

Children's economic and family circumstances: A world in motion*

Hélène Desrosiers, Lucie Gingras and Ghyslaine Neill
with the collaboration of Nathalie Vachon
Direction Santé Québec, Institut de la statistique du Québec

**Paper presented at the 17^e Meeting of the
International Society for the Study of Behavioural Development**

**S10-10 The longitudinal Study of Child Development in Québec (QLSCD/ÉLDEQ0 :
Parents' Characteristics and Behaviours**

**Ottawa
August 2002**

* An earlier version of this paper has been published by the Institut de la statistique du Québec under the title *Growing up in a changing environment* (Desrosiers *et al.*, 2002).

1. Introduction

From one generation to the next, children are born and raised in a family environment very different from the one their parents grew up in. While, thirty years ago, most children were born to married parents in their first union, today's children emerge into a far more diversified context.

In a context of high conjugal mobility, the experience of single-parent family life after parents separate has become the reality of a rising proportion of children even during the pre-school years (Marcil-Gratton, 1998). To these children are added others, born outside a union, who live with a single parent, most often their mother, throughout early childhood (Le Bourdais and Neill, 1999). Both groups of children are likely to see various individuals enter their family environment – a parent's new partner, a stepsibling with whom they have no biological or adoptive link, or even a half-sibling from the new union.

Although most children emerge unscathed from “broken homes”, research on this topic generally agrees that pre-school children whose parents separate are a little more at risk of certain health or adjustment problems, at least in the short term, even when other pre-disposing factors are controlled for (Amato and Booth, 1996). More recently, studies based on longitudinal data have shown that a better understanding of the association between the family types within which children live and problems of social or school adjustment can only be reached using an approach that takes the diversity of children's family pathways from birth into account (Pagani *et al.*, 1997). Therefore, it is essential to describe children's principal family transitions in order to gain a deeper insight into how certain events, such as parental separation early in life or multiple stepfamily episodes, are linked to their health and well-being which is what will be done in the first part of this paper.

Whether linked to family mobility or not, economic insecurity is another feature of the environment in which children grow up. In recent decades, numerous studies have clearly indicated that children from underprivileged backgrounds are more susceptible to health and developmental problems given the sum of unfavourable social and sanitary conditions often present in their environment. However, the debate is far from closed as to the factors mediating the observed associations. Furthermore, very little is known as yet about the impact the duration of poverty has on young children's growth and development (MSSS, 1997).

One of the main reasons for this lack of knowledge is the absence, until recently, of longitudinal data in Québec that make it possible to identify the spells of time spent by children in poverty. In this respect, in the second part of this text, we will explore the characteristics of children from families with some experience of temporary or prolonged economic hardship. Detailed information on children's family pathways should also help us reach a better understanding of the complex articulation between family trajectories and the economic circumstances within which young children evolve.

Using data collected during the 1998, 1999 and 2000 QLSCD rounds, we will attempt to evaluate the extent to which the family context at birth influences children's trajectories. We will also explore what happens to children who spent their first months of life in a household with an inadequate income. For example, how many children witnessed an improvement in their family's

financial situation and how many experienced persistent economic difficulties? To what extent is the entry into, and exit from, an episode of low income associated with household characteristics and with children's family pathways? These are the questions which will be investigated in the second part of this paper.

2. Studying the changing nature of children's family and economic environment: the relevance of the longitudinal approach

Many studies based on longitudinal data have shown how important it is to take account of the whole set of family transitions that children live in order to understand more fully how children's family structure is linked to various problems of development.

Analysing a cohort of children aged 12-17 years, for example, Kiernan and Hobcraft (1998) found that the impact of living with a single-parent on the risk of social and school adjustment problems varies according to whether or not the stability of the family environment since birth was controlled for. Certainly, the experience of single-parent family life is different for children born and raised in this situation than for children whose parents separate. Other studies also highlight the benefits of a stable single-parent family compared with multiple family transitions (Acock and Demo, 1994).

The impact of entering and leaving conjugal unions is also the central theme of a recent study (Hetherington and Stanley-Hagan, 2000). Findings show that children living in stepfamilies experience poorer academic achievement than children from two-parent intact families; they are also more prone to behaviour or emotional problems. However, these differences are reduced, or even disappear, in the few years following the creation of the new family unit. Furthermore, children tend to adapt better to stepfamilies formed when they are young (Hetherington, 1992). Results from another longitudinal survey conducted in Québec converge, revealing that, once pre-separation family factors are taken into account, remarriage has no effect on children's behaviour, other than playing a minor protective role for hyperactive behaviour if it occurs before puberty (Pagani *et al.*, 1997).

Although the effect on children of family reconstitution tends to decrease with time, it is nonetheless important to underline that these new unions are often more fragile (Desrosiers *et al.*, 1995). What is more, Amato and Booth (1991) find that an additional separation disturbs children even more than their parents' divorce, while others focus on the cumulative negative effect of multiple family transitions (Kurdek *et al.*, 1995). All this points to the importance of acquiring a better knowledge of children's family trajectories before attempting to study their impact on school and social adjustment.

In addition to family change, the family's financial situation may also alter. These changes may themselves result from, or be the cause of, the family transitions that children live through. Income loss and economic insecurity have been linked to an increased risk of union breakdown (Bumpass *et al.*, 1991; Yeung and Hofferth, 1998), greater residential mobility (Yeung and Hofferth, 1998), and frequent changes in childcare arrangements.

Recent longitudinal studies demonstrate nonetheless the importance of looking at the duration and severity of poverty in any attempt to improve our understanding of the link between adverse living

conditions and child development. Thus, children living in extreme or chronic poverty are more likely to have educational difficulties, physical and health problems, or socio-emotional problems (Duncan and Brooks-Gun, 1997) and to live in high risk environments in terms of schools, neighbourhood or housing (Rank, 2000).

According to Morrissette and Zhan (2001), between 1993 and 1998, around 12% of Canadian children under the age of 6 years lived in low-income families for four years or more compared with approximately 8% of the Canadian population as a whole. The corresponding proportion for Canadians living in single-parent families was 32%. Immigrants admitted to Canada within the previous ten years were also more likely to live long periods in poverty, mainly because of higher unemployment rates and lower qualification levels among these groups (Finnie, 2000). Finally, other studies demonstrate that the longer individuals spend in such impoverished circumstances, the lower their chances of escaping a year later (Huff-Stevens, 1994; Laroche, 1997).

Picot *et al.* (1999) found that movements below and above the low-income threshold¹ among Canadian children between 1993 and 1994 were due, in similar proportions, to changes in family composition and in their parents' employment situation (pay and number of hours worked); this applied as much for children from single-parent as from two-parent families. This study also highlights the importance of being qualified, particularly for single-parents. Beyond qualifications, however, a double-income stands out as the predominant factor in helping people out of periods of poverty. Thus, according to Gascon (2000), while poverty among two-parent families could be all but eliminated in Canada if both members of the couple worked full-time, almost half the single-parent families would be poor despite full-time employment. Even with a university diploma, these families maintain a very high predicted poverty level, suggesting that a single breadwinner with at least one dependent child is nowadays not enough to generate an income adequate to meet a family's basic needs.

