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**It's All in the Past? Exploring the Repercussions of
Parents' Early Conjugal and Parental Histories on
the Family Life Course of their Children**

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Le présent rapport fait partie d'un ensemble d'études sur l'Enquête longitudinale nationale sur les enfants et les
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Abstract

It has long been accepted that the social and economic well-being of adults is determined principally by their passage through childhood and that well-adjusted children emerge most often from healthy families. Creating the stability, emotional warmth and security of a healthy family environment is a challenge to parents at the best of times, but to do so in the current situation of family disruption and reconstitution is even more so. With parents separating more often, and earlier in their children's lives, family life experiences are likely to become increasingly diverse.

Too much research has attempted to understand the impact of family change on child development without first properly defining the relevant aspects of family history. The National Longitudinal Survey on Children and Youth (NLSCY) provides a unique opportunity for improving the definition of the family life course. Detailed data on the children's family history, including the conjugal and parental life of both parents before the child's birth and, where applicable, after separation, permit a detailed classification of family trajectories. Combining this with information on the child's emotional and intellectual development should provide a potent tool to explore which life experiences are more or less propitious for the different aspects of child development.

In this study, we explore how different elements of parents' and children's family life course interact, focusing particularly on the relationship between the parents' conjugal and parental behaviour *before* the union in which the target child was born, and after the child's birth. More specifically, we analyse the impact of a number of elements related to the context at birth, such as the rank and type of the parents' union, and whether or not they have children from an earlier union, on the likelihood that parents separate. Based on the results of these analyses, we define a series of summary family history variables that can be incorporated into analyses of child outcomes.

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Executive Summary

Issue

It has long been accepted that well-adjusted children grow up in healthy families. Creating a healthy, stable and secure home life has always been a challenge for parents, but is even more so today. Thirty years ago, the arrival of another child was the only major family change that most children experienced. Today, many children face radical changes in their family environment as parents separate and create new families. With lone-parent or stepfamily life becoming commonplace, more parents and children are facing the challenge of adapting to increasing numbers of family transitions.

Research Objective

1. To analyze whether characteristics of parents' conjugal history (e.g. whether parents are married or common law, number of previous conjugal unions) affect the likelihood that those parents will separate.
2. To explore whether parents' previous parental history (having children from an earlier union) affects what happens to children later in life.
3. To define variables about family history that can be used in future research about children "outcomes." (what happens to the child later in life)

Data

The NLSCY provides a unique opportunity for increasing our understanding of the links between parents' and children's family life course. Detailed data on the children's family history, including the conjugal and parental life of both parents before the child's birth and, where applicable, after separation, permit a detailed classification of family trajectories.

Key Research Findings

1. The kind of union parents have when their children are born is a predictor of the stability of their relationship. In all regions of Canada, including Quebec though to a lesser extent, children whose parents were not married when they were born are much more likely to see their parents separate than other children.
2. The fact that one or both parents lived with previous partner(s) increases the risk that they will separate. Less than one quarter of Canadian children have parents who had previous common law relationships or marriages, but forty percent of all separations happen to the parents of these children. In general, the more previous relationships parents have had, the more likely it is that their current relationship won't last.

3. The presence of half-siblings has a significant impact on family stability – 13.5 percent of children aged 0-11 years in 1994-95 were born into families with half-siblings. Compared with children without half-siblings, children with maternal half-siblings present in the family, and children with paternal half-siblings living elsewhere, are twice as likely to see their parents separate.

Potential Impacts on Future Research, Policy and Practice

1. How can we ensure that parents in all kinds of families have adequate support in order to help their children adapt to changes to the families' structures?
2. How do changes in family composition affect children's development and outcomes?
3. What other factors influence family stability?

1. Introduction

It has long been accepted that the social and economic well being of adults is determined principally by their passage through childhood and that, to put it concisely, “healthy children emerge most often from healthy families (Ross, Scott and Kelly 1996, p. 15).” Creating the stability, emotional warmth and security of a healthy family environment is a challenge to parents at the best of times, but to do so in the current situation of family disruption and reconstitution is even more so. Thirty years ago, the arrival of another child was the only major change in family composition for the vast majority of children. In contrast, of the children aged 0-11 years at the first wave (1994-95) of the National Longitudinal Survey of Children and Youth (NLSCY), almost a quarter were living with a lone parent or in a stepfamily, and had therefore experienced radical changes in the family group; given the growing precocity of family disruption among the youngest generations covered by the survey (Marcil-Gratton 1998), family life experiences are likely to become increasingly diverse in future waves of the survey. Some families adjust more successfully to these disturbances than others, and research into the elements fostering positive family adaptation is essential.

2. Family change and child outcomes – explaining the discrepancies

The rapid transformation of marital behaviour since the 60s, responsible for this situation, has given rise to a massive increase in research into the effect of parental separation and divorce on children. The cumulative evidence of this research points to negative child outcomes in the areas of academic achievement, behaviour, psychological adjustment, self esteem and social relations (see reviews by Amato 2000, and Seltzer 1994). Moreover, these negative effects may continue into adulthood, lowering educational and occupational attainments (Biblarz and Raftery 1999, McLanahan and Sandefur 1994), leading to early home-leaving, or influencing the entry into conjugal life (Cherlin et al. 1995; Goldscheider and Goldscheider 1989; Haurin 1992; Kiernan, 1992; Kiernan and Hobcraft 1997; Marcil-Gratton and Le Bourdais 1998; McLanahan and Bumpass 1988). Children from disrupted families are more likely to choose cohabitation rather than marriage, and to experience the breakdown of these unions. Young women are also more at risk of pre-union or premarital childbearing.

However, results on outcomes are often inconsistent and at times implausible (Amato and Keith 1991; Biblarz and Raftery 1999); differences in well-being for children from divorced and non-divorced families are, on average, small (Amato and Keith 1991), and those that do exist often disappear once pre-divorce factors, such as parental conflict, are controlled for (Amato 1993; Fergusson, Horwood and Lynskey 1994).

Biblarz and Raftery (1999) explore two possible sources of discrepancies in the literature on the impact of family disruption, in their study of the effect of “alternative family structures” on children’s later educational and occupational success. First, they demonstrate how variations across studies in the mix of control variables (race, gender, sibship size, education, etc.) or intervening variables (income, employment, etc.) can affect outcomes. Children’s school attainment, for instance, is inversely related to the number of children in a family; given the lower average number of children in single-mother families, studies that omit this variable reduce the negative effect of single-mother families compared with intact families.

Secondly, variations in the classification of “alternative family types” also contribute to inconsistencies across studies, as not all types of alternative family are affected in the same way by family disruption. In Biblarz and Raftery’s analysis, different effects were found for the three types of “alternative” families tested in the study, with children in father-headed alternative families or in mother-stepfather families experiencing more negative effects than those living with a single mother. Not differentiating between these family types would have altered outcome effects considerably.

This is indeed a problem central to research in this field. In the past, most studies employed a simple dichotomous variable (intact v. disrupted; two parent v. one parent) as an indicator of family disruption in statistical models. Not only does this mean that family experience is characterised inadequately, it is rarely defined consistently between studies, causing problems of comparability. Moreover, the positive and negative effects of family events within these poorly defined categories may cancel each other out, contributing to the apparently small effect of family history on child development mentioned earlier. A recent study of the link between family history and delinquency in a cohort of English boys, for instance, demonstrated greater variation in the risk of delinquency *within* the group of disrupted families than *between* intact and disrupted families (Juby and Farrington 2001). Likewise, variations in delinquency between harmonious and conflict-ridden *intact* families also exceeded those between intact and disrupted families taken as a whole.

