Influence of Opportunity Structures on Transitions and Trajectories to Family Formation: What do the SLID Longitudinal Panel Data tell us?

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Abstract

This study is built on the premise that three major sociological determinants of the life course events related to family formation are social class, gender and ethnicity. These three determinants capture the structural social inequalities that still prevail in our postmodern times and influence the life courses and life chances of young men and women. We therefore examine the influence of these determinants on young Canadians' family formation using both the retrospective and prospective longitudinal information obtained from two completed panels (1993-1998 and 1996-2001) of the Survey of Labour and Income Dynamics. We focus on men and women aged 18-29 at the start of the panels. Using life table techniques, we examine early life course transitions and trajectories or sequences of transitions to parenthood. This paper presents the results on transitions to postsecondary education, entry into labor force, cohabitation, marriage, and parenthood as well as the trajectories among these events, and the influence of parental and respondents' own social status. It concludes with a summary of salient results and a discussion of possible policy implications.

Keywords: Early life transitions; family formation; determinants of family formation; retrospective and prospective longitudinal data; SLID Panels; life table techniques; transitions and trajectories; opportunity structures; parental and personal social status.

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Influence of Opportunity Structures on Transitions and Trajectories to Family Formation: What do the SLID Longitudinal Panel Data tell us?

1. Introduction

It is well-known that in comparison to older cohorts, younger men and women in the developed societies delay their transition to adulthood and follow more complex life course trajectories. Canada is no exception. Young Canadians go through events such as home-leaving, school completion, start of regular work, and first union through cohabitation or marriage at later ages. And, they trace pathways through these events that markedly differ from those of the older cohorts (Ravanera, Rajulton, and Burch, 1998; Ravanera et al, 2002; Goldscheider, Hogan, and Turcotte, 2006; Turcotte and Goldscheider, 1998). Within cohorts, however, there remain variations in timing and trajectories to adulthood, especially with respect to socioeconomic inequalities and opportunities available to specific groups of Canadians (Ravanera and Rajulton, 2006b). This is particularly true for family formation.

For the cohorts born until the 1960s, most first unions were marriages. But among younger men and women, say, those born after 1971, more than 50% of first unions involve cohabitation, although some eventually marry their partner. The prevalence of cohabitation poses a problem for determining when family formation starts. If we were to take first marriage as the start, these young men and women postpone their family formation by as long as 4 and 6 years respectively compared to the cohorts born in the 1920s. However, among women born during the seventies, the median age at motherhood (28.9) is slightly lower than the median age at first marriage (29.1) – see Ravanera, Rajulton, and Burch (2005b) -, implying that childbearing within cohabiting unions is no longer negligible. This shows that age at first marriage is no longer a good indicator of the start of family formation. If we were to take first union as the start of family formation, then the delay in family formation is just about 1 to 2 years (as compared to the cohorts born in the 1920s). But this does not reflect reality either, since we know that many cohabiting unions are transitory and an appreciable proportion of cohabiting unions break up rather quickly, suggesting that they are not entered into with the intention of forming a family.[1]

Another aspect that complicates the process of family formation is its dependence on prior events, in particular labour force entry, which in turn is affected by school leaving. In most societies, and Canada is no exception, readiness to form one's own family is generally associated with an independent source of income. This norm applies particularly to men, but in recent times to women as well.

In this paper, we study young Canadians' family formation and its determinants using *both* the retrospective and prospective longitudinal data provided by the first two completed panels of the Survey of Labour and Income Dynamics (SLID). We examine not only transitions to

[1] A recent study on the intended and unintended births within cohabiting unions in the US (Musick, 2007) finds increased acceptance of cohabiting unions in the US and suggests that cohabitation may be a route to marriage for some but an end in itself for others. Yet, intended childbearing is still less among cohabiting women than among the married.

cohabitation, marriage, and parenthood – the events directly defining family formation -, but also the transitions that typically precede family formation. While previous studies (including ours) have examined many determinants of various life course events, often each event separately, most of them have been based on cross-sectional and retrospective data that severely limit the inferences we can make on the influence of such determinants, because information on these determinants are usually measured at the time of survey.[2] More significantly, few studies have examined the sequences of transitions or trajectories[3] as we have been doing in our research. The prospective nature of SLID data helps us identify the determinants at or before the events of interest such that proper temporal order is preserved to make "cause-effect" inferences, if any. In this paper, we examine these transitions separately as a prelude to trajectories (or sequences of transitions). We also examine how the early life transitions are influenced by gender, parental and individual social status (or class). We focus on men and women aged 18-29 at the first wave of the two panels 1993-1998 and 1996-2001. The longitudinal survey interviewed these men and women twice a year for the next six years, obtaining most of the information needed for our analysis, namely data on family formation and on changes in socioeconomic status.

2. Theoretical Background

This study is built on the premise that three major *sociological* determinants of the life course events related to family formation are social class, gender and ethnicity. These three classical determinants of life course have not lost their significance in postmodern times. In trying to make sense of life in what has been called the postmodern era, new sociological theories highlight the importance of uncertainty in a context of globalization, consumerism and choice. This is in contrast to conventional sociological theories, which were concerned with such issues as structural social inequalities based on social class, gender and ethnicity. It is true that in our times individuals face a future of uncertainty throughout the life course. For instance, the possibility of unemployment, marital and family breakdowns looms large in the life courses of young Canadians. The uncertainty of the future is further complicated by the multitude of choices facing young men and women. They are at greater liberty than ever before to chart their way through the life course. In this choice framework, age-old conventions surrounding family formation, such as marriage, childbearing and gendered division of labor, are increasingly seen

[2] Retrospective surveys such as General Social Surveys on Family and Friends collect information on the "determinants" - for example, education, work status, income - as of the survey dates rather than at or before the occurrence of the events of interest, thus violating the criterion of temporal order of any "cause-effect" relationships.

[3] In the current literature, the term "trajectory" is largely used to denote transitions between two states such as married and unmarried, employed and unemployed, healthy and sick, and so on. Using two states, one can study, for example, employment trajectory, that is, moving back and forth between the two states. It is good to note that these two states are not "distinct" states in the sense that they make up only one variable "Employment". In contrast, in this study, we use the term "trajectory" to denote a *sequence of transitions among more than two states* that are often distinct. For example, in the case of young men and women, we study a sequence of transitions from an arbitrary age or state (call it an Origin state) to completion of education, entering into common-law union, entering into labor force, getting married, and having a child. Trajectories, therefore, imply a temporal ordering of transitions in and among different realms – union formation, education, employment, etc. See Figure 1 for an illustration.

as superfluous, or at times meaningless. Family formation is now seen more as a matter of individual choice and preferences, and western societies have accepted these principles so that there is no more social compulsion to marry and to bear children. Also, an increasing number of alternatives to conventional marriage and childbearing have evolved: freedom to be single, to cohabit, to live in union with a member of the same sex, to surrogate motherhood or fatherhood, or even to view "child-free" life as something better than life with children.

However valid the postmodernist emphasis on uncertainty and choice may be, as Hunt (2005) argues, it does not necessarily denote the demise of structural social inequalities influencing the life course and life chances. Social inequalities continue to shape and limit life experiences and life chances of individuals. Social class may no longer be conceptualized in terms of ownership of production but it persists in terms of rewards and benefits derived from education and occupation through income and status accorded not only to parents under whose tutelage young men and women grow into adults but also to themselves through their own success in educational and occupational opportunities. Class is now linked to consumer power in relation to lifestyles and opportunities. Although a larger middle social class has gradually emerged, there is a concern in Europe and North America that socioeconomic differences (indicated by income, education, social class, or life styles) have accentuated differences in family life, for example, in the timing of transitions, fertility, and family dissolution (Schulze and Tyrell, 2002: 78; Bianchi, 2000; Martin, 2000; Lochhead, 2000). Class structures might have changed but the gulf between the 'haves' and 'have-nots' continues to influence the life chances and opportunities available to individuals. This is a matter for concern particularly because, in Canada, the gap between the poor and the rich has widened over the period 1986-2001, despite the significant role that government transfers have played to stabilize income of poor families (The Daily, November 2, 2005).