Identifying and understanding the links uniting family and socio-economic trajectories with the development of preschool children means that we need to acquire a deeper knowledge of the changes occurring in their environment. For this reason, this paper is dedicated to describing changes in children's family and economic situation, from birth to 2½ years. Thus, the first section will focus on family pathways, and the second on transitions into and out of low-income status according to certain family characteristics. Finally, economic changes will be examined in the light of family trajectories in such a way as to connect these two aspects of the child's environment.

3. Children's family pathways

3.1 Data

The data used to chart Québec children's family pathways from birth to approximately 2½ years old come from two sections of the Interviewer Completed Computerized Questionnaire (ICCQ) – one, administered every two years, dealing with family history and legal custody, and the other, describing the relationship between household members. The first section contains detailed, dated

¹ In this study, the low-income measure used corresponds to 50% of the median family income adjusted according to adult equivalents for 1993.

information on the conjugal and parental history of the two biological parents, except if they never lived with the child.

The analytical sample is composed of 1,991 cases and includes all target children who participated in the 1998 and 2000 survey rounds of the QLSCD and for whom the necessary information for reconstructing the family pathways from birth to approximately 2½ years old (29 months) is available.

The study of the family life course is based essentially on the child's residential environment. To be more specific, only events occurring in the environment of the responding biological parent are taken into account. This procedure has the obvious consequence of under-estimating the family mobility experienced by some children following their biological parent's separation. Note that, at the 1998 round, among children born to a single parent, only 5% lived in shared custody whereas, at the 2000 round, approximately 11% of those living in a single-parent family were in this situation. In addition, among the former group, nearly three out of ten had no contact with their other parent at five months. The pathways described here should, therefore, be taken to reflect the situation lived by children *most of the time* during the period covered.

In the ensuing analysis, events leading to following changes in the family configuration have been considered:

- those arising from the separation of parents living in the surveyed household, whether or not they are biological;²
- those resulting from the responding biological parent's (essentially the mother's) entry into a union with a new partner or with the other biological parent;
- those occurring after the arrival or departure from the surveyed household of half-siblings, insofar as this event leads to a change in the configuration of the family within which the target child lives;
- those leading to the entry into another type of family (ex.: foster family).

From the basic information included, three types of context at birth are considered in the analyses that follow:

- **Intact biological families** include only children living with their two biological or adoptive parents, irrespective of the type of conjugal union (marriage or common-law).
- **Biological stepfamilies** comprise a couple living with the target child from their union and at least one child from an earlier union of one or other parent. The family "reconstitution" in this case results uniquely from the presence of a sibling group composed of half-siblings normally living in the household.
- **Single-parent families** regroup families in which the target child is living with a single parent.

² This separation is almost exclusively the result of union breakdown. In only three cases did the separation occur as a result of the death of one of the parents.

To this are added other family types that become more numerous as the family landscape of the target child is transformed.

- **Stepfamilies** include a biological parent living with a partner who has no biological link to the target child. This partner may or may not have children from a previous union living in the household.
- **Other families** are those that include neither biological parent (ex.: foster family, grandparents etc.).

Thus, the typology makes it possible to distinguish stepfamilies according to the nature of the family links uniting its members; to distinguish, in other words, biological stepfamilies (two biological parents with half-siblings present) from stepfamilies created by the arrival of a stepparent.

Table 1 first depicts the family situation of children at their birth, and then at each of the survey rounds, when they were aged 5 months, 17 months and 29 months respectively. Eight out of ten children were born in a family that included only biological parents and children from their union. One child out of ten lived with his two biological parents and half-siblings from a previous union of one or other parent (biological stepfamily) while a slightly lower proportion of children were born to parents who were not living together at their birth. Almost all these children were living with their biological mother.

(insert Table 1)

Clearly, the proportion of children living with both biological parents (biological intact family or biological stepfamily) decreases over time in favour of children living in a single-parent family. From the 1999 round on, stepfamilies became more prevalent although the proportion of children living with a stepparent, essentially a stepfather, by the age of 2½ years remains very low.

This series of “photographs” (Table 1) masks the changes occurring from one round to the next. From these data it is impossible to tell whether children in single-parent families at birth remained in this situation throughout the period. Similarly, the pathways followed by children who were living in stepfamilies at the 2000 round are unknown. Finally, this table conceals the movements in and out of relationships as some biological parents get together after the child’s birth or are reconciled after a period of separation.

To clarify these questions, it is vital to examine children’s family life course, and reconstruct, in other words, the sequence of family events children live. The whole set of family changes that the children represented by QLSCD³ have experienced are presented at Figure 1. Constructed from the different family types presented earlier, the child’s family life course starts at birth (BIRTH) and is followed through 9 possible states: BIF1, BIF2, BS1, BS2, SPF1, SPF2, S1, S2, OF (see Figure 1 for a definition of these abbreviations). The arrows represent changes of state, or transitions. For instance, the transition from state BS1 to SPF1 represents the passage from the first episode in a biological stepfamily to a first episode in a single-parent family.⁴ Method and results are presented below.

³ This covers the children born in Québec in 1997-1998 who had not left the province permanently before the age of 29 months.

⁴ The analysis requires that each child experience a first transition at birth. This is not, strictly speaking, a transition since children

(insert Figure 1)

3.2 Method

Transition probabilities are estimated using the multiple decrement table method⁵, the main difference here being that a series of tables are calculated. This approach means that probabilities are estimated not for the whole group of children but only for the sub-group following a similar pathway: they are conditional, therefore, on the sequence of transitions already made (model non-markovian, for details see Fernando, 1992, 1999).

The first set of arrows in Figure 1 indicates the particular family situation children are born into: biological intact family, biological stepfamily, and single-parent family. Subsequently, each arrival point becomes, in its turn, a point of departure: for example, children born in a biological intact family are exposed to the risk of living a subsequent family episode, in an “other” family, in a biological stepfamily, or in a single-parent family. As there are several possible exits from a state, the risks associated with the events leading to these states are treated as competing.

In order to estimate the relative proportion of children taking different pathways, we used these transition probabilities to estimate sequence probabilities. Estimating the whole set of trajectories allows us to determine the relative importance of each one. It is also possible to calculate the probability that a child lives a particular event, irrespective of the pathway taken, as we will see below (for more details see Annex 1 in Desrosiers *et al.*, 2002).

3.3. Results

Figure 1 shows that 84% of children lived none of the family transitions under consideration: by the age of 2½ years, 72% were still living in a biological intact family, 7% in a biological stepfamily and 4.9% in a single-parent family.