Research results of NLSCY data, presented at the Workshop on Family Structure, Ottawa, October 1998, exemplify these problems. In one paper, the presence of siblings was shown to increase the “vulnerability” of children in lone parent families (Ross, Roberts and Scott 1998); a second paper demonstrated the opposite effect among children “experiencing life in post-divorce custody” (Haddad 1998). The first paper focused on lone parent families, including (presumably) children born to single mothers and those living with one parent after separation, and excluding children in stepfamilies; the second considered only children whose parents separated at some point, covering those living in both lone parent and stepfamilies. How far the conflicting findings are a result of differences in the populations studied needs to be verified, but they illustrate the way in which defining family history affects comparability. A third paper, comparing children in lone mother and intact families, typified the static nature of analyses using cross-sectional data where lone-motherhood is treated as a “status” rather than

as an “episode” (Lipman, Boyle, Dooley and Offord 1998). As no distinction could be made according to the length of time children had spent in lone-mother families, children spending their entire lives with a single parent were classified alongside those who had lived in intact families until a few months prior to the survey.

The inadequate definition and classification of family history may well be responsible for perhaps the most perplexing issue arising out of several recent studies that indicate that differences between children in intact and non-intact families all but disappear if the appropriate pre-disruption variables (parental conflict, child and parent personality or behaviour, etc.) are controlled. These findings imply that children’s family experience during and after parental separation has little or no impact on their development, and that any differences are due to factors present in the family before separation. This position, however, runs counter to that held by many clinicians, whose experience indicates the reverse to be the case (see Derdeyn 1994), and social scientists, who have identified several aspects of post-disruption circumstances, such as income reduction, that have a significant influence on child outcomes.

3. Linking parents' and children's family life courses

All this highlights the fact that, before attempting to assess the impact of family history on child outcomes, it is essential to understand the dynamics of family history itself. Only a deeper insight into the relationship between different aspects of the family life course of parents and of their children will make it possible to identify which elements of family experience are of greatest relevance to child outcomes. The NLSCY provides a unique opportunity for carrying out this project. At the first survey wave, carried out in 1994-95, the sample consisted of 22,831 children aged 0 to 11 years. For all these children, detailed retrospective data was collected on the conjugal and parental life of both biological parents prior to the union in which the target child was born: the number and type (marriage or cohabitation) of previous unions, whether these unions were fertile, and whether children from earlier unions were present in the household at the target child's birth. In addition, information collected on the union in which the child was born includes the type of union, and whether, when and how (through separation or the death of a parent) this union ended. For children whose parents were living apart at Cycle 1, data is also available on the conjugal unions their separated parents entered into subsequently, whether new partners had children of their own, and whether these new unions were fertile. This wealth of information permits a much more detailed analysis of the links between parents' and children's life courses than is generally possible; this in turn should lead to a more refined classification of the important elements of family history and provide a subtle tool to explore which life experiences are more or less propitious for child development and well-being.

This research focuses on the link between parents' histories and what is generally the first major transition in the family life of children born within a conjugal union – their parents' separation. The perspective adopted here on this well-researched topic is a new one, in the sense that it looks at conjugal union breakdown from the point of view of the child rather than the couple, as is normally the case. This means that all characteristics of the union are measured and analysed from the child's perspective: for example, union duration is calculated from the child's birth, and survival rates in the life table analysis reflect the child's age at their parent's separation. Up to four children per household were

included in the Cycle 1 sample¹ and each counts as one observation, whether or not they were born into the same union. This is particularly important in a policy-oriented perspective, since the break-up of a single union can have as many different consequences as there are children in the family.

The result of this analytical choice is twofold. First, it makes it possible to evaluate the impact of changes in the conjugal behaviour of parents on the family environment of *children*. Second, it limits the study of separation and divorce to couples with children. In most research on the subject, “children” are included as one of several control variables with an influence on union stability, and are generally found to be a factor of protection for both marital and cohabiting unions (Dumas and Bélanger 1997; Wu 2000). Very little research has focused specifically on separation among couples with children though, as Bumpass and Lu (2000) point out, when our focus is the impact of changing conjugal behaviour on children, looking at union dissolution *per se* is not necessarily the most relevant measure as “trends in disruptions among couples with and without children need not even move in the same direction” (p. 34).

This approach may also become more popular as cohabitation develops as a family form in its own right (Wu, 2000). In the absence of legal marriage, the decision to have a child together may well be the most obvious sign of a couple’s commitment thereby providing a baseline for research on union dissolution that includes both married and cohabiting couples. One of the few studies to adopt this approach examined the impact of changing patterns of family formation and female employment on family disruption in Canada (Le Bourdais, Neill and Vachon, 2000). To compare the differential impact of cohabitation and marriage, the birth of the first child was used to mark of the beginning of the family rather than union formation as is usually the case.

¹ The distribution of children (aged 0-11 years) per family is as follows: 31% – one child; 48% – 2 children; 16% – 3 children, and 5% – 4 children.

4. Research objectives

Although our ultimate aim is to reach a better understanding of the relationship between family history and child development, in the present paper our objective is to work on the first step of the process – exploring how different elements of parents' and children's family life courses interact in order to identify the aspects most relevant to child outcomes. Drawing on the innovative information provided by the NLSCY regarding the conjugal and parental history of both biological parents, the main thrust of this paper is to assess whether any link exists between the conjugal and parental life history of a child's parents (not only before his birth, but even before his parents got together) and the child's subsequent family life course. We wish to explore, in other words, whether it is possible to identify patterns of conjugal behaviour in the parents' generation that shape the family life course of children. More specifically, we will analyse the impact of the rank of the union in which children are born, and whether their parents had had children from an earlier partner, on the likelihood that parents separate.

Our second objective is an offshoot of this process. Based on the results of these analyses, we will define a series of variables that summarise the important elements of family histories; in the present paper, this will be restricted to aspects of parents' histories up to and including the moment of the target child's birth. Our aim is to extend this, at a later date, to variables summarising family life course events following the child's birth, such as parents' separation, or the arrival of stepparents and half-siblings. These could then be incorporated into analyses of child outcomes, replacing the simplistic variables so often used, and making it possible to evaluate more comprehensively the link between family experience and child development.

5. Predicting family stability from parents' conjugal and parental histories

Analyses of recent Canadian data have uncovered a consistent and strong link between the conjugal status of a child's parents at his birth and the probability of subsequent separation. Findings from the NLSCY (Marcil-Gratton 1998) concur with results from 1995 Canadian General Social Survey data (Le Bourdais, Neill and Vachon 2000) revealing that, even once children are involved, cohabiting unions are less durable than marriages. Of children born into a two-parent family (NLSCY, Cycle 1), those born to couples in a common-law union were six times more likely to have experienced the separation of their parents before the age of six years than those whose parents were married with no prior cohabitation (47% versus 8%). This was the case for just under one child in six (15.8%) whose parents were married at their birth but had lived together before marrying, and just over one in five (20.5%) for those whose parents married after their birth. The type of union seems to provide an indication of the level of "commitment" to conjugal life. In the next two sections, we explore how far this commitment is evident in a) the conjugal history and b) the parental history of parents even before the target child's birth, and whether or not it affects the stability of the child's subsequent family life course.