Depending on researchers' orientations, life course studies can look at individuals as active or passive agents. But as Mayer (2004:165) says, "Some would emphasize cultural scripts, some would stress social norms, and others would bet on rational choice. On the whole, however, sociologists tend to believe more in selection than in choice". This is because institutional contexts themselves narrow down to a large extent the choices and life avenues open to individuals. Given these institutional contexts, Mayer (2004:165) notes that, "individuals are probably more frequently being selected than selecting themselves." And, among the many institutional structures, the occupational and employment structures and educational systems clearly define the choices and opportunities available to individuals because these structures also define the status of individuals as well as their full participation in a society. Thus, for instance, in the context of social inclusion/exclusion or social integration, Polanyi (1994) argued that the opportunity structures available to individuals clearly define their social and economic integration. Among the three mechanisms (market exchange, redistribution, and reciprocity) that Polanyi considers producing and distributing the resources that are necessary for individuals' full participation in society, the first (market exchange) dominates individuals' access to resources in the developed societies. Individuals try to get a position in the labour market to earn an income, but the market inherently generates unequal access to resources based on strong or weak positions in terms of education, language and other skills.

A similar argument holds for inequalities associated with gender and ethnicity (Hunt, 2005; McMullin, 2004). Feminist studies continue to stress the disadvantage that women experience in these opportunity structures simply because of their biological and psychological development across the life course. In the same way, in a multicultural society as in Canada, class, status and opportunity structures get mingled with racial and ethnic inequalities (McMullin, 2004; Grabb, 2002). It may be that with globalization, ethnic communities find it increasingly difficult to retain a distinct culture and sense of identity. But at the same time, different ethnic groups experience profound inequalities in their access to professional, occupational, and educational opportunities, which definitely affect their life course and life chances.

The decision to form a union or a family is a complex process. In the real world, it is certain that more structures than the three considered here (for example, cultural, religious, political, and other economic structures) are in operation, especially in the case of women and in the case of ethnicity. But because of the limited information that surveys collect on these other important ideas, we will focus on the three major sociological structures discussed here.

Under the above theoretical rationale, this paper aims at examining how social inequalities related to socioeconomic status, gender and ethnicity operate on the life course trajectories of young Canadians toward family formation. We consider social status as the most important variable and make use of both the parental social status, which is generally assumed to affect the opportunity structures available to children, and the evolving social status of "children" themselves as they experience their life course trajectories, in terms of educational qualifications and employment opportunities. Parental social status can be considered as time-invariant for practical purposes (although it can also evolve over the early life course transitions of children). But the social status of young men and women as they go through their early transitions toward family formation is time-varying and evolving within the observation window of our study.

3. Research Questions

This study therefore examines the following questions for men and women separately:

- Since transitions and trajectories to family formation have been changing over recent birth cohorts, it is imperative to examine the trends in family formation by birth cohorts as well. In other words, how different are the experiences of family-related events such as cohabitation, marriage, and parenthood of individuals belonging to recent birth cohorts in Canada?

- How different are the transitions to family life of individuals belonging to different social statuses, defined either by their parents during their early life (such as school completion) or by their own life course development over time? The latter is expected to play a greater role for more recent birth cohorts of women and men since parental income (and status) alone can no longer afford to meet the rising costs of education and early living arrangements of "children" who are therefore obliged to find a way out on their own. Thus, inclusion of birth cohorts in this study is justified for the sake of capturing not only recent changes in transitions and trajectories to family formation but also any systematic

relationship that may exist between birth cohorts and specific social inequalities and constraints faced by them.

- Besides parental and personal social status, gender and ethnicity, what are the other possible explanations for the differences in transitions and trajectories of family formation?

- Whether the findings from this study confirm the various hypotheses existing in the literature regarding the influence of opportunity structures on the life course trajectories towards family formation?

We have an advantage here of using both the retrospective and prospective longitudinal data, while most studies on family formation in the past have used cross-sectional or retrospective data with the limitation mentioned above. Using longitudinal data, we can revisit some of the well-known hypotheses regarding family formation. For example, will this study confirm Becker's (1981) *economic independence hypothesis* (namely, labour force participation and education have negative impact on marriage for women but positive impact for men)? Or, will it confirm, in contrast, Oppenheimer's (1997, 2000) *career entry hypothesis* (namely, education delays entry into marriage for both men and women, and women's labour force participation and earnings have a positive impact on the timing of marriage)? Or, will it instead provide evidence for a *via media*, that is to say, that the influence of labour force participation and earnings on family formation depends on the "*family system*" or family types in which individuals experience their transitions – as was argued by Blossfeld (1995) and Tsuya and Mason (1995)?

4. Data and Methods

We use the longitudinal data collected by the Survey of Labour and Income Dynamics (SLID) conducted by Statistics Canada since 1993. The survey collects information from all persons living in Canada, excluding residents of Yukon, the Northwest Territories and Nunavut, and those living on reserves, residents of institutions, and members of the armed forces living in barracks. Starting in 1993, the survey collects information from a panel of respondents over a six-year period, with a new panel selected every three years. Thus, a second panel was introduced in 1996, a third panel in 1999 when the first panel was "retired", and so on. The focus of the survey is to understand the economic wellbeing of Canadians. Since family status, education, and demographic background may affect the economic wellbeing, the survey also collects static measures (at time of interview) as in cross-sectional surveys, as well as retrospective and prospective data on a variety of transitions, durations, and repeat occurrences relating to finance, work and family. In this study, we present results from Panels 1 and 2, covering the periods 1993-98 and 1996-2001 respectively, which would help evaluate *possible* changes in the socio-demographic processes of interest – "possible" because a three year difference between the two panels may not drastically alter demographic behaviour, yet it is good to examine the trends of recent behaviours such as cohabitation over cohorts.

The longitudinal design has unique advantages over cross-sectional surveys, but also raises unique problems. Attrition, which refers to loss of respondents from one round to the next, is

one of the more serious problems, especially with the younger age cohorts – the subjects of interest in this study - who are usually very mobile. We analyse only those individuals who have provided complete or near-complete information on the early life events of interest to this study. Given probable selectivity in drop-out, this sample of retained panel members is subject to biases of unknown size.[4]

A second problem with either prospective or retrospective information is the right censoring, where a process is curtailed by the last survey date (or when the panel is "retired"). It is essential therefore to make use of techniques of survival analysis that correct for right censoring in order to make the best estimates[5] of the intensity and timing of processes under study.

Early life course events leading to family formation include home-leaving, school completion (secondary, diploma or postsecondary), start of regular work, first union either through marriage or cohabitation, and first birth. Out of these six events, we consider only the last five since the data on home leaving are not collected by SLID. Since postsecondary education, not secondary education, is one of the factors that delay entry into adulthood, we explicitly incorporate the age at getting postsecondary diploma or certificate in our model building.[6] Ages at first full-time work[7], at first union (cohabitation and/or marriage) and at first birth are all available from the survey.[8]

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[4] The SLID longitudinal response rates, for example, for Panel 1 started with 93.3% at first interview and ended with 81.5% at the sixth interview. The corresponding rates are 89.5% and 77.4% for Panel 2, and 83.9% and 73.7% for Panel 3 (see Duddek, 2007, Table 5.2). Although the picture is getting worse over the Panels, they are definitely much better than what is happening elsewhere. The point is that attrition is a problem that cannot be avoided with longitudinal surveys.

[5] These are the "best" estimates, not in the statistical sense of minimum variance but in the sense of correcting the bias due to censoring phenomenon in all types of longitudinal data.

[6] Admittedly, given the different types of education with different typical time requirements, the definition of postsecondary education used here may be unsatisfactory. For example, a woman completing a two-year program in dental hygiene might report completion, as well as a woman doing a Bachelor's degree in three or four years, or a Master's degree in one, two or even in four years. Such time requirements can carry very different implications for the other transitions considered in this study.

[7] The variable used here is *agestft11= age first started working full-time*. This information was collected by SLID from persons aged 15 and older *and* who have worked full-time at some point excluding summer jobs while in school. We use the terms "first job", "first full-time job", "start of regular work", and "labour force entry" interchangeably to denote the same event.

[8] The SLID data file does not directly give the ages at cohabitation and ages at first birth. However, they can be derived indirectly by handling the relevant variables. Age at cohabitation, for example, can be indirectly inferred from the variable "duration of de facto marital state", which for a married person includes duration since cohabiting union, if any, before marriage. Similarly, age at first birth can be inferred in a roundabout way from the household relationship records that provide information on the relationship between two household members. For example, if A is mother and B is daughter, then there will be two household records: one has A (PERSONID) and B (RELATIVID), the other has B (PERSONID) and A (RELATIVID). The record where PERSONID is the child to the parent

Presentation of results consists of three parts. The first part focuses on examining the evolution of the five transitions mentioned above through single decrement life tables, non-parametric models that include no socioeconomic covariates as independent variables. Single decrement life tables are meant to capture the dynamic process of each transition separately. They describe the occurrence and timing of transitions made by young Canadians (18-29 at the start of the two panels) over the six year period. To see both stability and change in the evolution of these processes over birth cohorts, we look at timing of completing postsecondary education, starting full-time work, cohabitation, marriage, and parenthood of men and women in four 3-year age groups (18-20, 21-23, 24-26, and 27-29). We have a total of 3340 men and 3327 women aged 18-29 from Panel 1; the corresponding numbers are 3254 and 3324 from Panel 2. Breakdown by three-year age groups can be seen in Appendix Table 3.