The proportion of children living at least one change (16% of all children) varies according to the family context at birth. Approximately 11% of children born in biological intact families experience at least one transition while this proportion rises to 32% among children born in biological stepfamilies and to 44% for those born in single-parent families. Finally, around 6% of children live a second transition before the age of 2½ years (Table 2).

(insert Table 2)

A look at the transitions made by children born in biological intact families (81%) shows that parents' separation constitutes the main event modifying their family environment. In fact, the transition to a single-parent family (BIF1 → SPF1) accounts for 93% of the changes happening in the life of these children. The other possible changes, the passage towards “other family” or towards

have not lived a change in their situation. This “artificial” transition is necessary to fulfil the requirements of the software used (for more details see Annex 1 in Desrosiers *et al.*, 2002).

⁵ This involves calculating, at each interval of time, the probability attached to a group of children of living a given family event. For more details informations, see Burch and Madan (1986).

a biological stepfamily (with the arrival of half-siblings), are far less common. In total, during the period under observation, 8% (0.0802) of children make the transition from BIF1 to SPF1 (Table 3).

(insert Table 3)

The pathways taken by children born into biological stepfamilies (10%) may be marked not only by parental separation but also by the departure of half-siblings. Indeed, as the data in Table 3 show, 54% of first transitions for these children reflect the passage towards a single-parent family episode (BS1 → SPF1) and 44% towards an episode in a biological intact family (BS1 → BIF1).

As for children born within a single-parent family (9%), 80% of first transitions are caused by the return of the biological father (SPF1 → BIF1 + SPF1 → BS1) (Table 3). In all, around 37% of children born in these circumstances experienced their father's homecoming while 9% saw their mother enter a union with a new partner during the period under observation (Table 2). It is worth noting that, among the former children, the majority were still living with their father when aged about 2½ years old ((0.0150 + 0.0028 + 0.0041 + 0.0017) / (0.0250 + 0.0060 + 0.0017 = 72%) – Figure 1).

Summing all the probabilities of living at least one single-parent episode shows that almost one child in five (19%) had this experience by the age of 2½ years (Table 2). Almost half of these children (47%) were born in this situation, while the rest (53%) arrived there when their biological parents separated. Not all remain there, however: as Table 1 showed, only around 13% of children were living in a single-parent family at 2½ years old. The sequence probabilities show that, effectively, approximately 5% (0.0491 + 0.0031 + 0.0019) of all children are born to and remain with a single parent. Others have both parents present at birth and only later find themselves in this situation, at some point before the age of 2½ years (0.0522 + 0.0013 + 0.0025 + 0.0006 + 0.0073 + 0.0021 + 0.0020 = 7% - Figure 1).

Now, comparing children born within biological intact families with those born in biological stepfamilies shows that the former seem less likely to experience their parents' separation than the latter (10% v. 17%). This being said, while the vast majority of children experience a single-parent episode only once, some live at least two - the case for only 2.4% of the total number of children (see Table 2)..

The way in which a single-parent family episode ends depends on the context at birth. As we saw, for children born in this situation, the mother's entry (or re-entry) into a union with the child's biological father is the most common exit (80%) from the first period in a single-parent family. Among children born in biological two-parent families, intact or stepfamilies, a first single-parent family episode is far more likely to end with the arrival of a new partner (BIF1 → SPF1 → S1 = 57% and BS1 → SPF1 → S1 = 45% compared with SPF1 → S1 = 20% - Table 3).

In Table 1, we saw that the relative proportion of children living with two biological parents declined between birth and 2½ years (from 91% to 85%). This small decrease conceals a more complex set of movements in and out of unions. Indeed, while 79% of children born in two-parent families remain there for the first 2½ years of life (0.7217 + 0.0714), around 6% arrive in this situation following one or more transitions (Figure 1). In the same way, the relative weight of

children living in a single-parent family at 2½ years (13%; Table 1) is not only caused by separations, but also by the “stability” of the life course of many children born in this situation.

These findings give an account of the wider observed trends. As the analysis is based on the mobility of the responding parent, a certain number of movements or events remain invisible. Nevertheless, this analysis has made it possible to chronicle more fully the growing diversity and complexity of the family life course traversed by recent generations of children in Québec.

4. Periods of low income

Today, many children are exposed to the difficult financial circumstances experienced by their parents, whether the result of union breakdown, or of finding and keeping paid employment. Infants are particularly vulnerable (Ross *et al.*, 1996) because of the drop in work income that often accompanies the birth of a new baby. Finding a job, or returning to work, can be particularly difficult for mothers who have the sole responsibility of a young child.

In this part of the paper, we will try to answer the following questions, which are of crucial importance in a study devoted to child development (see among others Brooks-Gunn and Duncan, 1997; Seccombe, 2000; Wade *et al.*, 1999). What proportion of children experienced at least one low-income period since their birth? Among children born in difficult financial circumstances, how many saw their situation improve? For what percentage was this situation of economic insecurity a prolonged one? Is it possible to characterize households experiencing persistent rather than temporary poverty?

In this study, we assume that children living in a low-income household are experiencing economic hardship. A household is classified as “low-income” if the gross annual income from all sources is below the cut-off (before tax) defined by Statistics Canada according to the size of the family unit and of the region of residence.⁶

According to Statistics Canada, low-income cut-offs do not represent official poverty levels. It should be noted, however, that individuals below the LICO may find themselves in financial hardship because they spend a greater proportion of their budget purchasing basic essentials than does a family of a similar size living in a similar region. Even within this group, however, some households are worse off than others. In order to evaluate the level of income inadequacy, in some analyses, children belonging to household with an income less than 60% below the low-income threshold have been set apart from those whose family income is situated between 60 and less than 100% below the LICO (Séguin *et al.*, 2001).

From the outset, questions on household income were asked at each of the survey rounds when the children were approximately 5 months (1998 round), 17 months (1999 round) and 29 months (2000 round), and refer to the gross household income in the year preceding the survey. A child is considered as being in a situation of persistent or chronic low-income if the household in which he

⁶ More precisely, the low-income cut-off (LICO) corresponds to the level of income beyond which a household spends, on average, for food, clothing and lodging a proportion of its pre-tax income superior to 20% to that spent by the average family.

lives fell below the low-income cut-off from birth to 29 months. The evaluation of income adequacy on an annual basis means that, evidently, short episodes of poverty remain invisible.⁷

4.1 Low income: entries and exits

The proportion of children living in a low-income households are presented in Table 4, for each period of the study. For comparability, only children participating at all three survey rounds (n = 1,985), and for whom the information is available at each round have been included in the analytical sample, leaving a total of 1,905 children. As Table 4 shows, just over a quarter of children lived in a low-income household between birth and five months. This proportion declined to 23% at the 1999 round, and to 21% at the 2000 round.⁸ Among these low-income children, the data also show that the difference between income and the low-income cut-off had dropped from 42% at the 1998 round to 38% a year later, a level that remained stable in the following year.