The following hypotheses guided our investigation into the possibility of predicting the type and stability of the union within which a child is born from the family history of the parents. For each type of union at birth (direct marriage, marriage preceded by cohabitation, cohabitation) we assumed that:

- The greater the number of unions before that with the child's other parent, the more likely parents are to cohabit rather than marry.
- The more eventful the conjugal history of parents prior to the birth of their children, the higher the probability of separation.
- Previous cohabitation will have a stronger destabilising effect than previous marriage.
- Children from previous unions of the mother or father will decrease union stability, particularly if these children are present in the household.

5.1 Previous conjugal history

The distribution of children according to whether one or both of their parents' had been previously married or cohabiting is shown in Figure 1. Over three-quarters of children were born to parents for whom it was a first union; the rest were divided relatively evenly between those whose mother (6%), father (9%), or two parents (7%) had been in a previous conjugal union. Although the proportion of children whose parents were not in their first union appears relatively low, these children nonetheless constitute approximately 40% of children whose parents separated before the age of ten.

Figure 1 **Distribution of children born in two parent families according to whether their parents had a previous conjugal union, NLSCY, Cycle 1.**

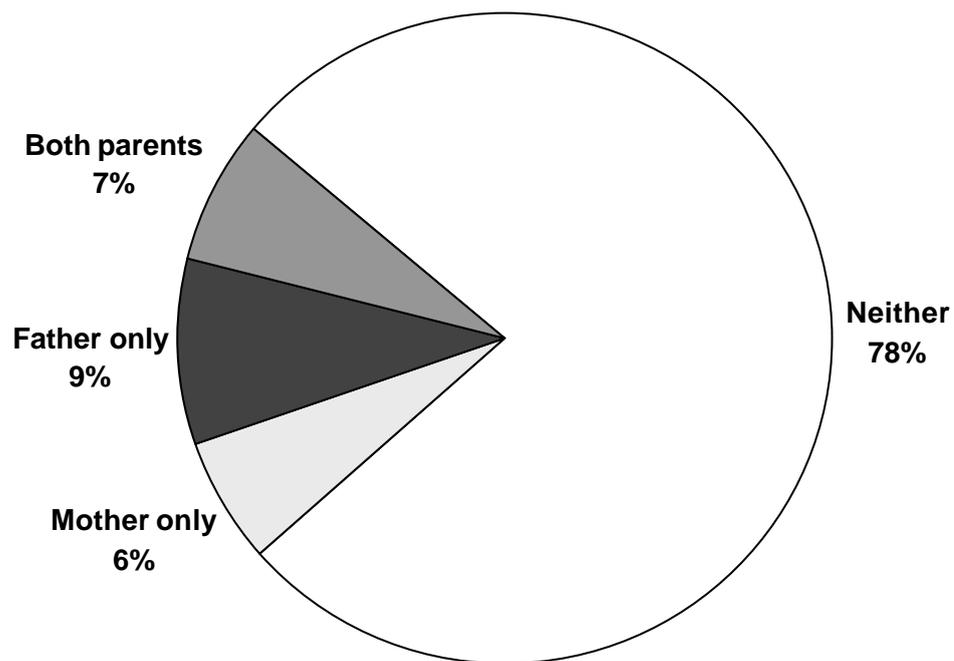
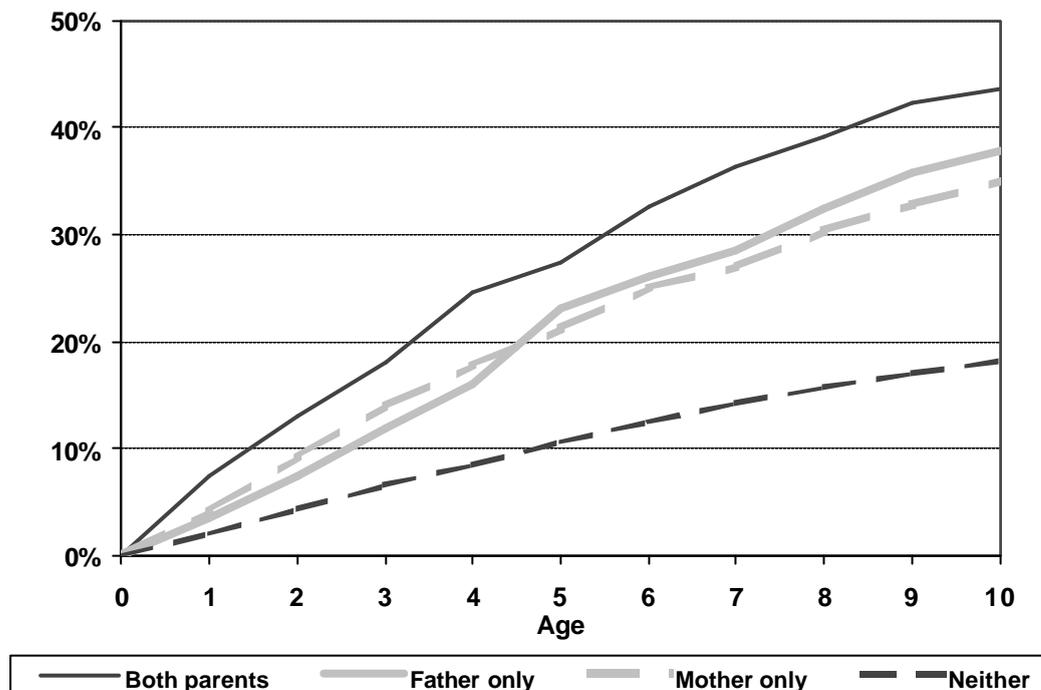


Figure 2 **Cumulative percentage of children born in a two-parent family experiencing their parents' separation, by year of child's age to age 10, according to whether their parents had a previous conjugal union, NLSCY, Cycle 1 (life table estimates)**



The higher risk of separation to which these children are exposed is highlighted in Figure 2, which shows the cumulative percentage of children with separated parents² at each age up to the tenth birthday, according to whether the mother, father or both parents had had a previous conjugal union. The curve for children born to “first-time couples” is much lower than the other three curves – less than one-fifth of these children (18.2%) had experienced their parents’ separation by the age of 10. The probability was around twice as high among children whose mothers (35%), fathers (37.8%) or two parents (43.6%) had a history of earlier conjugal unions. In other words, between one-third and one half of children whose parents were not in their first union experienced their parents’ separation by their tenth birthday compared with less than one-fifth of children born to parents in their first union. As a result, many children spent a relatively short period in a family with their mother and father, particularly if the two parents had been previously married or cohabiting. By eighteen months, 10% of these children were no longer living with both parents; by the age of four, this was the case for a quarter of them. Where only

² Life table estimates

one parent had been in a previous union, families remained intact a little longer, reaching the cumulative proportion of 25% of children with separated parents by the age of six years.