The second part examines the impact of opportunity structures on timing of marriage, cohabitation, and of first birth through the well-known Cox's proportional hazards models. One of the important assumptions of this model is that the "hazard" or the intensity with which an event occurs for person *i* is considered to be some underlying hazard for everyone but modified by the socioeconomic characteristics of person *i*. This proportional difference between person *i* and others is assumed to be constant for all time points. A specific advantage of the Cox model is that one need not be concerned about the functional form of the underlying hazard. The model is very useful when one is interested in gaining insight into how the hazard changes with the values of covariates in the model. However, if one is specifically interested in identifying the underlying hazard and if no theoretical insights are available, then one can experiment with popular functions such as exponential, Weibull, Gompertz, log-normal or log-logistic distributions and find the best functional form to use. For instance, in this study we are interested in studying marriage and cohabitation processes. These processes are known to have non-monotonic and unimodal form, and therefore rule out the possibility of using exponential, Weibull or Gompertz distributions; the correct functions would be either log-normal, log-logistic or gamma. These distributions help parameterization in such a way that the models give more prominence to analysis time. These models, called accelerated failure time (AFT) models, are very useful when one is interested in predicting event times, rather than simple hazard ratios. However, there can be some instances when such predictions can become problematic, especially when using time-varying covariates (for an illustration, see Cleves et al., 2002, pp.191-194). Since the results from the Cox models are easy to interpret, they are presented here in this paper.[9]

As for the covariates used in the Cox models, the major variables falling under the umbrella of opportunity structures discussed in the previous section include parental social status, gender, and ethnicity. Three life course variables capturing the progress of respondent's own social status

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(RELATIVID) will have the date of birth for the child (PERSONID). One can then link this information (child's date of birth) to the parent's record.

[9] We also built the AFT models using log-logistic distribution as the timing function. As expected, these models had the problem of convergence and some models were running for a day or more, especially with the inclusion of unobserved heterogeneity in the models. The final results however give the same pattern of effects as the Cox models, and therefore we are presenting here only the results from the latter that are easier to interpret. The results from AFT models are available on request from the first author.

in terms of education, employment, and income are also used as manifestations of opportunity structures that respondents take advantage of in shaping their life course. The first three variables (parental social status, gender, and ethnicity) are time-invariant, while the last three (respondents' education, employment, and income) are treated as time-varying, given the longitudinal information. Although SLID collects sufficient information on ethnicity of respondents in terms of categories such as Blacks, South Asians (Indo Pakistani), Chinese, Korean, Japanese, South East Asian, Filipino, West Asian and North African (Arab), and Latin American, the numbers are too small to be included in the types of analyses done in this study. The visible minority on the whole make up only 5% of the *unweighted* sample. Using the sample weights, the visible minority men and women make up 9 to 11% in Panel 1 and 10 to 12% in Panel 2, while the non-visible minority or whites make up 85 to 90% in Panel 1 and 80 to 81% in Panel 2 (see Appendix Table 3). Thus, it is unfortunate that we are not able to examine the life course processes for distinct ethnic groups with the SLID data. We have to be content with the variable "Visible Minority Status" instead.

Apart from these major determinants of early life transitions to family formation, we use a few other time-invariant variables as control variables: Age group at the start of the panel (or birth cohorts), region of residence,[10] and urban/rural residence are treated as time-invariant covariates and come from the first waves of the two panels. The Cox's hazard models are estimated separately for men and women.[11]

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[10] The variable "region of residence" groups the provinces into five regions, namely, the Atlantic, Quebec, Ontario, the Prairies and British Columbia in order to have sufficient number of cases for the types of analyses done in this Paper. This variable is meant to capture the regional (and provincial) differences in a host of contextual factors such as the economy, culture, politics, proportion immigrant, education and employment structures, etc. However, at the suggestion of one of the anonymous referees from HRSDC, we also experimented with models that specifically include a time-varying variable "Provincial Unemployment rate", denoting the state of the economy. The relevant data were obtained from Statistics Canada's Table 282-0087 - Labour Force survey monthly and seasonally adjusted estimates by sex and age group (Statistics Canada, 2008). The time-varying variable was created for years from the monthly data by taking an average for each year before 2001; for the year 2001, only the rate for January was available and was used as it is. The results suggest that most of the coefficients remain robust even after including the new variable, except for the impact of regions of residence, understandably enough. More surprisingly, however, unemployment increases the likelihood of first birth, which seems to be counterintuitive but not unacceptable. A study on the social and family consequences and costs of the unemployment of young people done by the Council of Europe, it was also found that unemployment in some European countries (Belgium and Sweden) contributes to an earlier first birth among women and that young unemployed women have children more often than working women. One possible explanation is: Unemployment offers the opportunity to have children, as an alternative to employment (see Council of Europe Steering Committee on Social Policy, 2001). For lack of space, these results are not included in this Paper, but for an illustration see Appendix Table 2. More details are available from the first author.

[11] Demographic studies have established the tradition of explaining family formation with the help of sociological and economic explanatory variables, rarely by psychological ones. More recently, researchers have argued for inclusion of psychological determinants. A longitudinal study of West German couples (von Rosenstiel et al., 1986) found that psychological variables explained an appreciable amount of variation (R-square = 0.47) in whether or not childless couples would have a child within a one-year interval. The study also found that given good psychological measures, socioeconomic factors such as employment, living arrangements as well as fertility desires and intentions did not contribute

The variable "parental social class", which we consider the most important indicator of opportunity structures affecting young women and men and their early life course transitions, is derived as a latent variable through a confirmatory factor analysis of four indicators: father's education, mother's education, home tenure (owned or rented), and economic family income.[12] The model fit was excellent (see Appendix for an illustration of the output from the structural equation model of social class). One specific point is worth noting here. According to these structural equation models, father's and mother's education are found to be strong indicators of social class, with their standardized path coefficients ranging from 0.72 to 0.82. Economic family income, although significant, has a much weaker relationship with the latent variable social class. Although home ownership is identified as a poor, non-significant indicator of social class, we retain it in the model. And, examining the distribution of the latent measure Y of social class, we aggregate it into three broad categories Low, Middle and High, based on our previous studies.[13] The missing values for social class, arising from the missing values on the four indicators, are retained as a specific category in analyses below, since those individuals who were unable or unwilling to provide the basic information on these indicators should indeed make up a special group by themselves (see Section 5.1.2 and Appendix 2 for more details on the missing category).

The third and final section of this paper will trace, in a multistate framework, the *trajectories* or *sequences of transitions*, starting from an origin state (say, at age 13, for convenience) and passing through the five life course events: postsecondary education, start of regular work, cohabitation, marriage and first birth. From the multistate perspective, these events (considered