(insert Table 4)

In fact, when we examine the proportion of children living in extremely poor households from the 1999 round (Table 4), we see that the relative size of this group declines. As will be seen later, such factors as the entry into, or return, of mothers to the labour force could explain this overall improvement in children's financial circumstances during their first years of life.

From the distributions observed each year, it is not possible to appreciate the movements into and out of economic hardship. While approximately a quarter of children live in a low-income household during any given year, the data in Table 5 indicate that one third of children were, in fact, exposed to at least one period of poverty between birth and 2½ years. For about half of these children (17%) this situation was temporary, while the other 16% experienced chronically difficult living conditions from birth to the age of 2½ years. In total, 6% of children lived in a household with a very inadequate income (inferior to 60% of the LICO) from birth (data not presented).

(insert Table 5)

What proportion of children born in difficult circumstances experienced an improvement in their situation?

Around four children out of ten born in a low-income household (1998 round) saw their situation improve at some point (Table 5).⁹ Of the children spending the first months of life in a low-income household, around a quarter were no longer experiencing the same difficulties a year later. In the same way, of all children living a period of low-income at around 17 months, the situation had changed for about 27% of them later on.

⁷ The inverse seems less probable. In fact, one might imagine that a relatively small proportion of children from poor households would have had significant exits from low-income in a given year, because of the debts that these households tend to accumulate.

⁸ McNemar's homogeneity test is significant at the 0.01 level for the drop observed both between the 1998 et 1999 rounds, and between the 1999 et 2000 rounds.

⁹ This percentage is estimated from the data in Table 5 in the following way: (5.1% + 4.2% + 1.5%) / (5.1% + 4.2% + 1.5% + 15.5%).

Movements out of and into poverty are normally due to a substantial change in income. Indeed, the increase in median income for households leaving the low-income category in 1999, for example, is equal to \$13,500. For households crossing the threshold in the opposite direction between 1998 and 1999, the median difference observed is just as striking (-\$13,000). By comparison, for households remaining below the low-income cut-off in 1998 and 1999, the median rise in income was only \$1,500. Disparities of the same scale are observed for the period 1999-2000 (data not presented). This suggests that important events occurred in the households experiencing a change of status: changes in the employment or conjugal situation, for example.

The findings taken as a whole suggest that the period surrounding the arrival of a child involves a significant loss in income for a sizeable proportion of households – that is to say, an income decline sufficiently large to push a certain number of households below the low-income cut-off. What are the sociodemographic characteristics of households experiencing chronic financial difficulties?

4.2 Characteristics of children living in households with chronic financial difficulties

In a previous analysis of QLSCD data, we identified certain sociodemographic characteristics of the households in which children lived chronic economic deprivation. Data reveal that young children of mothers who gave birth in their teens, who were non-European or recent immigrants (less than 10 years), and who had little education (no high school diploma), as well as children of birth order four and above, or who were born to a single mother, are considerably more likely to have lived continuously below the low-income cut-off since birth. More precisely :

- Half the children born to a mother aged less than 20 years lived in chronic poverty from birth, compared with around 11% to 21% of children born to older mothers;
- 45% of children born to non-European immigrant mothers experienced persistent low-income from birth – the situation for approximately one-fifth of children of European immigrant mothers and one-tenth of mothers born in Canada. Children of recent immigrants mothers (less than 10 years) are considerably more likely to have lived continuously below the low-income cut-off since birth;
- 36% of children whose mother had no high school diploma at the 1998 round had lived in a low-income household up to the age of 2½ years compared with 18% of children whose mother had a high school diploma, 9% whose mother had a post-secondary diploma (though lower than university) and around 5% of children with mothers with a university degree.

With regard to the family situation or the employment status of the parents, the data show that :

- 36% of children from families with at least four children lived in chronic poverty from birth compared with around 15% for the other children (3 children in the family or less);
- more than half of children living with a single biological parent lived in a household with an inadequate income for the entire first 2½ years of life. In comparison, only 11% of children born into biological intact families and 18% of those born into biological stepfamilies were exposed to persistent poverty;
- 81% of children living in families for whom social assistance was the principal source of income at the 1998 round had lived continuously in a low-income household since birth; the proportions

are 5,7% and 7,6% respectively for the households supported principally by a salary or self-employment income;

- children living in single-income two-parent families during the year of their birth are much more likely to have lived continuously in a low-income household than those belonging to a double-income family (22% v. 2.7%). Among children whose single parent was in employment, 29% were in this situation.

Detailed analysis show that the situation of single parent at birth (almost all mothers) is clearly disadvantage. For example, for single mothers, a better education is no guarantee of a better financial situation, as a similar proportion of mothers with a high school diploma as with a higher level of education (55%) had lived constantly below the low-income threshold since their child's birth. In fact, even when income is above the low-income threshold in the few months surrounding the child's birth – the case for around one-tenth of single mothers – those who were not living in a couple at the birth are less likely to maintain this level of income subsequently (50%) than their counterparts in two-parent families (92%) (data not presented).

What about children with a transitory experience of low income; those who, in other words, lived one or two episodes rather than none at all?

In addition to the “at-risk” groups already identified, certain children are more often exposed to transitory economic hardship than others are, in that they are more likely to experience one or two low-income periods. This is the case, for example, for children whose mother was aged 20-24 years at the birth (32%) or who were not educated beyond the high school diploma (24%), as well as those living in a household whose principal income source in the year preceding the 1998 survey round was self-employment income (around 25%) or another income source (around 32%).

Moreover, temporary low-income episodes (one or two low-income periods) are more prevalent among children born to an employed single parent (55%) than among children born in a single-income two-parent family (26%). This result may reflect the difficulty single mothers have remaining in full time employment after the birth of a child (data not presented; see Desrosiers *et al.*, 2002).

4.3 Parents conjugal transitions and children's low-income experience

How far can change in the family situation as a single parent's forming a union or a couple separating lead to a change in low-income status?

The data in Figure 2 illustrate the important influence family change has on the economic mobility of the QLSCD children. Visibly, children who lived exclusively with one parent since birth are the least well-off, in financial terms: 64% lived prolonged economic insecurity from birth, the situation for around 43% of those whose family situation changed with the reappearance of the biological father (BIF or BS) or the arrival of a new partner in the household (S). As might be expected, two-parent intact families whose situation remained the same since birth occupied the most enviable position: only 10% of them had experienced prolonged low-income. This percentage rose to 14% in biological stepfamilies. Between these two extremes are found children from two-parent families

that separate: between approximately 28% and 39% of them lived below the low-income cut-off for the length of the period under observation.

