majority phenomenon (eastern Germany and Quebec) compared to regions where it is a minority phenomenon (western Germany and the rest of Canada). Thus, despite huge differences in the prevalence of childbearing within cohabitation between eastern and western Germany on the one hand (respectively 27% and 60%), and Quebec and the rest of Canada on the other (19% vs. 73%), the overall level of family instability is only slightly higher in high-prevalence regions (the rightmost two bars of each sub-graph).

Figure 2: Family dissolution differentials according to parent's union type at child's birth, Germany and Canada (not controlling for covariates)



<sup>&</sup>lt;sup>a</sup> For Germany, results are mother's relative risks of separation after their first birth (censored when the child is 10 years old or at the time of the interview). Children's mean year of birth = 2002. Source: Schnor (2014), data from *pairfam* (Waves 1-3).

## **Future steps and expected results**

Using data from the previously mentioned 18 countries, we expect to replicate this general finding that the family instability levels of married and cohabiting families converge when childbearing within cohabitation becomes more prevalent and accepted in a given social context. The overall risk of family dissolution for all children combined will likely increase with the diffusion of cohabitation, but at a very low rate.

Instead of the binary comparisons of our preliminary findings, the inclusion of data on multiple countries and cohorts in a single model will allow us to estimate a continuous indicator of the relationship between family dissolution risks and the diffusion of cohabitation, in the manner of Liefbroer and Dourleijn (2006) or Pelletier (forthcoming; see Figure A in the appendix for a graphical example of results from that article that we will reproduce in a multilevel and international context). In order not to impose a functional form on the relationship between family dissolution risks and the diffusion of cohabitation, we will use natural cubic splines, rather than linear or quadratic expressions, to model it.

In addition to identifying the functional form of this relationship for Europe and North America in general, our multilevel model will allow for more detailed analyses by enabling the distinction between country-specific patterns from the more general, pooled one. We will be especially attentive to possible deviations from the general functional form.

In order to confirm the predictive power of the contextual level of childbearing within cohabitation on family-level dissolution risks, we will add other contextual-level covariates to

<sup>&</sup>lt;sup>b</sup> For Canada, results are odd ratios of parental separation for all children below 7 years old. Children's mean year of birth = 2005. Francophones only in Quebec; Anglophones only in the rest of Canada. Source: Pelletier and Lardoux (2013), data from the *National Longitudinal Survey of Children and Youth* (Cycle 8).

the model such as unemployment rates or shared values. Contextual-level covariates will be taken from the GGP Contextual Database and other relevant sources. In accordance with previous research (Pelletier, forthcoming), we expect the frequency of births occurring within cohabitation to remain significantly associated with dissolution risks even after having controlled for possible contextual confounders.

Because educational differentials in unmarried childbearing and family instability are such a important source of debate between researchers seeing cohabitation through the lens of the Second demographic transition and those arguing that it is linked to a pattern of disadvantage (McLanahan, 2004; Vitali et al., 2015) that we will give them a central place in our analysis and discussion. Education will figure as an individual- as well as a contextual-level variable in the final model.

### Conclusion

The aim of our project is to provide a detailed picture of the interrelation between the family and social contexts in with children are born and raised in Europe and North America. We already know that with the Second demographic transition non-marital cohabitation has become increasingly popular as a partnership context for childbearing, even the modal way in some countries. We also know that children born to cohabiting parents face higher risk of family dissolution during their childhood then children born to married parents. In opposition to the argument that this situation will lead to a rapid increase in overall family instability, we argue that such a large increase is unlikely because there exist a dynamic mechanism by which the reduction of cohabiting families' instability counterbalances their growing share among all families during the course of the diffusion of childbearing within cohabitation. The convergence of married and cohabiting families' stability levels is probably brought about by two interwoven mechanisms: (1) a loosening of the selection of separation-prone individuals into cohabitation with the diffusion of the behaviour; (2) a decrease of the cohabitation causal influence on separation risks through greater social acceptance and legal normalization of the behaviour.

Our analysis will provide a first estimate of the functional form of the relationship between family-level dissolution risks and contextual-level proportions of childbearing within cohabitation in an international context. We will use a multilevel model that will make explicit country-specific particularities while extracting the more general, common pattern from the data.

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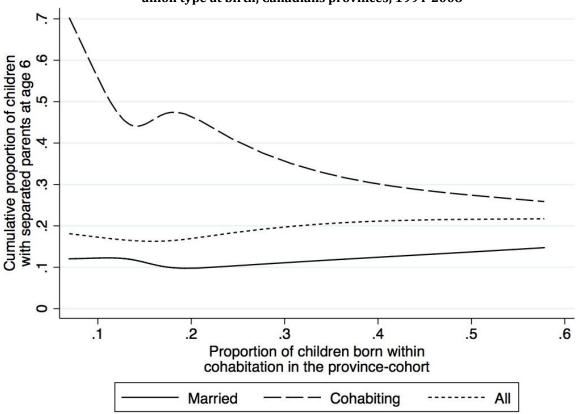
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# **Appendix**

Figure A: Model-based proportions of children with separated parents by age 6 according to the contextual level of childbearing within cohabitation in the province-cohort of the child, by parents' union type at birth, Canadians provinces, 1994-2008



Source: Pelletier (forthcoming).

# Description:

As childbearing within cohabitation became increasingly common in Canadian provinces over time, the probability of family dissolution decreased rapidly for children born to cohabiting parents (dashed line) but remained fairly stable for children born to married parents (full line). As a consequence, the overall probability of family dissolution, i.e. for all children taken together, increased only slightly (dotted line).