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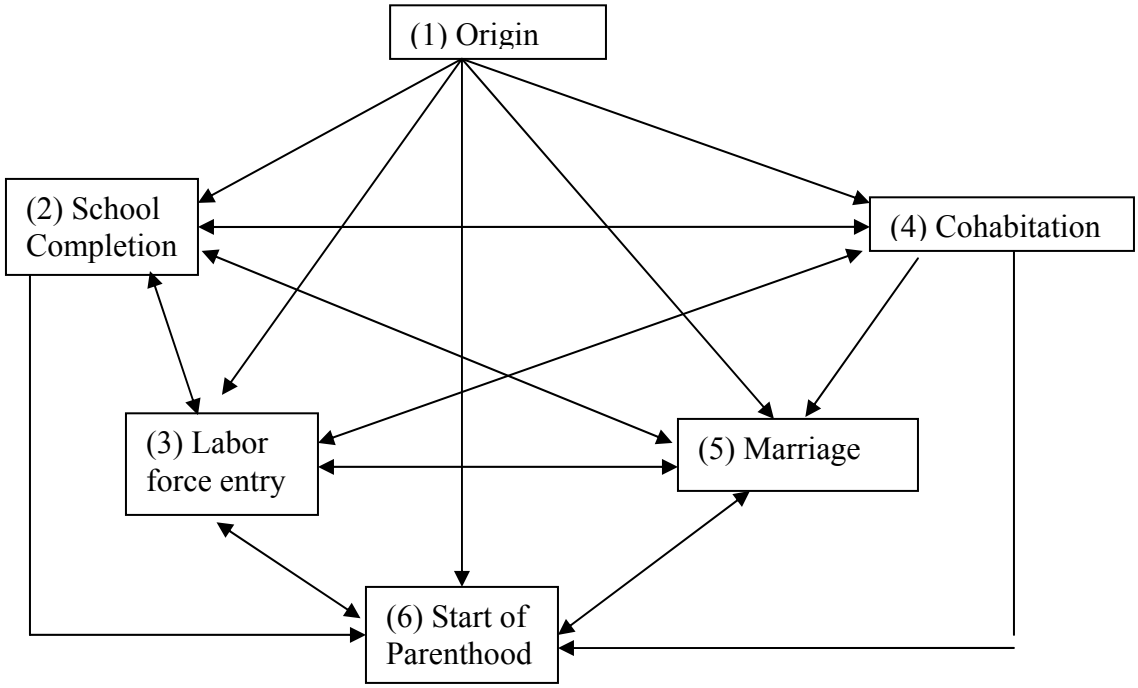
additionally to the fit of the model. Citing this as the basis for his study, von der Lippe (2006) presents some interesting results on the influence of psychological determinants on fertility in East Germany using the data from the Rostock Longitudinal Study. Because SLID does not include such psychological variables, and because our earlier works have shown that social inequalities still clearly operate in the life course transitions of Canadians, we limit the set of determinants in this study to classical sociological and economic ones.

[12] Father's occupation is considered an important indicator of parental social class in many studies, especially in studies done in the UK, which use the indicator either directly as a proxy for social class or as one of several indicators in a structural equation or factor analysis framework. The SLID unfortunately did not systematically collect information on father's occupation from all respondents. If fathers joined the longitudinal respondents as "co-habitants" during a year, then SLID placed the information on fathers in the cross-sectional component of the survey. Only for such fathers, we could retrieve information on their occupation, which resulted in more than two-thirds of respondents considered in this study having missing values for father's occupation.

[13] The latent measure is usually standardized (with a mean of zero and variance of 1) but not necessarily a normal distribution. In this study, the continuous latent measure of social class was split into three groups - Low, Middle and High - using the following criterion: 23-25% of Canadians fall into Low social class, 47-52% fall into Middle social class, and 19-25% fall into High social class - see Kendall, Lothian and Linden (2004) and Ravanera and Rajulton (2005a) for some examples. These proportions roughly correspond to cut-off points $Y \leq -0.65$ and $Y \geq +0.80$ in the latent scores.

also as transitions between states) make up a total of 22 admissible (or meaningful) transitions, as presented in Figure 1. Our analysis uses a program called LIFEHIST to estimate conditional probabilities of following specific trajectories or sequences of transitions to parenthood. The LIFEHIST analysis assumes that history is important, that is, a transition probability may be affected by earlier transitions (Rajulton, 2001b), and therefore follows a non-Markovian framework. Essentially, the procedure involves a multiple-decrement life table technique that estimates the conditional probabilities of transition from the previous state to each successive state in the sequence. The program also estimates the mean duration of stay in each state, final probabilities of completion of trajectories, and mean age at completion of each trajectory. For our purpose, we focus on two specific results from the LIFEHIST program: (a) the probabilities of experiencing selected pathways or trajectories to parenthood; and (b) the age at which a specific trajectory is completed. Given the five transition states, the total number of distinct trajectories can be 120 (that is, 5!). But most of them will not be realized, so our focus will be on those trajectories that are traversed by an appreciable number of individuals. For reasons of confidentiality imposed by Statistics Canada's Research Data Centres, this number is taken to be 10, implying any specific trajectory traced by less than 10 individuals is suppressed in our presentations. Also, because of insufficient number of sample cases for three-year birth cohorts for tracing complete trajectories, we show these results for all age groups together (that is, ages 18-29) to get an overall picture of the dominant trajectories that the members of the two panels trace over the six year period. Given the focus of this study, however, we present these trajectories by social class. And, in *all* the analyses presented in this paper, we have used the longitudinal sample weights attached to each individual. Since Statistics Canada uses rather complex sampling procedures, it is imperative to use the sample weights that take into account adjustment for many factors such as attrition, non-response rate, etc. For more details, see Statistics Canada (1997).

Figure 1: Multistate transitions among the six states considered in the study



5. Results from Single Decrement Life Tables

Starting with a cohort of individuals who have experienced an event origin that is assumed to start the process of interest, life table analysis examines how a specific process evolves over time (age or duration). One of the tools in life table analysis to describe the process under study is the cumulative proportion (or probability of) experiencing the event of interest by a specific age. The cumulative proportions at various ages reveal how fast or slow the process unfolds, especially when comparing two or more groups. Tables 1 and 2 summarize the results from the single decrement life tables of the five events considered in this study by the end of the two panels in 1998 and 2001. Table 1 classifies the final cumulative proportions by gender and age groups (18-20, 21-23, 24-26, and 27-29 at the time of first interview in 1993 and 1996) for the two panels, and Table 2 presents the timing or speed of these processes by focusing on selected percentiles. Tables 3 and 4 do the same job but now classified by gender and parental social class.

5.1. Intensity and Timing of the Processes by age groups

In Table 1, after the cumulative proportions for each age group or cohort, we provide also the log-rank test for equality of life table distributions for these groups (in column 5). The term 'equality' here implies that the four age groups experience a process in the same way, in the sense that the final cumulative proportions *and* the speed of experiencing the process are not statistically different for the groups. The log-rank test statistic follows a chi-square distribution with 3 degrees of freedom (that is, number of groups less one) with critical values of 7.82 and 11.34 at 5% and 1% level of significance respectively. If the log-rank test statistic given in the table is larger than these critical values, then we reject the null hypothesis of equal life table distributions and say that the respective groups have significantly distinct life table distributions. As seen in the Table, all but four chi-square values are much larger than the critical values, thus indicating highly significant differences between age groups in experiencing the events under consideration. Of the four non-significant chi-square values, three are associated with transition to first job, one with transition to men's first marriage. Reasons for these exceptions will become clear later, when we examine the timing of these specific events.

i) Postsecondary education

The final cumulative proportions completing postsecondary education in Table 1 reveal that they generally have increased at least by 10% from the oldest cohorts (aged 27-29 at the start of the panels) to younger cohorts (aged 21-23) in both the panels. However, proportions completing postsecondary education have decreased over the panels. While 67% of men and 69% of women (all ages together) from Panel 1 completed some form of postsecondary education, only 57% of men and 63% of women from Panel 2 did so. Possible reasons for this decline over the panels may rest on lessened accessibility to postsecondary education due to higher costs of education including rising tuition fees faced by younger cohorts around the turn of this century. This however needs to be corroborated with data on later panels.

In general, the proportions completing postsecondary education are larger for women than for men. In the youngest cohorts (aged 18-20 in 1993 or 1996) who still had time to go for completion of some form of postsecondary education, the proportion of women completing postsecondary education exceeds that of men. In Panel 2, for example, which already has lower

Table 1: Life Table Final Cumulative Proportions experiencing each event, classified by gender, age groups and panels [+]

a) SLID Panel 1993-1998

	Men					Women				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Age group	18-20	21-23	24-26	27-29	Logrank $\chi^2(3)$	18-20	21-23	24-26	27-29	Logrank $\chi^2(3)$
Weighted N	710	800	807	930		809	828	801	883	
Events										
Postsecondary	0.58	0.76	0.66	0.66	44.1***	0.65	0.75	0.71	0.65	45.4***
First Job	0.83	0.89	0.97	0.97	5.4	0.77	0.86	0.90	0.96	5.8
First Cohabitation	0.19	0.21	0.23	0.16	19.9***	0.24	0.31	0.26	0.17	41.8***
First Marriage	0.17	0.31	0.46	0.55	15.9**	0.23	0.46	0.63	0.72	54.3***
First Birth	0.11	0.21	0.42	0.56	20.7***	0.26	0.53	0.76	0.79	21.9***

b) SLID Panel 1996-2001

	Men					Women				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Age group	18-20	21-23	24-26	27-29	Logrank $\chi^2(3)$	18-20	21-23	24-26	27-29	Logrank $\chi^2(3)$
Weighted N	754	838	820	842		816	819	769	920	
Events										
Postsecondary	0.46	0.69	0.59	0.55	57.3***	0.63	0.67	0.66	0.56	80.2***
First Job	0.78	0.84	0.86	0.90	4.2	0.76	0.77	0.85	0.84	8.0*
First Cohabitation	0.12	0.25	0.24	0.21	13.3**	0.25	0.28	0.21	0.18	47.8***
First Marriage	0.16	0.30	0.53	0.56	7.2	0.25	0.45	0.67	0.65	26.2***
First Birth	0.11	0.26	0.42	0.55	17.5***	0.30	0.45	0.65	0.82	19.1***