Finally, compared with children living in intact two-parent families, those born to parents with children from a previous union (biological stepfamilies) tend towards greater financial insecurity, irrespective of whether or not the couple separated subsequently. These results partly reflect the different composition of these two groups and particularly the conjugal and parental histories of their parents. Children from biological stepfamilies are more likely, for example, to be born to little-educated mothers (no high school diploma: 30% v. 15%), who were not working at their birth or at five months (39% v. 27%) and who had become first-time mothers during adolescence (data not presented).

The findings demonstrate how important it is to consider children's family transitions in the search for a better understanding of the relationship between economic insecurity and family type. However, given the nature of the data, establishing a causal relationship between conjugal mobility, on the one hand, and the children's transitions in and out of poverty, on the other, is not an easy task. According to current research, economic insecurity can be as easily the cause as the consequence of parental separation (Bumpass *et al.*, 1991).

5. Conclusion

Since the early 1970s, when divorce rates started to climb, many studies from Europe, the United States and Canada, investigated the impact separation and divorce have on children. Research using a cross-sectional or longitudinal approach revealed that, even if most children of divorce come through it unscathed, life in a single-parent family or stepfamily is associated with a slightly higher risk of various adjustment and health problems, at least in the short-term (Bernier *et al.*, 1994; Cheal, 1996). Other research in the United States found that, compared with children with married parents, those whose parents were divorced were more likely to experience educational difficulties, emotional or behaviour problems, or long-term health problems (for a review, see Amato, 2000). Certain longitudinal studies have even suggested that certain negative repercussions of parents' divorce do not appear until much later (Cherlin *et al.*, 1998). Certainly, it is still too early to verify if such tendencies are present among children in Québec. The data of future rounds of the QLSCD 1998-2002 will make it possible, however, to understand the effect that early parental separation may have on the children's social and educational adjustment in Québec, at least in the short term.

In the meantime, the analysis of family pathways has shown that, among children born in Québec at the end of the 1990s, around one-fifth had lived in a single-parent family at some point before the age of 2½ years. Among these children, more than half (53%) were confronted by this situation following the break up of their parents' union while a quarter had lived it from birth. Finally, one child in five (21%) born to a single-parent had seen the family situation change subsequently.

For a sizeable proportion of children born outside a union, the first family transition occurs when their father takes up residence with their mother. In fact, just over one-third of these children saw their father integrated into the household after their birth, and for almost seven out of ten children he was still present when the child was 2½ years old. Among children born in two-parent families, family composition has an influence on their subsequent family life course. Thus, 11% of children

born in a biological intact family lived at least one family transition in the 2½ years after their birth. In comparison, 32% of children born in a biological stepfamily, i.e. with half-siblings present, experienced at least one change. Overall, the latter appear to have lived through their parents' separation a little more frequently than children born in a two-parent intact family (17% v. 10%).

Finally, totalling all the family transitions, we estimate that around one child out of six experiences one of the selected transitions between birth and the age of 2½ years. However, this proportion could well be higher. Remember that, for reasons already given, for children living in a single-parent household, only changes in the life of the parent living with the child, almost always the mother, were taken into consideration. This approach could lead to a slight underestimation of children's family mobility given that men are more likely to enter a union following separation (Desrosiers *et al.*, 1999; Villeneuve-Gokalp, 1991). It should be repeated here that approximately one-tenth of children in a single-parent household at 2½ years were in shared custody. As the QLSCD collected detailed information on the conjugal and parental trajectories of both biological parents after separation, on the arrangements surrounding the separation and on the type of contact between the child and the non-resident parent, more in-depth analyses could be conducted at some point to provide a better picture of the complexity of the family situations lived by children experiencing their parents' break up.

As for the economic situation, the analysis has shown that one-third of children in Québec aged around 2½ years in the year 2000 had been exposed at some point to at least one low-income period since birth. Approximately half (that is, 16% of all the children) had experienced prolonged economic hardship up to the age of 2½ years. In total, 6% of children lived in a household whose income was grossly inadequate, that is to say more than 60% below the low-income cut-off, since birth.

The analysis has also highlighted certain sociodemographic characteristics of the households in which children lived chronic economic deprivation. Although several of these characteristics are linked, the analysis showed that, at equal qualifications, mothers who were not in a couple at their child's birth start with a handicap. Thus, whatever the mother's level of qualifications, approximately half the children born outside a union were raised in chronic poverty, while a much lower proportion of children born in a two-parent family (from 4% to 31% depending on the mother's diploma) were in this situation. Beyond the family situation in itself, the importance of two parental incomes for protecting young children from economic hardship also stands out.

Their mother's entry into a conjugal union, by bringing an extra employment income into the household, proved to be a successful way out of difficult financial circumstances for children born to a single-mother. In contrast, parental separation sends a proportion of children from two-parent families below the low-income threshold at some point. In addition, children born in a biological stepfamily, a family that includes children born within an earlier union of one or other parent, experience greater economic insecurity than those born in an intact family. These results, as we saw, partly reflect the conjugal and parental pathways taken by their parents.

In this sense, data from the first three QLSCD rounds provide evidence of the close link between the conjugal trajectories of parents and children's movements in or out of poverty. They illustrate the

importance of considering children's family transitions in the search for an improved understanding of the relationship between financial insecurity and family structure.

Comparing QLSCD data with those collected in the Canadian national survey (NLSCY) suggests that children born in Québec at the end of the 20th century are more likely than earlier generations to experience life in a single-parent family before their third birthday. Data from different sources concur that the growing precocity of single-parent family life results not so much from the modest rise in out-of-union births in Québec, as from the increase in early parental separation. Only by following children through time will it be possible to determine whether this change will be accompanied by an increase in other family transitions among preschool children.

Already, the rise in (early) parental separation is of concern to policy makers and others involved in family issues. In 1997, for instance, the Québec government instituted compulsory mediation when parents separate in order to facilitate the separation process for parents and their children. At the same time, other groups, such as the *Conseil de la famille et de l'enfance*, underlined the importance of efforts aimed to prevent conjugal problems among couples with children, given the human costs associated with conjugal disharmony (*Conseil de la famille*, 1996, 1997; *Société canadienne de pédiatrie*, 2001). Indeed, among the numerous sources of tension leading to conjugal breakdown, are undoubtedly certain pressures associated with the social organisation of the family, an area in which intervention is possible: the difficulty of reconciling work and family, for instance, or the problems encountered by young parents attempting to enter the labour force. In this respect, the QLSCD is one of the rare data sources in Québec that may help uncover the determinants of early parental separation.

How do changes in economic circumstances, such as losing a job or cutting down the number of hours worked, affect conjugal stability? Apart from movements below and above the low-income cut-off, what proportion of children experience a significant reduction in living standards when their parents separate? What is the impact of an important change in living standards on the development and well-being of children of separated parents, once other factors, such as characteristics of the child and the context surrounding the separation (ex.: level of agreement between the parents, contact with the non-custodial parent) are taken into account? More generally, which factors make it possible to counter the negative influence of financial and social insecurity on preschool children's health and development? These are only a few of the many questions it will be possible to investigate in the near future.