Table 1 **Distribution of children born within a conjugal union, according to the previous conjugal union of their parents, and the type of parental union at their birth, NLSCY, Cycle 1**

Previous Unions	Type of parental union at child's birth			Total %
	<i>Marriage</i> %	<i>Marriage after Cohabitation</i> %	<i>Cohabitation</i> %	
Neither	92.8 (9,712)	67.7 (4,437)	47.7 (1,593)	77.3 (15,742)
Mother only	2.2 (234)	9.7 (633)	12.6 (422)	6.3 (1,290)
<i>marriage^a</i>	1.0	5.2	6.1	3.2
<i>cohabitation</i>	1.2	4.5	6.5	3.1
Father only	4.0 (414)	12.5 (820)	19.7 (659)	9.3 (1,893)
<i>marriage^a</i>	2.5	7.5	10.8	5.5
<i>cohabitation</i>	1.5	5.0	8.9	3.8
Both parents	1.0 (109)	10.1 (663)	20.0 (667)	7.1 (1,438)
<i>marriage^a</i>	0.7	7.5	14.3	5.2
<i>cohabitation</i>	0.3	2.6	5.7	1.9
Total	100.0 (10,468)	100.0 (6,553)	100.0 (3,342)	100.0 (20,363)
	51.4	32.2	16.4	100.0

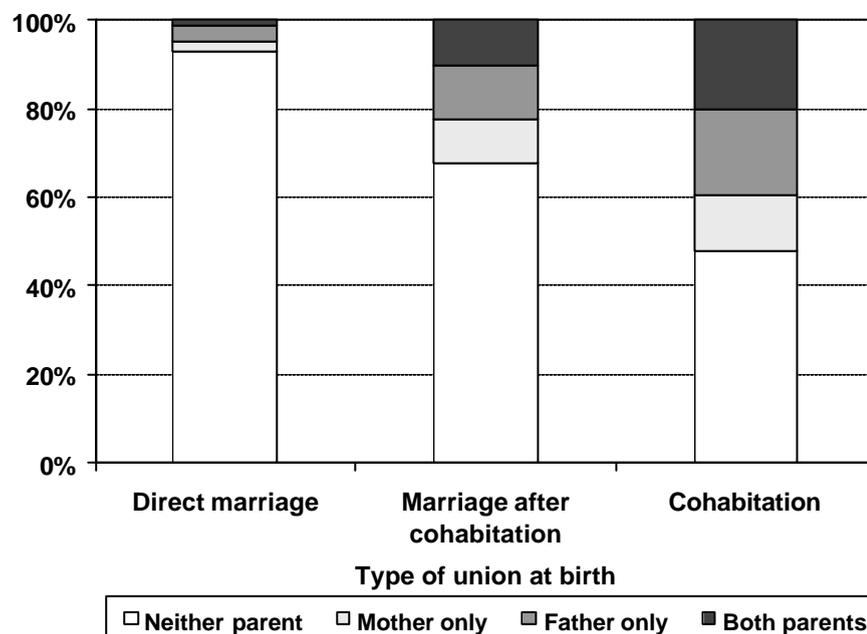
Note: ^a may also have cohabited.

A more detailed look at the data suggests that this apparent link between previous unions and separation may not be a direct one but may be mediated by the type of union in which the child was born. Table 1 presents the distribution of children according to a) the type of parental union at birth, and b) whether or not their mother, father, or both parents had been involved in conjugal unions (marriage or cohabitation³)

³ Parents may have both cohabited *and* been married previously but, given the limited sample size, we could not include all possible combinations of previous conjugal history. Marriage was given priority in our definitions, in the sense that individuals who had experienced both types of previous union were categorised as "previously married." Those in the category "previous cohabitation," therefore, had never been married prior to their union with the target child's other parent. This applies even when both parents have had a previous union: they are categorised as having previously cohabited only if neither parent was previously married.

before their union with the child's other parent. Just over half the children (51.4%) were born to parents who had married directly (i.e., had not lived together), almost one-third to married parents who had lived together before marrying, and the rest (16.4%) to cohabiting parents. Figure 3 shows clearly the link between the type of parental union at birth and the likelihood of it not being the first union. For children of parents who were married without living together first, the union was almost always the first for both parents (92.8%). This was the case for less than half (47.7%) of those whose parents were cohabiting at their birth. Children whose parents had cohabited before marrying fell in between - for two-thirds of them (67.7%) it was the first union for both parents. The pattern is even clearer at the other extreme: only 1.0% of children whose parents married directly had both parents in previous unions, compared with 10.1% of those whose parents cohabited before marrying, and 20.0% who were still cohabiting at the child's birth. Altogether, of the latter, almost one-third (12.6% + 20.0%) of the mothers, and 40% (19.7% + 20.0%) of the fathers had already been married or living with a partner.

Figure 3 Distribution of children born within a union, according to parents' previous unions and the type of union at birth, NLSCY, Cycle 1



There is no evidence that the type of previous union has an impact on the union in which the child was born. Children of previously married parents, in other words, were just as likely to be born in a

cohabiting union as were children of previously cohabiting parents. Even the strong predominance of previous marriages when both parents had had previous unions (5.2% versus 1.9% cohabiting) is a product of our decision to give priority to marriage in the definition of previous union type. However, as Table 2 shows, the type of previous union does appear to have an impact on the stability of subsequent unions.

Table 2 Cumulative frequency of parental separation by age 10 years, for children born within a conjugal union, according to the previous conjugal history of their parents and the type of parental union at their birth, NLSCY, Cycle 1, life table estimates.

Previous unions	Type of parental union at child's birth			Total %
	<i>Marriage</i> %	<i>Marriage after Cohabitation</i> %	<i>Cohabitation</i> %	
Neither	12.3	22.5	49.8	18.2
Mother only <i>marriage^a</i>	27.2	20.3	67.0	35.0
	20.3	14.3	68.0	30.4
<i>cohabitation</i>	34.5	27.6	65.9	40.3
Father only <i>marriage^a</i>	24.7	29.5	55.2	37.8
	16.8	23.8	57.5	33.7
<i>cohabitation</i>	39.2	39.7	51.4	44.4
Both parents <i>marriage^a</i>	27.5	31.2	61.0	43.6
	-	23.6	58.5	39.3
<i>cohabitation</i>	-	53.2	65.6	59.4
Total	13.1	23.8	55.3	22.4

Note: ^a may also have cohabited

Table 2 presents the cumulative risk that children experience their parents' separation before age 10, for all sub-groups of Table 1 except those in which the small number of cases would lead to unreliable estimates. Overall, 22.4% of Canadian children experienced their parents' separation before the age of 10 years. The variation in the risk according to each type of union at birth, however, confirms the importance of this variable. The risk of separation increases steeply as cohabitation appears in the picture: from 13.1% for those whose parents never cohabited, to 23.8% for parents legalising a

cohabiting union before the birth, and reaching 55.3% for parents who remained in a “common-law” union at their child’s birth.

A closer look, however, reveals that the association of previous conjugal history and type of union at birth is a complex one. Firstly, previous unions are linked to the greatest increase in separation probabilities among children whose parents married directly. For the small minority of these children with parents for whom it was not the first union (7.2%), the risk that their parents separate was more than double that for children whose parents were both in their first union (between 24.7% and 27.5%, compared with 12.3%). For the other children, whose parents had cohabited before marrying or who were still cohabiting at the child’s birth, the fact of it not being their parents’ first union generally decreased union stability, but to a smaller degree.