- [+] These cumulative proportions obtained from life tables have been corrected for censoring
- Significance of Log-rank test: * = .05; ** = .01; *** = <.01

Table 2: Ages at which 10%, 25%, 50% and 75% of persons experience an event, classified by gender, age groups, and panels
a) SLID Panel 1993-1998

	Men				Women			
Age group	18-20	21-23	24-26	27-29	18-20	21-23	24-26	27-29
i) Postsecondary education								
Proportions								
10%	21.7	21.9	22.4	22.0	21.1	20.9	20.9	20.7
25%	23.4	24.2	24.4	24.8	23.0	22.9	23.4	23.4
50%	25.1	26.9	29.0	32.2	24.5	25.4	27.0	30.8
75%	–	28.9	–	–	–	–	–	–
ii) First Job								
Proportions								
10%	17.2	17.4	17.1	16.6	17.5	17.4	17.6	17.5
25%	18.2	18.6	18.2	18.1	18.5	18.8	18.8	18.7
50%	19.4	20.5	20.2	20.1	19.8	21.1	21.2	20.8
75%	21.0	22.4	23.3	23.2	24.3	23.0	24.3	23.3
iii) First Cohabitation								
Proportions								
10%	22.5	23.9	24.6	26.4	20.6	22.2	22.5	26.6
25%	–	–	–	–	–	26.1	29.2	–
iv) First Marriage								
Proportions								
10%	24.4	24.1	22.5	22.5	22.4	21.4	20.3	19.7
25%	–	27.1	25.4	25.3	–	23.7	22.8	21.7
50%	–	–	–	30.8	–	–	27.6	25.6
v) First Birth								
Proportions								
10%	25.6	24.6	23.2	23.6	20.2	21.1	20.0	20.1
25%	–	–	27.0	27.2	25.7	24.7	22.8	22.9
50%	–	–	–	31.8	–	28.7	27.2	26.7
75%	–	–	–	–	–	–	32.9	32.3

Note: – indicates that the percentile has not been reached by the end of the panel

Table 2 Contd: Ages at which 10%, 25%, 50% and 75% of persons experience an event, , classified by gender, age groups, and panels
b) SLID Panel 1996-2001

	Men				Women			
Age group	18-20	21-23	24-26	27-29	18-20	21-23	24-26	27-29
i) Postsecondary education								
Proportions								
10%	20.4	21.3	20.9	21.3	20.3	20.3	20.4	20.8
25%	22.4	22.9	23.7	24.0	22.0	22.2	22.8	23.7
50%	–	25.5	28.5	32.6	23.9	25.0	27.1	32.1
ii) First Job								
Proportions								
10%	17.2	17.1	16.5	16.2	17.9	17.7	16.9	16.7
25%	18.5	18.5	17.8	17.6	19.0	19.7	18.4	17.9
50%	20.0	21.2	21.0	20.1	20.4	22.2	21.7	20.6
75%	23.3	23.3	24.9	23.6	24.4	25.5	25.4	26.0
iii) First Cohabitation								
Proportions								
10%	25.0	23.8	24.9	26.8	20.9	22.2	23.9	27.1
25%	–	–	–	–	25.9	27.4	–	–
iv) First Marriage								
Proportions								
10%	24.9	24.2	24.1	23.2	22.6	21.6	20.6	21.0
25%	–	27.5	26.9	25.8	26.0	24.2	23.7	23.1
50%	–	–	31.6	32.1	–	–	29.4	28.2
v) First Birth								
Proportions								
10%	25.5	23.9	23.9	22.9	20.2	19.9	19.9	20.3
25%	–	28.8	28.2	26.5	25.2	24.1	23.2	22.9
50%	–	–	–	32.4	–	–	29.0	26.6
75%	–	–	–	–	–	–	–	34.3

Note: – indicates that the percentile has not been reached by the end of the panel

proportions compared to Panel 1, 46% of men and 63% of women aged 18-20 in 1996 have done postsecondary education by the end of the panel in 2001.

Completion of postsecondary education is taking place earlier and earlier not only from cohort to cohort but also from panel to panel (see Table 2). In the case of men and women from Panel 1, for example, the age at which 25% completed postsecondary education has declined from 24.8 to 23.4 and from 23.4 to 23.0 respectively. Similarly, the median age at completion of postsecondary education has declined from 32.2 to 25.1 and from 30.8 to 24.5 respectively. And, although lower proportions of men and women from Panel 2 complete postsecondary education, they do so earlier than those from Panel 1 (excepting the oldest cohort aged 27-29 in both the panels - see Table 2). For example, the age at which 50% of men and women aged 21-23 at the start of Panel 1 completed postsecondary education by age 26.9 and 25.4 respectively. These ages have declined to 25.5 and 25.0 respectively for men and women from Panel 2. Again, women in general complete postsecondary education earlier than men. For example, 50% of men belonging to 24-26 age cohort from Panel 2 have completed some postsecondary education by age 28.5, while it takes one and a half years less for the same age cohort of women.

ii) Entry into labor force

As with completion of postsecondary education, proportions entering into labour force have slightly decreased over the panels (Table 1). And, it is not surprising that larger proportions of men than women in all age groups enter into labor force by the end of the panel, but women are not lagging far behind. Seventy six percent of women in the youngest cohort (Panel 2) have already entered into full-time work by the time they were aged 24-26 in 2001. In contrast to postsecondary education, the log-rank test statistics are the smallest and non-significant (except for the borderline case among women of Panel 2), thus indicating that there are no appreciable differences in the life table distributions of entry into labor force by birth cohorts. In a way, this suggests that economic (and other) circumstances in Canada encourage young women and men to enter into labor force as early as possible, and in fact most of them do so after age 18, following the same track (or speed) established by earlier cohorts .

Entering into labor force shows a consistently uniform speed over age cohorts and gender (Table s). Irrespective of age cohorts they belong to, 10% of men and women enter into labor force around age 17, 25% around ages 18-20, 50% around ages 19-22, and 75% between ages 21 and 26. It is this uniform speed in entry into labor force between age cohorts that was captured by the (non-significant) log-rank test statistics seen in Table 1. In general, women enter into labor force later than men. Young men start working even before completing postsecondary education; perhaps they work to complete postsecondary education. This is clearly seen in Table 2 - timings of entry into labor force are much earlier than the timings of completing postsecondary education.

iii) First cohabitation

Depending on age and sex, about 20-30% of young Canadians experience cohabitation, either as a prelude or as an alternative to marriage. The cumulative proportions classified by gender and age groups in Table 1 reveal that there is a cohort transfer of norms and values surrounding cohabitation in the sense that the proportions generally increase from older to younger cohorts, the last one still having time to experience the event. While the largest proportion of men

experiencing cohabitation is found among those aged 24-26 in Panel 1 (23%) and among those aged 21-23 in Panel 2 (25%), the largest proportion of women experiencing cohabitation is found among those aged 21-23 in both the panels (31% and 28% respectively). This might due to the age difference between cohabiting couples.

Women enter into cohabitation at earlier ages. Keeping in mind that cohabitation is a phenomenon observed more among younger cohorts, we see that over cohorts the age by which 10% of women enter cohabitation has steadily declined from age 27 to 21, while for men in Panel 1 it has decreased from age 26 to 22 and for men in Panel 2 from 27 to 25 (Table 2). More recent cohorts of women show a faster rate of cohabitation. Twenty five percent of women aged 21-23 and 24-26 from Panel 1 have already formed a cohabiting relationship in their lives between ages 26 and 29. This has shifted down to lower age groups - 25% of women aged 18-20 and 21-23 from Panel 2 have formed a cohabiting relationship between ages 26 and 27 respectively. New social norms and values surrounding cohabitation may be expected to make more profound changes in these and future cohorts.

iv) First marriage

The marriage process shows a singularly uniform pattern by age and by gender (Table 1). As they grow older, more men and women enter into married state (either directly or through cohabitation). Age is definitely an important consideration in marriage process. Significantly larger proportions of women than men experience marriage. While 65-72% of women would be married by age 35 (see the proportions for age group 27-29 who would have reached full adulthood by the end of the panels), only 55% of men would be so.