6. References

- ACOCK, A. C., and D. H. DEMO (1994). *Family diversity and well-being*, Thousand Oaks (CA), Sage, 299 p.
- AMATO, P. R. (2000). "The consequences of divorce for adults and children", *Journal of Marriage and the Family*, Vol. 62, No. 4, p. 1269-1287.
- AMATO, P. R., and A. BOOTH (1996). "A prospective study of divorce and parent-child relationship", *Journal of Marriage and the Family*, Vol. 58, p. 356-365.

- AMATO, P. R., and A. BOOTH (1991). "Consequences of parental divorce and marital unhappiness for adult well-being", *Social Forces*, No. 69, p. 895-914.
- BERNIER, M., H. DESROSIERS, C. LE BOURDAIS and E. LÉTOURNEAU (1994). *Un profil des familles québécoises*, Montréal, Monographie No. 1, Enquête sociale et de santé 1992-1993, Santé Québec, Ministère de la Santé et des Services sociaux, Gouvernement du Québec, 82 p.
- BROOKS-GUNN, J., and G. J. DUNCAN (1997). "The effects of poverty on children", *The Future of Children*, Vol. 7, No. 2, p. 55-71.
- BUMPASS, L. L., T. CASTRO MARTIN and J. A. SWEET (1991). "The impact of family background and early marital factors on marital disruption", *Journal of Family Issues*, Vol. 12, p. 22-42.
- BURCH, T. K., and A. K. MADAN (1986). *Formation et rupture d'unions. Résultats de l'enquête sur la famille de 1984. Annexe technique*. Ottawa, Statistique Canada, Catalogue No. 99-963, p. 27-31.
- CHEAL, D. (1996). "Histoires des familles reconstituées" in Statistique Canada and Développement des ressources humaines Canada, *Grandir au Canada*, Ottawa, Ministre de l'Industrie, Catalogue No. 89-550-MPF (Enquête longitudinale nationale sur les enfants et les jeunes [Canada]), 1205-6855, No. 1, p. 105-115.
- CHERLIN, A. J., P. L. CHASE-LANDSDALE and C. McRAE (1998). "Effects of divorce on mental health throughout the life course", *American Sociological Review*, Vol. 63, p. 239-249.
- CONSEIL DE LA FAMILLE (1997). *La médiation préalable en matière familiale*, Québec, Conseil de la famille, 9 p.
- CONSEIL DE LA FAMILLE (1996). *Recueil de réflexions sur la stabilité des couples-parents*, Québec, Conseil de la famille, 229 p.
- DESROSIERS, H., H. JUBY and C. LE BOURDAIS (1999). "Les trajectoires familiales des hommes" in *Les familles canadiennes à l'approche de l'an 2000*, Ottawa, Statistique Canada (série des monographies du Recensement), Catalogue No. 96-321-MPF, No. 4, p. 161-218.
- DESROSIERS, H., C. LE BOURDAIS and B. LAPLANTE (1995). "Les dissolutions d'union dans les familles recomposées : l'expérience des femmes canadiennes", *Recherches sociographiques*, Vol. XXXVI, No. 1, p. 47-64.
- DESROSIERS, H., G. NEILL et L. GINGRAS (2002). "Growing up in a changing environment" in *Québec Longitudinal Study of Child Development (QLSCD 1998-2002)*, Québec, Institut de la statistique du Québec, Vol. 2, No. 2.
- DUNCAN, G. J., and J. BROOKS-GUNN (1997). *The consequences of growing up poor*, New York, Russell Sage Foundation, 660 p.

- FERNANDO, R. (1999). *Lifehist: Analysis of Life Histories, a State Space Approach*, University of Western Ontario, Population Studies Centre, London, Canada, 12 p.
- FERNANDO, R. (1992). *Life history analysis: Guidelines for using the program LIFEHIST (PC version)*, Discussion Paper No. 92-5, University of Western Ontario, Population Studies Centre, London, Canada, 27 p.
- FINNIE, R. (2000). *Low Income (Poverty) Dynamics in Canada: Entry, Exit, Spell Durations, and Total Time*, Ottawa, Développement des ressources humaines Canada, Direction générale de la recherche appliquée, Politique stratégique (W-00-7E).
- GASCON, S. (2000). *Revenu potentiel de marché et pauvreté au Canada, 1986-1996*, Ottawa, Développement des ressources humaines Canada, Direction générale de la recherche appliquée, Politique stratégique (W-00-7F).
- HETHERINGTON, E. M. (1992). "Coping with marital transitions: A family systems perspective", *Monographs of the Society for Research in Child Development*, No. 57, p. 1-14.
- HETHERINGTON, E. M., and M. STANLEY-HAGAN (2000). "Diversity among stepfamilies" in DEMO, D. H., K. R. ALLEN and M. A. FINE (eds). *Handbook of family diversity*, New York, Oxford University Press, p. 173-196.
- HUFF-STEVENS, A. (1994). "The dynamics of poverty spells : Updating bane and ellwood", *American Economic Review*, Vol. 84, No. 2, p. 34-37.
- KIERNAN, K., and J. HOBBCRAFT (1998). *Long-term outcomes of childhood divorce, crime and poverty : A longitudinal analysis*, Paper presented at the 1998 Annual Meeting of the Population Association of America, Chicago.
- KURDEK, L. A., M. A. FINE and R. J. SINCLAIR (1995). "School adjustment in sixth graders: Parenting transitions, family climate, and peer norms effects", *Child Development*, Vol. 66, p. 430-445.
- LAROCHE, M. (1997). *The persistence of low income spells in Canada 1982-1993*, Ottawa, Ministère des Finances du Canada, Division des études économiques et de l'analyse de la politique, 56 p.
- LE BOURDAIS, C., and G. NEILL (1999). *Does Childbearing still lead to marriage in Canada?*, Paper presented at the 1999 Annual Meeting of the Population Association of America, New York.
- MARCIL-GRATTON, N. (1998). *Grandir avec maman et papa? Les trajectoires familiales complexes des enfants canadiens*, Ottawa, Statistique Canada, Catalogue No. 9-66-XIF.
- MINISTÈRE DE LA SANTÉ ET DES SERVICES SOCIAUX (1997). *Priorités nationales de santé publique 1997-2002*, Québec, Gouvernement du Québec, 103 p.