Secondly, although marriage is associated with greater stability, the link is not consistent. For children born to married parents, whether or not they had previously cohabited, separation rates are much lower if the previous parental union was a marriage rather than a cohabiting union. However, for those born to cohabiting parents this relationship is absent, with the risk of separation virtually identical for the two types of previous union. The most unstable unions are those in this category, with children of cohabiting parents whose mother had already been married most at risk, with a probability of over two-thirds (68.0%) of experiencing their parents’ separation before the age of ten.

To sum up, children of unmarried parents are much more likely to experience parental separation than other children; however, this instability appears to be influenced by their parents’ earlier conjugal histories, though the pattern is a complex one. Generally speaking, previous cohabitation increases risk of parental separation for children of married parents. In other words, the fact that cohabiting parents are also more likely to have had previous conjugal unions does not seem to be entirely responsible for the positive relationship between previous parental union and the risk of separation visible in Figure 2.

5.2 Previous parental history

Next, we explored the previous *parental* life of the parents, looking at whether or not they had had children with someone other than the child’s other parent. Evidently, there is considerable overlap with

the “previous union” variable, given that the majority of these “previous children” will have been born within a “previous union.” The possible family configurations at birth are numerous for children born to parents who already had children at the start of their union with the child’s other parent. These half-siblings may be children of their mother, their father, or both; one, some or all of the half-siblings may live in the target child’s household at birth, all or only part of the time, or they may live elsewhere permanently. To classify these many combinations, we first gave priority to the presence in the household of children from earlier unions, with no distinction made between full and part time presence. In other words, only if all half-siblings lived elsewhere full-time were they classified as “living outside the household.” In cases, for example, where at least one child from a mother lived in the household at least part of the time, the target child was classified as having half-siblings “in the household, mother only” either if the father had no children from a previous union (CPU) or if all his CPU all lived elsewhere. This allowed us to regroup the child’s family environment at birth into seven categories, and the distribution, by the type of union at birth, is presented in Table 3.

Overall, parents’ earlier childbearing decisions meant that 13.5% of children born to couples had half-siblings in their family environment at their birth. The two most common situations were found to be: (a) children born with paternal half-siblings only, living outside the household (4.2% of children born to couples) and (b) children with maternal half-siblings living in the household (5.4% – with, in some cases, paternal half-siblings living elsewhere). This is not surprising given the large majority of children remaining in their mothers’ care after separation. The link with union type at birth is strong, and predictably follows the same pattern as that of previous unions. Only 5% of children whose parents married directly were born into a family environment that included half-siblings, compared with one-third of children born to cohabiting parents.

Table 3 Distribution of children according to the existence and presence in the household at birth of CPU of their parents, according to the type of parental union at birth, NLSCY, Cycle 1

Children from previous union	Type of parental union at child's birth			Total %
	Marriage %	Marriage after Cohabitation %	Cohabitation %	
None	94.9 (9,952)	83.1 (5,456)	66.6 (2,232)	86.5 (17,640)
All CPU living outside household	2.2 (234)	7.0 (461)	11.0 (371)	5.2 (1,066)
<i>mother only</i>	0.4	1.3	1.7	.9
<i>father only</i>	1.8	5.5	9.0	4.2
<i>both parents</i>	0.0	0.2	0.3	0.1
Some or all CPU in the household	2.8 (297)	9.9 (646)	22.4 (748)	8.3 (1,691)
<i>mother only^a</i>	1.7	6.7	14.4	5.4
<i>father only^b</i>	0.9	2.3	5.2	2.1
<i>both parents</i>	0.2	0.9	2.8	0.8
Total	100.0 (10,483)	100.0 (6,563)	100.0 (3,351)	100.0 (20,397)

Notes: ^aFor 219 children, the father also had CPU who were living outside the household at birth.

^bFor 11 children, the mother also had CPU who were living outside the household at birth.

Although only a small percentage of the total number of children, those with half-siblings account for a much larger proportion of children whose parents separated before their tenth birthday. Life table risks of separation for sub-groups with adequate numbers (see Table 4) confirm the close link between earlier parental life course and subsequent union stability; children with older half-siblings were much more at risk of living through their own parents' separation than other children. The two most common family situations, mothers' children in the household and fathers' children living elsewhere, were also the most short-lived, with a probability of separation of 45.2% and 56.4% respectively by the child's tenth birthday.

Table 4 **Cumulative frequency of parental separation by age 10 years, according to the existence and presence in the household at birth of CPU of their parents, according to the type of parental union at birth, NLSCY, Cycle 1, life table estimates.**

Children from previous union	Type of parental union at child's birth			Total %
	Marriage %	Marriage after Cohabitation %	Cohabitation %	
None	12.6	20.9	48.1	18.8
All CPU living outside household	25.2	32.8	67.6	42.5
<i>mother only</i>	-	-	-	28.4
<i>father only</i>	29.3	35.2	68.9	45.2
<i>both parents</i>	-	-	-	-
Some or all CPU in the household	20.0	41.7	67.4	49.0
<i>mother only^a</i>	24.3	49.8	69.4	56.4
<i>father only^b</i>	4.0	27.0	61.4	36.6
<i>both parents</i>	-	-	-	33.1

Notes: ^a For 219 children, the father also had CPU who were living outside the household at birth.

^b For 11 children, the mother also had CPU who were living outside the household at birth.

Not surprisingly, the pattern of separation probabilities according to the type of parent's union at birth is similar to that for the "previous union" variable. The probability of subsequent union breakdown is twice as high for children whose parents had married directly; for children of cohabiting parents, the difference is not as great, given the already high risk of separation among parents cohabiting at their child's birth. Nonetheless, separation probabilities before the age of 10 years reached 60% to 70% among children born to cohabiting parents with children from earlier unions. For these children, this risk is unaffected by whether the children are present in the household, and whether they are the mothers' or fathers' children.

For married parents, however, the origin of half-siblings present in the household does appear to have an impact. The risk of separation is considerably lower when children from the father are present, irrespective of whether or not the mother also has children present. A number of explanations could be put forward to account for this. It is possible, for example, that these fathers are particularly committed

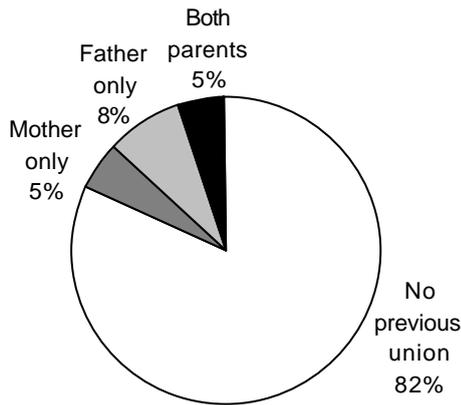
to family life: remaining closely involved with children after separation may indicate a high level of “paternal commitment,” while the willingness to remarry rather than cohabit, as many stepfamily couples do, may signify a commitment to conjugal life. On the other hand, it may be that stepmothers become more involved with their stepchildren than stepfathers do, thereby cementing the relationships between the different members of the stepfamily and contributing to its durability.