As for the timing of marriage, however, over cohorts we see a trend that is opposite to what is found with cohabitation (Table 2). Although the last two younger cohorts have not yet had sufficient time to form a marital union, we see a clear trend in delaying marriage among both men and women. The ages by which 10% of men from Panel 1 enter into marital union have increased from 22 to 24, and for men from Panel 2 from 23 to 25. For women, we find a similar increase from 20 to 22 (Panel 1) and 21 to 23 (Panel 2). Similarly, the ages by which 25% of men and women from Panel 1 (Panel 2) get married have increased respectively from 25 to 27 (26 to 27) and from 22 to 24 (23 to 26). What is more revealing is the median age at marriage shown by the oldest cohort of men and women, who were in their full adult years at the end of the panel. The median age at marriage for men aged 27-29 from Panel 1 is 31, while the same for men from Panel 2 is 32. The corresponding ages for women are 26 and 28 from Panels 1 and 2 respectively.

Comparing the evolution of cohabitation and marriage processes (Table 2), we see that the ages by which the cumulative proportions reach 10 and 25% are generally higher in the cohabitation process than in the marriage process. This bears evidence to the fact that among young Canadians, cohabitation is no longer simply seen as a “prelude” to marriage as many studies in the past have presumed. Rather, cohabitation is an end in itself and is entered at higher ages than marriage. It may serve well therefore to view cohabitation and marriage, not as two distinct processes, but as one process, say, first union process. Yet, it may be useful to distinguish them when examining the process of entry into parenthood.

v) First birth

As with marriage, the cumulative proportions of men and women entering into parenthood show an increasing trend by age (Table 1). Larger proportions of women than men enter parenthood by age 35. Thus, we find that about 56% of men and 79% of women who were aged 27-29 in 1993 (hence, aged 33-35 at the end of the panel) experienced parenthood by age 35. This result may be due to under-reporting of births by male respondents. The picture has not changed much for men and women from Panel 2.

The changes noted above in the trend and timing of union statuses are closely related to onset of parenthood. These three *interdependent processes* have to be studied together for a complete picture. Cohabitation occurs earlier and earlier over age cohorts, marriage occurs later and later, and first births occur later and later (Table 2). Delaying first births by younger cohorts has increased the age at first decile from 24 to 26 among men from Panel 1 and from 23 to 25 among men from Panel 2. Although the ages at first decile have remained constant among women, their ages at first quartile have increased by three years in Panel 1 and by two years in Panel 2. The median age at first birth is 32 for men aged 27-29 of both the panels - a five years difference when compared to women in the same age group of both the panels. The age at third quartile, found only among the women belonging to 24-26 and 27-29 cohorts, has increased from 32 to 34 years. Thus, postponement of first births to higher and higher ages has become a norm among young Canadians.

5.2. Intensity and Timing of the Processes by Social Class

As in the previous section, Table 3 classifies the final cumulative proportions by gender and parental social class for the two panels, and Table 4 presents the timing through selected percentiles. These tables are unique to this study as they include a missing category for social class. As seen in Table 3, the number of individuals with missing information on any one of the variables used for measuring their parental social status is appreciable with a total of 777 cases in Panel 1 and 1083 cases in Panel 2. It is worth exploring therefore who these individuals are and in what way their demographic behaviour differs from others in the sample. With this in mind, we have included them as a separate category in these tables, thus making up four social class categories, unlike in other studies.

i) Postsecondary Education

The cumulative proportions achieving postsecondary education reveal a much clearer differential by social class (Table 3). While more than 90% of men and women belonging to high social class have completed postsecondary education, much lower proportions (50 to 70%) of those in low social class have done so. The log-rank test statistic is the largest for the event of postsecondary education among men, and if not the largest, it is the second largest among women, indicating the significant differentials by social class in achieving postsecondary education. The reasons for lower proportions completing postsecondary education among men and women from Panel 2, as noted in the previous section, are somewhat evident now. We see

conspicuously low proportions of men and women classified under low and missing categories of social class completing postsecondary education by the end of the panels.

An examination of the timing of postsecondary education by parental social status shows remarkable differences as well (Table 4). In general, men and women belonging to high social class complete their postsecondary education at earlier ages than those belonging to middle and low social classes. While the median age at completing postsecondary education for men of high social class in Panel 1 is 26, it increases to 28 and 31 for men of middle and low social classes respectively. These men are more apt not only to work during college or university but also to go back for some sort of certification after beginning to work in a trade. Also, only men and women of middle and high social classes reach the third quartile, between ages 27 and 35. Again, women of high social class complete their education earlier than men.

ii) Entry into Labour Force

The significant log-rank test statistics seen in Table 3 tell us that there are differentials by parental social class in entry into labor force. However, a close look at the cumulative proportions shows that the significant difference arises mainly because of the fourth "missing" category of social class. The missing category has the lowest proportion entering into labor force, because of which log-rank test statistics are inflated, while the three conventional categories have nearly equal proportions. This finding only corroborates the statement made in the last section about entry into labor force by birth cohorts. Here too, no matter what the parental social status, labor force entry is an important, and almost universal, transition in the life of young Canadians.

As Table 4 shows, men of low social class generally start working early and maintain the speed of entering into labor force until the third quartile. There is a difference of at least one year between men of low and high social classes at different proportions reached. The labor force entry among women evolves almost at the same speed, with a smaller difference (about half a year) between women of low and high social classes from Panel 1 and an appreciably larger difference (from one to two years) for those from Panel 2.

iii) First Cohabitation

The proportions cohabiting by social class in Table 3 reveal that social class does not differentiate the life table distributions of cohabitation among women in Panel 1 (indicated by the lowest and non-significant log-rank test statistic), but it does differentiate among women in Panel 2, where there is a difference of 10 percentage points between women of low and high social classes. The pattern among men is not as clearly established as in the case of women. Men of high social class in Panel 1 have a 3 percentage points higher, and those in Panel 2 have a 4 percentage points lower, cumulative proportions. It is worth noting again that although the log-rank test statistics are generally significant except for women from Panel 1, the significant differences arise mainly because of the missing category of social class. The log-rank test statistics for both men and women are rather low compared to other processes, indicating that social class differences that used to exist in cohabitation process (see Bumpass and Sweet, 1989; Bumpass, Sweet and Cherlin, 1991) may be disappearing among more recent cohorts.

Looking at the cohabitation process by social class (Table 4), we see that men and women of low and middle social classes generally start cohabitation early and reach the 25% mark between

Table 3: Life Table Final Cumulative Proportions experiencing each event, classified by gender, social class and panels [+]

a) SLID Panel 1993-1998

	Men					Women				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Parental Social Class	Low	Middle	High	Missing	Logrank $\chi^2(3)$	Low	Middle	High	Missing	Logrank $\chi^2(3)$
Weighted N	633	1446	734	426		615	1508	854	343	
Events										
Postsecondary	0.70	0.75	0.94	0.56	41.2***	0.59	0.76	0.93	0.68	45.9***
First Job	0.94	0.97	0.98	0.82	17.3***	0.91	0.95	0.98	0.76	14.2**
First Cohabitation	0.23	0.24	0.26	0.14	12.5**	0.29	0.28	0.27	0.27	0.9
First Marriage	0.58	0.53	0.61	0.31	20.0***	0.67	0.72	0.57	0.53	25.1***
First Birth	0.63	0.54	0.39	0.41	18.1***	0.86	0.78	0.55	0.70	59.1***

b) SLID Panel 1996-2001

	Men					Women				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Parental Social Class	Low	Middle	High	Missing	Logrank $\chi^2(3)$	Low	Middle	High	Missing	Logrank $\chi^2(3)$
Weighted N	523	1349	839	540		655	1417	707	540	
Events										
Postsecondary	0.53	0.68	0.91	0.47	83.4***	0.58	0.75	0.98	0.46	124.3***
First Job	0.98	0.99	0.95	0.43	129.8***	0.91	0.94	0.96	0.45	86.2***
First Cohabitation	0.26	0.29	0.22	0.23	11.4**	0.28	0.29	0.18	0.22	14.9**
First Marriage	0.71	0.52	0.52	0.49	8.7*	0.57	0.65	0.63	0.56	12.9**
First Birth	0.68	0.48	0.40	0.48	37.5***	0.74	0.74	0.45	0.74	63.2***