- MORISSETTE, R., and X. ZHANG (2001). “À faible revenu pendant plusieurs années” in *Perspective*, Ottawa, Statistique Canada, Catalogue No. 75-001-XIF, mars.
- PAGANI, L., B. BOULERICE, R. E. TREMBLAY and F. VITARO (1997). “Behavioral development in children of divorce and remarriage”, *Journal of Child Psychology and Psychiatry*, Vol. 38, No. 7, p. 769-781.
- PICOT, G., M. ZYBLOCK and W. PYPER (1999). *Qu’est-ce qui explique les mouvements des enfants vers la situation de faible revenu et hors de celle-ci, les changements de situation sur le marché du travail ou le mariage et le divorce*, Ottawa, Statistique Canada, Research Paper, Catalogue No. 11F0019MIF, No. 132, Occasional.
- RANK, M. R. (2000). “Poverty and economic hardship in families” in DEMO, D. H., K. R. ALLEN and M. A. FINE (eds). *The handbook of family diversity*, New York, Oxford University Press, p. 293-315.
- ROSS, D. P., K. SCOTT and M. A. KELLY (1996). “Aperçu : les enfants du Canada dans les années 90” in Statistique Canada and Développement des ressources humaines Canada, *Grandir au Canada*, Ottawa, Ministre de l’Industrie, Catalogue No. 89-550-MPF (Enquête longitudinale nationale sur les enfants et les jeunes [Canada]), 1205-6855, No. 1, p. 17-51.
- SECCOMBE, K. (2000). “Families in poverty in the 1990s : Trends causes, consequences, and lessons learned”, *Journal of Marriage and the Family*, Vol. 62, p. 1094-1113.
- SÉGUIN, L., M. KANTIÉBO, Q. XU, M.-V. ZUNZUNEGUI, L. POTVIN, K. FROHLICH and C. DUMAS (2001). “Standard of Living, Health and Development, Part I – Child Poverty, Health and Development” in *Québec Longitudinal Study of Child Development (QLSCD 1998-2002)*, Québec, Institut de la statistique du Québec, Vol. 1, No. 3, p. 25-60.
- SOCIÉTÉ CANADIENNE DE PÉDIATRIE (Page consulted on November 16, 2001). Website of the *Société canadienne de pédiatrie (SCP)*, La promotion de la santé mentale pour les enfants de parents qui se séparent [<http://www.cps.ca/francais/enonces>].
- VILLENEUVE-GOKALP, C. (1991). “Du premier au deuxième couple : les différences de comportement conjugal entre hommes et femmes” in HILBERT, T., and L. ROUSSEL (eds). *La nuptialité : évolution récente en France et dans les pays développés*, Paris, INED-PUF, p. 179-192.
- WADE, T. J., D. J. PEVALIN and A. BRANNIGAN (1999). “The clustering of severe behavioural, health and educational deficits in Canadian children: Preliminary evidence from the National Longitudinal Survey of Children and Youth”, *Canadian Journal of Public Health*, Vol. 90, No. 4, p. 253-259.
- YEUNG, W. J., and S. HOFFERTH (1998). “Family adaptations to income and job loss in the United States”, *Journal of Family and Economic Issues*, Vol. 19, p. 255-283.

TABLES AND FIGURES

Table 1

Distribution of children according to their family context from birth to approximately 29 months of age, Québec, 1998, 1999 and 2000

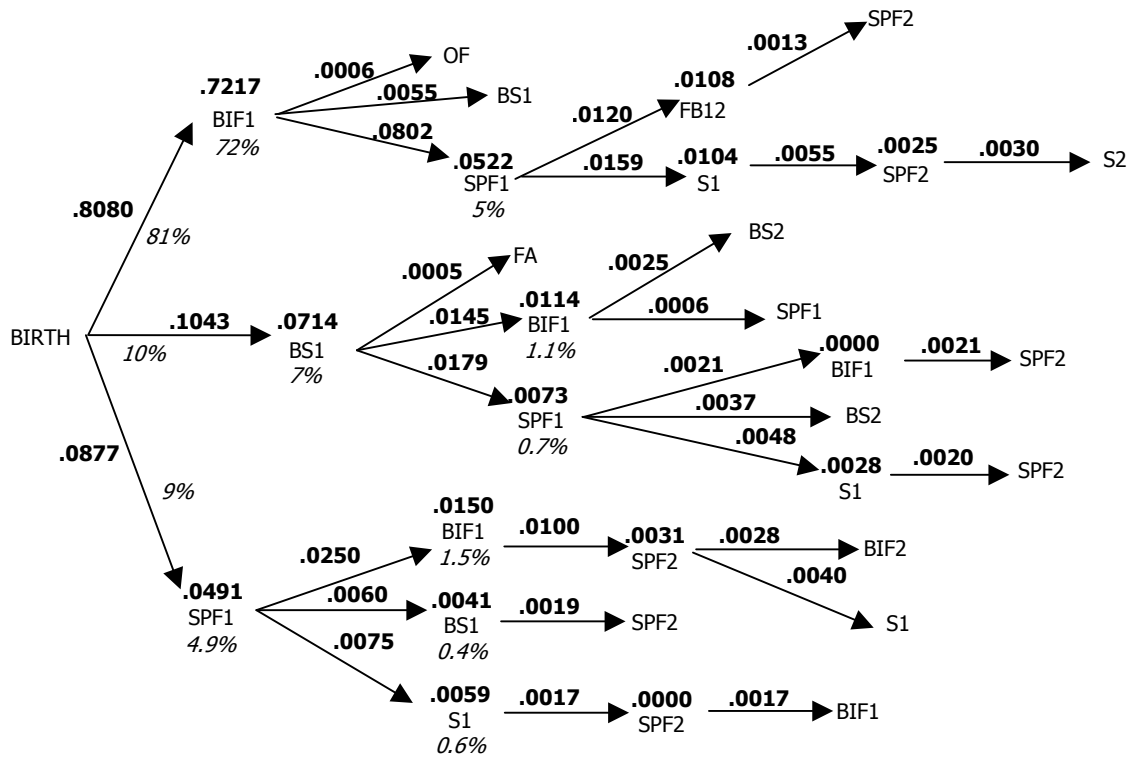
	Birth	5 months (1998)	17 months (1999)	29 months (2000)
	%			
Biological intact family	80.8	79.9	77.6	76.1
Biological stepfamily	10.4	10.3	9.6	8.9
Stepfamily	–	0.1 **	1.4 *	2.2 *
Single-parent family	8.7	9.4	10.6	12.7
Other family	–	0.3 **	0.7 **	0.1 **
Total n	1,991	1,991	1,991	1,991
%	100.0	100.0	100.0	100.0

* Coefficient of variation between 15% and 25%; interpret with caution.

** Coefficient of variation greater than 25%; imprecise estimate for descriptive purposes only.

Source: *Institut de la statistique du Québec, QLSCD 1998-2002.*

Figure 1
Children's family pathways from birth to approximately 29 months: sequence probabilities, Québec, 1998, 1999 and 2000



BIF1: 1st episode in a biological intact family
 BIF2: 2nd episode in a biological intact family
 BS1: 1st episode in a biological stepfamily
 BS2: 2nd episode in a biological stepfamily
 SPF1: 1st episode in a single-parent family
 SPF2: 2nd episode in a single-parent family
 S1: 1st episode in a stepfamily
 S2: 2nd episode in a stepfamily
 OF: 1st episode in an other family

Source: Institut de la statistique du Québec, QLSCD 1998-2002.