Once again, the existence and presence in the household of half-siblings from parents' earlier unions are closely linked to the amount of time children spend as an “intact” family. Among children with no half-siblings in their family environment at birth, 10% experienced their parents' separation by the age of 5 years. This proportion was reached at around eighteen months for children with half-siblings. By the age of 4 years, the parents of one quarter of children with paternal half-siblings living elsewhere, or with maternal half-siblings living in the household, had separated. The less common situations – maternal half-siblings not in the household, or paternal half-siblings in the household – lasted longer, with the threshold of 25% of children with separated parents reached at 7 years and 5 years respectively.

Figures 4 and 5 provide a clear illustration of the association between parents' previous conjugal and parental behaviour and their children's subsequent family life course. They compare the distribution of children whose parents had remained together and those who had separated according to whether a) their parents had a previous conjugal life (Figure 4), and b) their parents had children from an earlier union (Figure 5). Children whose parents separated were more than twice as likely to have parents with a history of previous conjugal unions, and more than three times as likely to have half-siblings in their family environment, than were those whose parents did not separate.

Figure 4 Distribution of children whose parents have and have not separated according to the previous conjugal history of their parents, NLSCY, Cycle 1

PARENTS NEVER SEPARATED



PARENTS SEPARATED

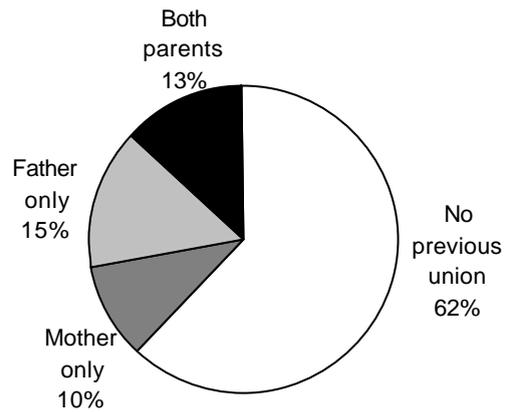
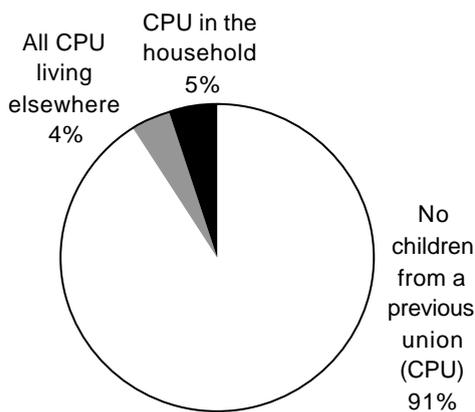
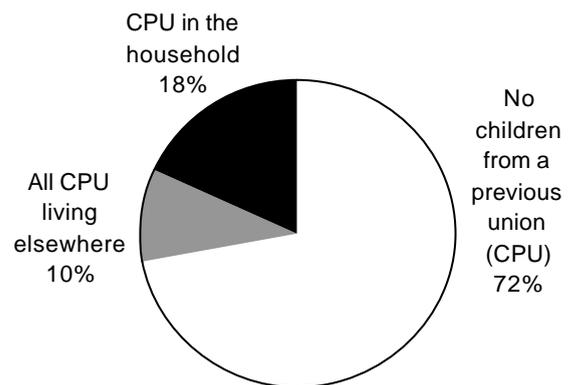


Figure 5 Distribution of children whose parents have and have not separated according to whether their parents had children from a previous union (CPU), NLSCY, Cycle 1

PARENTS NEVER SEPARATED



PARENTS SEPARATED



5.3 Statistical analysis

The analysis so far confirms the important association between the type of union into which the child is born and subsequent union stability; it also suggests that previous unions, cohabitation in particular, may contribute further to union instability, as may the existence of children from previous unions. At this stage, it is not clear whether previous unions have any effect in themselves, or whether the children from these unions constitute the main destabilizing element. To disentangle these various elements, and to test which, if any, of these factors are valid predictors of union stability, we entered these variables into a statistical model, and controlled for other elements commonly associated with conjugal breakdown.

5.3.1 Method

The aim of this analysis is to explore the impact of parents' family history and a number of other socio-demographic characteristics shown by other research to be relevant to this question on the risk that a child's biological parents separate within the first eleven years of their life. Logistic regression is not appropriate in this case, due to the "incomplete" (censored) nature of our data. The sample includes children aged anywhere between 0 and 11 years, many of whom were not exposed to the risk of parental separation up to the age of eleven. Children aged five at the survey, for example, were exposed to the risk that their parents separate for the first five years of their life; however, the absence of information between ages 6-11 years does not mean that their parents would not separate during that time. Proportional hazards models make it possible to take incomplete histories into account, and permit the integration of sample members as long as they are still at risk of living the event, and are still under observation. The dependent variable in a model of this type is the instantaneous probability of a transition from one state to another – in this case, the probability that parents separate; younger children can, therefore, be included in the analysis up to their age at the survey, on the assumption that their behaviour would have been the same as those for whom the data is uncensored. As with the descriptive

analyses, given that parents' separation is the object of the analysis, only children whose biological or adoptive parents were living together at their birth are included in the analysis.⁴

5.3.2 Control variables

As research has shown regional differences in conjugal behaviour, with cohabitations both more stable and more common in Québec than in the rest of Canada (Marcil-Gratton, 1998), the *type of union at birth* was entered in interaction with the *region of residence* (Québec versus the rest of Canada). Two different combinations of the parents' *previous conjugal history* were tested, because of the complexity of this variable. In model 1, a three-category variable was defined for each parent indicating the presence and type of previous union (no previous union, previous marriage [with or without previous cohabitation], previous cohabitation). In model 2, information on both parents was combined, and a five-category variable created (no previous union, one parent married, one parent cohabited, both parents married, both parents cohabited).

Previous parental history was summarised into a four-category variable. Children whose half-siblings all lived elsewhere were classified together, irrespective of the sex of the common parent. Those with half-siblings in the household at their birth were divided into two groups according to whether the mother or father was the common parent. Those who had half-siblings from both parents in the household were included with the father's children, as survival probabilities were very close for the two groups.

Three variables commonly associated with union breakdown were also introduced. Firstly, as early age at marriage has been linked consistently to union breakdown, we included the *mother's age at start of union* divided into four categories (under 20, 20-21 years, 22-24 years, 25 and over). Secondly, union

⁴ Information on two important variables, mother's age at the start of the union and her level of education, was not collected for mothers who were not living with their children at the time of the survey. This meant that children living with their fathers at the survey would have to be excluded from the analysis. Although this was the case for only a small number of children in the sample as a whole, these children represented a larger proportion of those whose parents separated. To verify the bias this might introduce, we first carried out the analyses using all the children, but excluding the two problematic control variables. Estimates proved to be very similar to those for the sample in which children living with their fathers excluded.

stability has also been linked to education, though the relationship seems to be changing over time.⁵ It also seems that whether or not studies were completed at the child's birth is more relevant to family stability than the level of education itself (Le Bourdais, Neill and Vachon 2000). The *mother's level of education* was divided into four groups (no high school diploma, high school diploma, post-secondary studies, college or university diploma). Finally, premarital conceptions are also closely related to raised risks of separation; we included a third four-category variable, indicating *the length of time the parents had been married or cohabiting* at the child's birth (less than nine months, nine months to two years, two to five years, five years and over).