- [+] These cumulative proportions obtained from life tables have been corrected for censoring
- Significance of Log-rank test: * = .05; ** = .01; *** = <.01

Table 4: Ages at which 10%, 25%, 50% and 75% of persons experience an event, classified by gender, social class and panels

a) SLID panel 1993-1998

	Men				Women			
Social Class	Low	Middle	High	Missing	Low	Middle	High	Missing
i) Postsecondary Education								
Proportions								
10%	22.5	21.7	21.7	22.7	21.0	20.5	21.5	21.6
25%	25.0	24.1	23.5	24.8	23.7	22.9	23.1	23.7
50%	31.3	27.9	25.9	32.6	31.4	26.6	24.6	28.8
75%	−	34.9	30.2	−	−	34.5	29.1	−
ii) First Job								
Proportions								
10%	16.2	17.2	17.4	16.8	17.4	17.3	18.0	17.5
25%	17.8	18.3	18.8	18.2	18.6	18.5	19.0	19.2
50%	19.3	19.8	20.7	20.6	20.7	20.3	21.2	22.0
75%	22.5	22.0	23.1	25.3	23.4	22.9	23.6	29.9
iii) First Cohabitation								
Proportions								
10%	24.3	23.4	24.1	28.5	22.1	22.1	23.7	21.1
25%	−	−	−	−	−	29.2	29.5	27.8
iv) First Marriage								
Proportions								
10%	22.3	23.1	24.3	24.7	19.5	20.7	22.1	21.1
25%	24.9	25.8	27.2	28.1	21.4	23.2	24.8	25.5
50%	30.1	32.6	34.5	−	26.1	27.3	29.2	31.5
v) First Birth								
Proportions								
10%	22.4	23.9	25.5	24.4	18.9	20.4	23.2	17.8
25%	26.2	27.5	29.0	29.2	21.7	23.0	26.5	22.2
50%	32.3	32.7	−	−	25.8	27.6	32.1	29.0
75%	−	−	−	−	30.3	32.7	−	−

Note: − indicates that the percentile has not been reached by the end of the panel

Table 4 Contd: Ages at which 10%, 25%, 50% and 75% of persons experience an event, classified by gender, social class and panel

b) SLID panel 1996-2001

	Men				Women			
Social Class	Low	Middle	High	Missing	Low	Middle	High	Missing
i) Postsecondary Education								
Proportions								
10%	20.8	20.8	20.9	22.0	20.2	20.0	20.6	22.4
25%	23.6	23.3	22.4	25.7	23.2	22.2	22.0	25.5
50%	32.7	27.4	26.6	−	31.9	25.1	23.7	−
75%	−	−	29.4	−	−	33.8	26.9	−
ii) First Job								
Proportions								
10%	15.8	16.5	17.2	17.5	16.2	17.0	18.2	17.6
25%	17.4	17.8	18.8	19.9	17.8	18.4	19.7	19.6
50%	19.3	19.7	21.1	−	20.1	20.5	21.8	−
75%	22.2	22.3	23.7	−	23.3	23.4	24.3	−
iii) First Cohabitation								
Proportions								
10%	24.0	24.2	27.0	25.6	22.1	22.0	24.9	22.3
25%	31.6	29.3	−	−	32.4	27.9	−	−
iv) First Marriage								
Proportions								
10%	22.4	24.0	24.7	24.6	20.1	21.4	22.3	22.0
25%	25.6	26.8	27.1	29.0	22.6	23.9	24.8	26.0
50%	32.2	32.8	31.8	−	29.6	28.4	32.1	30.8
v) First Birth								
Proportions								
10%	22.2	23.6	26.4	24.0	18.7	20.3	23.4	19.7
25%	25.9	27.7	30.6	27.6	21.3	24.0	27.2	22.8
50%	30.3	−	−	−	24.9	28.3		28.3
75%	−	−	−	−	−	−	−	−

Note: − indicates that the percentile has not been reached by the end of the panel

ages 28 and 32. Men and women of high social class start cohabiting later and rarely reach the 25% mark (an exception being the women of high social class from Panel 1).

iv) First Marriage

Although differentials by social class exist in the marriage process, by examining the proportions in Table 3, we see again that these differentials are due to the missing category which has distinctly lower proportions marrying. Another distinct case is the men of low social class in Panel 2, among whom 71% are already married. Apart from these two 'deviant' cases, the cumulative proportions point to possible disappearance of differentials in marriage by social class in the future, especially among women.

As for timing of marriage by social class (Table 4), in general men and women of low social class marry earlier, but slow down when about reaching 50% mark. The median age at marriage for men of low and high social classes from Panel 1 has a 4.5 years difference, while the corresponding median age for women has a 3 years difference. This difference in median ages seems to be narrowing in Panel 2 such that the median age for men of low social class even exceeds that for men of high social class. This is something worth watching in future panels.

v) First Birth

In the last section, the cumulative proportions entering into parenthood showed normally expected increasing trend by age (Table 1). The story however is different if we examine these proportions by social class (unlike what was noted above with cohabitation and marriage processes). Cumulative proportions having first birth show a clear decline by social class categories. It is men and women of low social class who have the highest proportions (63% of men and 86% of women from Panel 1, and 68% of men and 74% of women from Panel 2) entering into parenthood. Social class differences in the transition to parenthood are more conspicuous than for any of the other transitions studied, particularly in the case of women. While the difference in the proportions between men belonging to low and high social class ranges between 24 and 28 percentage points, the difference ranges between 29 to 31 percentage points between women belonging to low and high social classes. This difference between low and high social classes, as well as the difference introduced by the women in the missing category, is captured by the somewhat larger log-rank test statistic for the first birth process among women.

Table 4 reveals a trend in first birth that is similar to the one operating in the union processes. Men and women of low social class enter parenthood at earlier ages. The median age at parenthood is 32 for men of low social class, while men of high social class rarely reach the 50% mark. A six years difference in the median ages is also seen between women of low and high social classes in both the panels. Seventy five percent of women of low and middle classes in Panel 1 have first birth by age 30 and 33 respectively, while women of high social class have yet to reach that mark. It is evident that young women belonging to high social class are either postponing their entry into parenthood or avoiding it altogether.

vi) Case of Missing Social Class Category

A few more words are in order about the results for the missing category of social class given in column 4 of Table 3. Individuals who have not provided information on their parental education or home ownership or economic family income do indeed constitute a special group by themselves with respect to early life events considered here. Among men falling into this special category, the cumulative proportions experiencing most events are consistently lower than those for all other regular categories of social class, sometimes even up to 50% lower than the cumulative proportions found for low social class (see, for example, the proportions entering into labor force for men in Panel 2). Among women, a much better picture prevails, excepting labour force entry in Panel 2 that is comparable to what we find for men. An outstanding difference between those belonging to the missing category and those belonging to all other categories is experience of first birth. Rather high proportions (70% or more) of women belonging to the missing category have first birth, and in the case of Panel 2, their proportion equals those for women of low and middle social classes. It makes us wonder whether the traditional three categories are adequate to capture the social strata in our society. Perhaps there is indeed a "lower" category of social class after all.

Examining this specific group by other socioeconomic characteristics, we find that a) they are mostly urban English-speaking whites, residing mostly in Ontario but spread in good proportions throughout the country as well; b) most of them having high school education or less but a quarter of them having some form of postsecondary education; c) two thirds of them coming from low or middle income families with an average total economic family income around $40,000; and, d) a majority of them (around 60%) earning modest income through wages and salaries, but 14-22% relying on government transfers as well. All these evidences show that these individuals indeed form a special group of their own. What is more striking is that they seem to deliberately avoid providing the much-needed basic information on their own or their parents' characteristics. And, the profiles portrayed by these statistics over the two panels also seem to portray a worsening situation over time, at least in terms of reporting the needed information.

One thing is clear with the additional information on this group: they make up a rather heterogeneous group. Thus, it is not easy to classify them into one category or other, say something like "lower social class" or even as "underclass" or "excluded class" as debated in very recent sociological literature. Yet, they are a distinct group, and further study is warranted to make any specific conclusions regarding this group.