Table 2

Proportion¹ of children experiencing certain family transitions between birth and the age of approximately 29 months, according to the family type at birth, Québec, 1998, 1999 and 2000

	Family type at birth			Total
	BIF1	BS1	SPF1	
No family change	89.3	68.5	56.0	84.2
At least 1 family transition	10.7	31.5	44.0	15.8
At least 2 family transitions	3.5	13.1	15.5	5.5
At least 1 single-parent family episode	9.9	17.2	100.0	18.6
At least 2 single-parent family episodes	0.8	3.9	15.5	2.4
The end of the 1 st single-parent family episode by ² :				
the mother's entry into a union with a new partner	2.0	4.6	8.5	3.2
the return of the biological father	1.5	5.6	37.3	4.9

1. Proportions are calculated using the sequence probabilities presented in Figure 3.2. For example, the percentage of children born in a biological intact family (BIF1) experiencing at least 1 family transition during the period under observation is estimated as the ratio of the probabilities of leaving the state to that of being into it, thus: $(0.0006 + 0.0055 + 0.0802)/0.8080 = 0.1068$ or 10.7%.

2. These proportions include all states following the first single-parent family episode irrespective of their order in the sequence.

Source: *Institut de la statistique du Québec, QLSCD 1998-2002.*

Table 3

Sequence probabilities and distribution of certain family transitions made by children between birth and approximately 29 months, Québec, 1998, 1999 and 2000

Family Pathways	Sequence Probabilities	Distribution of transitions %
BIF1 → OF	0.0006	0.7
BIF1 → BS1	0.0055	6.4
BIF1 → SPF1	0.0802	92.9
Total	0.0863	100.0
BIF1 → SPF1 → BIF2	0.0120	43.0
BIF1 → SPF1 → S1	0.0159	57.0
Total	0.0279	100.0
BS1 → OF	0.0005	1.5
BS1 → BIF1	0.0145	44.1
BS1 → SPF1	0.0179	54.4
Total	0.0329	100.0
BS1 → SPF1 → BIF1	0.0021	19.8
BS1 → SPF1 → BS2	0.0037	34.9
BS1 → SPF1 → S1	0.0048	45.3
Total	0.0106	100.0
SPF1 → BIF1	0.0250	64.9
SPF1 → BS1	0.0060	15.6
SPF1 → S1	0.0075	19.5
Total	0.0385	100.0

Source: *Institut de la statistique du Québec, QLSCD 1998-2002.*

Table 4

Proportion of children living in a household whose income is moderately or very inadequate, and the income deficit in relation to the low-income cut-off, Québec, 1998, 1999 and 2000

	1998 (5 months)	1999 (17 months)	2000 (29 months)
	%		
Percentage living in a low-income household	26.3	23.4	21.3
Moderately inadequate income	11.7	12.1	11.4
Very inadequate income	14.6	11.3	9.9
Income deficit¹ / LICO (%)	41.8	37.7	36.1
n	1,905	1,905	1,905

1. Low-income cut-off (LICO) before tax, minus the gross annual household income.

Source: *Institut de la statistique du Québec, QLSCD 1998-2002.*

Table 5

Distribution of children aged around 29 months according to the number of periods spent below the low-income cut-off (before tax) since birth, Québec, 1998, 1999 and 2000

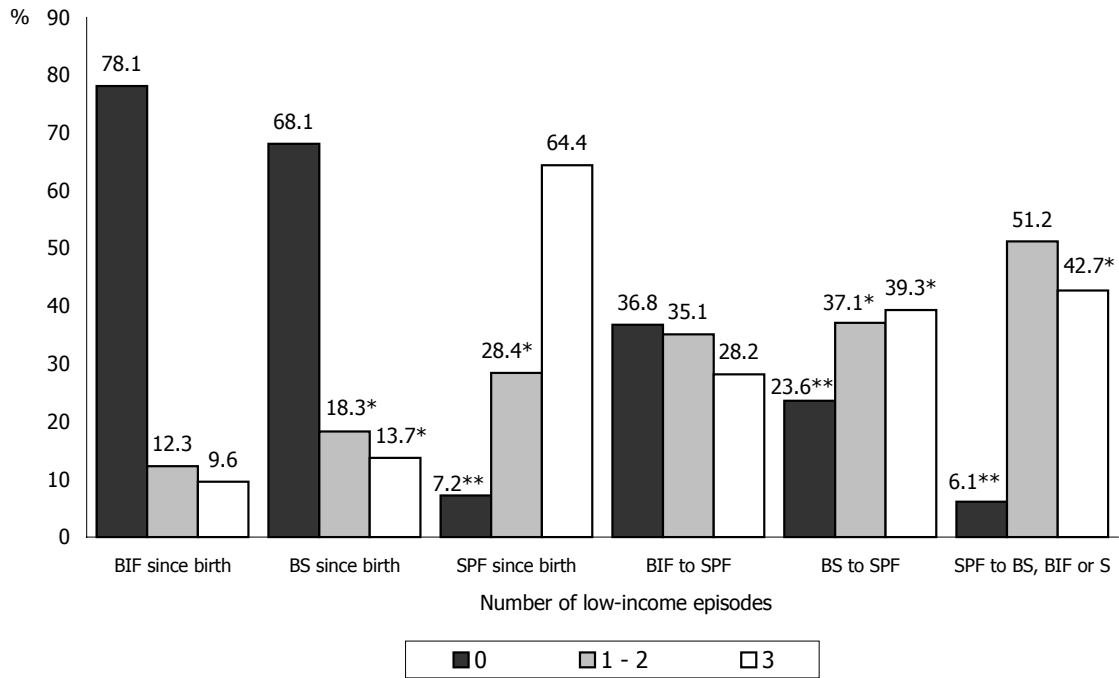
	%	n
None	67.3	1,282
At least one year below the LICO since birth	32.7	623
One or two periods	17.2	327
1998 only	5.1	97
1998-1999	4.2	79
1998-2000	1.5 *	29
1999 only	2.2 *	41
1999-2000	1.5 *	29
2000 only	2.7 *	52
All three periods	15.5	296
Total	100.0	1,905

* Coefficient of variation between 15% and 25%; interpret with caution.

Source: *Institut de la statistique du Québec, QLSCD 1998-2002.*

Figure 2

Distribution of children aged approximately 29 months according to the number of episodes spent in a low-income household (before tax) since birth and certain family trajectories, Québec, 1998, 1999 and 2000



BIF = biological intact family
 BS = biological stepfamily
 SPF = single-parent family
 S = stepfamily

* Coefficient of variation between 15% and 25%; interpret with caution.

** Coefficient of variation greater than 25%; imprecise estimate for descriptive purposes only.

Source: *Institut de la statistique du Québec, QLSCD 1998-2002.*