With research indicating the "confluence" of conjugal/parental histories with employment histories (Tzeng and Mare 1995), and revealing an association between conjugal stability and a) mother's employment (Le Bourdais, Neill and Vachon 2000) and b) non-standard work schedules (Presser 2000), employment variables would ideally have been included in the model. This was out of the question, however, as retrospective work history data were not collected in the first wave of the NLSCY. Prospective data from successive survey waves will remedy this situation in the future, and make it possible to track both family and employment status and change.

5.3.3 Results

All covariates were entered into the model as dummy variables. The parameter estimates for the two full models are presented in Table 5. These coefficients are easy to interpret, as they represent the net effect for each category relative to the variable's reference category (given in brackets). A coefficient superior to 1 indicates that the characteristic in question increases the likelihood that a child's parents separate, while a value inferior to 1 shows that it reduces the risk. A coefficient of 2, for example, means that the risk of separation is double for the particular category compared with the reference group; a coefficient of 0.5, on the other hand, means that the risk is halved. Standard errors were adjusted to take account of any clustering caused by the fact that children in the sample may belong to the same family.⁶

⁵ Higher education among Canadian women contributed to union instability in the past. For more recent generations, however, having a college or university diploma has been shown to increase union stability among couples with children (Le Bourdais, Neill and Vachon 2000).

⁶ For details of the method, see Goldstein 1995.

Table 5 **Effects of selected characteristics on the risk of parents' separation, NLSCY, Cycle 1 - proportional hazards estimates (exp β)^a**

Variables	Model 1	Model 2
Region x union at birth		
• (ROC ^b – marriage)	1.00	1.00
• ROC – cohabitation + marriage	1.59 ^{***}	1.59 ^{***}
• ROC – cohabitation	4.65 ^{***}	4.68 ^{***}
• Quebec – marriage	1.13	1.12
• Quebec – cohabitation + marriage	1.21	1.22
• Quebec – cohabitation	3.19 ^{***}	3.22 ^{***}
Mother's age at start of union		
• (25+)	1.00	1.00
• 14-19 years	1.86 ^{***}	1.88 ^{***}
• 20-21 years	1.17	1.18
• 22-24 years	1.01	1.02
Duration of union at birth		
• (5 years or more)	1.00	1.00
• 0-8 months	1.80 ^{***}	1.82 ^{***}
• 9-23 months	1.61 ^{***}	1.61 ^{***}
Schooling of Mother		
• (college/university diploma)	1.00	1.00
• No high school diploma	1.20	1.19
• High school diploma	1.06	1.06
• Some Post-secondary	1.50 ^{***}	1.49 ^{***}
Previous unions		
a) Mother – (none)	1.00	
– marriage	0.81	
– cohabitation	1.49 ^{**}	
Father – (none)	1.00	
– marriage	0.88	
– cohabitation	1.24	
b) Both parents		
(Neither parent had previous union)		1.00
One parent		
– marriage		0.88
– cohabitation		1.17
Both parents		
– marriage		0.87
– cohabitation		2.29 ^{***}
Previous children		
• (None)	1.00	1.00
• All outside household	1.97 ^{***}	2.01 ^{***}
• Living in household:		
– mother's children only	2.30 ^{***}	2.31 ^{***}
– father's children (or both)	1.23	1.23

Notes: ^a*** p<0.001; ^{**} p<0.01; ^{*} p<0.05.

^bROC = Rest of Canada

In both models, the type of union at birth, in conjunction with the region of residence, is highly significant. Throughout Canada, children of direct marriages were least likely to experience their parents' separation. Living together before marriage did not significantly increase separation probabilities for children in Quebec, though it did elsewhere in Canada. Children whose parents were cohabiting at their birth were in the most precarious position throughout the country, though the effect of cohabitation was much higher in the rest of Canada than in Quebec, where it is rapidly replacing marriage as a context for conjugal and family life.

The three other variables controlling for mother's characteristics also have a significant impact on union stability. As expected, having a mother who entered conjugal life during her teens raised the probability of family disruption. Also as expected, the longer the duration of the union at the time of the birth, the longer it is likely to last after the birth. The first duration category, 0 to 8 months, is comprised of children conceived outside a union, whose parents may have started living together or married *because* of the child – an event that puts the relationship at risk. Almost as risky are births within the first two years of the union; the fact that they will generally be the couple's initiation to parenthood may account for part of the extra risk.

Compared with children whose mother had a college or university diploma, those whose mother had some post-secondary education but no diploma, are more likely to experience the breakdown of their parents' union. This finding is hard to interpret particularly because, as the only "socio-economic-status" variable in the model, it is likely that the "education" effect includes some unmeasured effects of employment and income.

Even controlling for these characteristics, both the "previous union" and "previous children" variables have a significant impact on subsequent union stability. Estimates for the two "previous union" combinations suggest that earlier marriages have no notable impact on subsequent union stability. Model 1 suggests that if the mother had cohabited previously (and never married), risks of separation were significantly increased. In addition, Model 2 demonstrates a cumulative effect of previous cohabitations, with two previously cohabiting parents doubling the risk of separation.

The presence in the family environment of children conceived within an earlier union has a significant impact on family stability. However, this impact depends on whether these children were resident in the household at the target child's birth, and on whether they were maternal or paternal half-siblings. Compared with having no half-siblings in the family environment at birth, having half-siblings living *outside* the household (mainly paternal half-siblings) doubled the risk of parental separation. Interestingly, when fathers had children from a previous union, their impact was more disruptive if the children lived elsewhere than if they lived, at least part of the time, with their father and his new family. As mentioned earlier, this may be because fathers who obtain part or full time custody of their children are more committed to family life than the others. The most precarious conditions, however, were experienced by children born into households comprising maternal half-siblings; as shown in Table 3, this is also the most common situation for children with half-siblings in the family environment at birth.

6. Defining the situation-at-birth variables

This analysis has indicated which of the conjugal and parental history data gathered by the NLSCY are the most relevant to subsequent union stability. These aspects of parents' conjugal and parental history can be summarised in three variables to be entered into analyses of child outcomes. Firstly, the four-category "*type of parental union at birth*" variable is essential, and probably the most important.

Children are categorised according to whether, at the time of their birth, their biological parents were:

- Married, and had not lived together before their marriage
- Married, and had lived together before marrying
- Cohabiting
- Living apart⁷

Secondly, previous unions can be introduced in a number of ways. The most condensed form is simply to indicate whether or not one or other parent had cohabited (but not married) a previous partner.

Otherwise, the combination that best explained the variance was the two-variable combination indicating whether the mother or father had married or lived with a previous partner.

Finally, children can be classified according to the existence of half-siblings, which amounts to a classification according to the type of family into which children are born. We propose a five category variable as fitting best the NLSCY data:

- Intact family: neither parent had CPU
- Quasi-intact family: one or both parents had CPU, but they were not resident in the household at the child's birth
- Stepfather family: mother's CPU only, living full or part time in the household at the child's birth
- Stepmother family (or stepmother/stepfather family): father's CPU living full or part time in the household at the child's birth (mother's CPU may also be present)
- Lone parent: with or without CPU in the household at the child's birth

⁷ For analyses not limited to children born within a conjugal union.

7. Conclusion

The literature on separation and divorce have shown that certain factors, such as age at start of union, or type of union, have an impact on union stability. Given that cohabiting unions are often a prelude to marriage or the equivalent to “courting” relationships, the fact that they are less durable than marriage is only to be expected. However, research findings showing that the greater instability of cohabitation over marriage persists even after the birth of a child come as more of a surprise. In the absence of a marriage ceremony, starting a family is the most obvious marker of commitment within a cohabiting relationship and we had anticipated that cohabiting-couple *families* would be should be as stable as married-couple families. There is some evidence that the gap is decreasing, particularly in Quebec, where the fact of living together before marriage has lost the significant effect on marital stability that it still has elsewhere in Canada. However, at present, the type of union remains an important predictor of family stability.

The source of this difference is the subject of much debate. The “selection hypothesis” suggests that individuals who choose cohabitation over marriage are those with attitudes or personalities that make them more likely to abandon rather than work at a relationship when the going gets tough. Whether or not this is the case, our analysis certainly supports the idea that there is a pattern running through conjugal behaviour – that one union or family breakdown may well lead to another. One might have expected that the trauma of living through one family breakdown might reduce the likelihood of a second one, but this does not appear to be the case. For any given type of union at a child’s birth, the fact of it not being the first union of one or both parents increases the probability of union breakdown, particularly if that union was a cohabiting one. Conjugal and parental history variables summarising these “patterns” of behaviour should improve research in this field.

However, this is only a first step in the attempt to reach a fuller understanding of the connection between parents’ conjugal and parental pathways and the family experience of their children. The analysis so far has revealed a link between “pre-birth” family characteristics and the likelihood that parents separate. For children with parents living together at their birth, however, this event may be only the first of a number of transitions that transform the family environment. In subsequent research, the study will be extended to include how subsequent family transitions, such as parents’ new unions, and child-bearing

within new unions, affects their children's family environment. Only then will it be possible to start looking at whether and how these different family transitions are related to the many aspects of child development measured by the National Longitudinal Survey of Children and Youth.

Bibliography

- Amato, P.R. (1993). "Children's adjustment to divorce: Theories, hypotheses and empirical support." *Journal of Marriage and the Family*, 55, 23-38.
- _____. (2000). "The Consequences of Divorce for Adults and Children." *Journal of Marriage and the Family*, 62: 1269-1287.
- Amato, P.R. & B. Keith (1991). "Parental divorce and the well-being of children." *Psychological Bulletin*, 110, 26-46.
- Biblarz, T.J. and A.E. Raftery (1999) "Family Structure, Educational Attainment, and Socioeconomic Success: Rethinking the 'Pathology of Matriarchy.'" *American Journal of Sociology*, 105 (September) 321-365.
- Bumpass, L. and H.-H. Lu (2000). "Trends in cohabitation and implications for children's family contexts in the United States." *Population Studies*, 54: 29-41.
- Cherlin, A.J., K.E. Kiernan and P.L. Chase-Lansdale (1995). "Parental Divorce in Childhood and Demographic Outcomes in Young Adulthood." *Demography*, 32, 3, 299-318.
- Derdeyn, A.P. (1994). "Discussion of: Parental separation, adolescent psychopathology, and problem behaviors." *Journal of the American Academy of Child and Adolescent Psychiatry*, 33, 1131-1133.
- Dumas, J. and A. Bélanger (1997). "Common-Law Unions in Canada at the end of the 20th Century." *In Report on the Demographic Situation in Canada 1996*. Statistics Canada; Cat. no:91-209-XPE: 123-186.
- Fergusson, D.M., L.J. Horwood & M.T. Lynskey (1994). "Parental separation, adolescent psychopathology, and problem behaviors." *Journal of the American Academy of Child and Adolescent Psychiatry*, 33, 1122-1131.
- Goldstein, H. (1995). *Multilevel Statistical Models*. London: Edward Arnold; New York: Halstead Press.
- Goldscheider, F.K. and C. Goldscheider (1989). "Family Structure and Conflict: Nest-Leaving Expectations of Young Adults and Their Parents." *Journal of Marriage and the Family*, 51, 87-97.
- Haddad, T. (1998). *Do Children in Post-Divorce Custody Have More Problems Than Those in Intact Families?* Workshop paper for: Investing in Children: A National Research Conference, Ottawa, Human Resources Development Canada, Applied Research Branch Working Paper W-98-9Es.
- Haurin, R.J. (1992). "Patterns of childhood residence and the relationship to young adult outcomes." *Journal of Marriage and the Family*, 54, 846-860.
- Juby H. and D.P. Farrington (2001). "Disentangling the link between family structure and delinquency." *British Journal of Criminology*, 41:22-40.

- Kiernan, K.E. (1992). "The Impact of Family Disruption in Childhood on Transitions Made in Young Adult Life." *Population Studies*, 46, 213-234.
- Kiernan, K.E. and J. Hobcraft (1997). "Parental Divorce during Childhood: Age at First Intercourse, Partnership and Parenthood." *Population Studies*, 51: 41-55.
- Le Bourdais, C., G. Neill and N. Vachon (2000). "Family Disruption in Canada: Impact of Changing Patterns of Family Formation and of Female Employment." *Canadian Studies in Population*, 1: 85-105.
- Lipman, E.L., M.H. Boyle, M.D. Dooley and D.R. Offord (1998). "What About Children in Lone-Mother Families?" Workshop paper for: Investing in Children: A National Research Conference, Ottawa.
- Marcil-Gratton, N. and C. Le Bourdais (1998). "The Impact of Family Disruption in Childhood on Demographic Outcomes in Young Adulthood." In *Labour Markets, Social Institutions, and the Future of Canada's Children*, published under the direction of Miles Corak, Statistics Canada, Ottawa, pp. 91-105.
- Marcil-Gratton, N. (1998). *Growing up with Mom and Dad? The intricate family life courses of Canadian children*. Statistics Canada, catalogue no. 89-566-XIE.
- McLanahan, S. and L. Bumpass (1988). "Intergenerational Consequences of Family Disruption." *American Journal of Sociology*, 94, 130-152.
- McLanahan, S. and G. Sandefur (1994). *Growing Up With a Single Parent: What Helps, What Hurts*. Harvard University Press, Cambridge, Massachusetts. 196 pages.
- Presser, H.B. (2000). "Nonstandard Work Schedules and Marital Instability." *Journal of Marriage and the Family* 62 (February): 93-110.
- Ross, D.P., P.A. Roberts and K. Scott (1998). *Mediating Factors in Child Development Outcomes: Children in Lone-Parent Families*. Workshop paper for: Investing in Children: A National Research Conference, Ottawa, Human Resources Development Canada, Applied Research Branch Working Paper W-98-7Es.
- Ross, D.P., K. Scott and M.A. Kelly (1996). "Overview: Children in Canada in the 1990s." In *Growing Up in Canada*. Statistics Canada, catalogue no. 89-550-MPE, pp. 15-46.
- Seltzer, J.A. (1994). "Consequences of Marital Dissolution for Children." *Annual Review of Sociology*, 20, 235-266.
- Tzeng, J.M. and R.D. Mare (1995). "Labor market and socio-economic effects on marital stability." *Social Science Research* 24: 329-351.
- Wu, Zheng (2000). *Cohabitation. An Alternative Form of Family Living*. Oxford University Press, Canada. pp. 200.