5.3. Conclusion

The above findings highlight the interdependence of cohabitation, marriage and first birth processes. The other two processes, completion of postsecondary education and starting regular work also evolve interdependently with these three processes. Entering into a union and becoming a parent may be delayed because of pursuing higher education. And, they may also be delayed until a viable source of steady income is found, this being especially so among men but increasingly among women as well. The highlights from life table analysis clearly show that we need to examine the *sequences of transitions* because of the interdependence of the processes under study. By examining the sequences of transitions, we may be able to identify dominant trajectories, say, starting from an arbitrary age of 15, and tracing the pathways to onset of

parenthood. We do this in Section 7, aiming to unravel the pattern of sequences (as well as some possible explanations for some specific sequences – only some, since a full explanatory analysis is beyond the scope of this paper). To avoid biased inferences based on small number of cases, a problem which arises for many sequences, we need to combine the age groups, while distinguishing the different social statuses where possible.

Before doing this, however, we shall turn our attention to finding some possible determinants (and explanations) of the three major events related to family formation, namely first cohabitation, first marriage and first birth. So far, we have examined the differentials by birth cohorts as well as by gender and social class, the major determinants of family formation processes in this study. To obtain the net effects of these major determinants in the presence of other possible explanatory variables, we shall use the well-known Cox regression model in survival analysis in Section 6 and examine whether the impact of social class still persists in the presence of other variables. The covariates to be used in the model have already been discussed in the section on Data and Methods.

6. Results from the Cox Models of First Cohabitation, First Marriage and First Birth

In this section, we examine the impact of opportunity structures captured by other important covariates than parental social status. The results from the Cox models are presented in Tables 5 through 7. For ease of interpretation, these tables present only the models built for all age groups (18-29) together. We also built models separately for each age group. For lack of space these models are not presented in this paper but references to separate age groups will be made in the text when deemed relevant.

In building these Cox models, we have made use of *both* retrospective and prospective information on the ages at cohabitation, marriage and parenthood, unlike in our previous study (Ravanera and Rajulton, 2006b) that used only the prospective information collected during the six-year observation window of Panel 1. Since we use the retrospective information as well, there is no left censoring here. However, the time-varying covariates are available from the survey only for the six-year observation window. Therefore, those individuals who experienced the events before the start of the panel are given the values for these covariates as of the first longitudinal observation. The bias introduced by this procedure is expected to be minimal since we do not expect huge differences in either income or years of schooling among men and women aged less than 25. There may be appreciable bias, however, in the case of 27-29 cohorts.

For categorical variables, Tables 5 through 7 present the hazard ratios of individuals belonging to a specific category experiencing the event under consideration in comparison to individuals belonging to the reference category, indicated in these tables as “Ref.”. The reference category has a hazard ratio of 1, and the other categories have ratios either greater than 1 or less than 1. If the hazard ratio is greater than 1, say 1.66, then the individuals belonging to that category are said to have 66% greater odds of experiencing the event than the individuals in the reference category. “Greater odds” also means “higher risk”, or “higher likelihood or chance”, and hence “earlier timing” of experiencing the event. Thus, the hazard ratios imply both the *occurrence* and the *timing* of the event under study. Similarly, if the hazard ratio is less than 1, say 0.85, then the individuals belonging to that category are said to have 15% (that is, 1 – 0.85) lower odds of

experiencing the event than the individuals in the reference category. “Lower odds” also means “lower risk”, or “lower chance”, and hence “later timing” of experiencing the event. In the case of continuous covariates, the hazard ratio is interpreted as a factor by which the likelihood increases or decreases for a unit increase in the continuous variable. For example, if the hazard ratio is 1.15 for years of schooling, then a unit increase in years of schooling multiplies the likelihood by a factor of 1.15. Likewise, a two-units increase multiplies the likelihood by $(1.15)^2$ = 1.32, therefore implying the likelihood increases by 32%, and so on. As for statistical significance, we shall use the traditional criterion of 5% or lower levels of significance; the significant coefficients are highlighted in these tables.

6.1. First Cohabitation

Table 5 presents the hazard ratios from the Cox models for cohabitation for all age groups together, classified by gender and by panels. Results in Table 5 show that compared to the youngest cohort of women and men, older age groups have progressively smaller chance of entering into cohabitation. Thus, women aged 24-26 and 27-29 in 1993 (Panel 1) are respectively 55% and 80% less likely to have cohabited compared to women aged 18-20. Similar ratios (51% and 70%) are found for the same age groups of women from Panel 2. Note that the two younger cohorts of women in both the panels are not different from each other in their likelihood of cohabitation. Significant hazard ratios for men are slightly different. Compared to the youngest cohort of men, men aged 21-23, 24-26 and 27-29 from Panel 1 are 39% 51% and 71% less likely to cohabit, and only men aged 27-29 from Panel 2 are 49% less likely to cohabit. In general, cohabitation seems to have been already “established” among the two youngest cohorts of men and women.

Even in the presence of other socioeconomic characteristics and personal life course variables, parental social class exerts its overall significant impact on cohabitation process and the hazard ratios are mostly in the expected direction. In particular, men and women of high social class are significantly less likely to cohabit as shown by the hazard ratios from Panel 2. In addition, we also see that men belonging to the missing category of social class in Panel 1 are 46% less likely to cohabit while women from the same group in Panel 2 are 63% more likely to cohabit.

French speaking women and men have the expected higher chance of cohabiting than their English speaking counterparts. The significant hazard ratios are however found only for francophone men from Panel 1 and francophone women from Panel 2 who are respectively 66% and 91% more likely to cohabit than the Anglophones. The allophones are however significantly less likely to cohabit than the Anglophones.

Visible minority women and men exhibit lower chance of cohabiting, although the only significant case is found for men from Panel 1. In the same way, rural men and women are also less likely to cohabit, the statistical significance showing up again only in the case of men.

Region-wise, net of the effects of mother tongue discussed above, men and women from Quebec have generally greater likelihood of forming a cohabiting union compared to their counterparts in the Atlantic region, with as high a hazard ratio of 3.7 among men aged 21-23 in Panel 2 (not shown in the table). Men and women from Ontario are in contrast 35 to 50% less likely to

Table 5: Hazard ratios from Cox models of First Cohabitation, classified by gender and panels.

HR = Hazard Ratio

	Men				Women			
	Panel 1		Panel 2		Panel 1		Panel 2	
	HR	P-value	HR	P-value	HR	P-value	HR	P-value
Time-invariant covariates								
Age in 1993 or 1996								
18-20 (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
21-23	0.61	0.038	1.03	0.896	0.72	0.106	0.76	0.114
24-26	0.49	0.001	0.78	0.293	0.45	0.000	0.49	0.000
27-29	0.29	0.000	0.51	0.003	0.20	0.000	0.30	0.000
Social Class								
Low (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Middle	1.08	0.689	0.95	0.759	0.84	0.297	0.98	0.915
High	0.91	0.696	0.62	0.040	0.76	0.246	0.54	0.002
Missing	0.54	0.036	0.92	0.769	1.22	0.466	1.63	0.035
Mother Tongue								
English (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
French	1.66	0.019	1.14	0.690	1.68	0.059	1.91	0.001
Other	0.14	0.013	0.23	0.002	0.48	0.056	0.27	0.009
Visible Minority								
No (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Yes	0.16	0.007	0.58	0.225	0.33	0.071	0.73	0.451
Region in 1993 or 1996								
Atlantic (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Quebec	1.16	0.540	1.59	0.152	1.47	0.149	1.06	0.762
Ontario	0.60	0.021	0.55	0.002	0.65	0.032	0.50	0.000
Prairie	0.75	0.135	0.94	0.738	0.75	0.153	0.71	0.063
BC	0.40	0.004	0.90	0.669	1.13	0.661	0.91	0.674
Urban in 1993 or 1996								
Urban (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Rural	0.73	0.043	0.14	0.309	0.88	0.389	0.98	0.912
Time-varying covariates								
Employment status								
Employed all year (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Employed part year	0.85	0.360	0.86	0.357	1.37	0.047	0.91	0.548
Unemployed all year	0.43	0.064	0.71	0.129	0.54	0.145	0.90	0.453
Years of schooling	0.95	0.065	0.99	0.342	0.90	0.000	1.00	0.884
Personal income	1.09	0.067	1.04	0.016	1.20	0.003	1.02	0.091
No. of Cases	2957		2962		2842		3051	
No. of Cohabitations	444		556		518		647	
Log Pseudolikelihood	-2279		-2745		-2723		-3468	

cohabit. It may come as a surprise that men and women in the Atlantic region are more likely to cohabit than those from Ontario given the general impression that greater family orientation prevails in the Atlantic region. One needs to keep in mind, however, that Ontario is home to a conspicuously large proportion of immigrants, compared to the Atlantic provinces, and these immigrants are less likely to cohabit.

The three time-varying covariates used in this model of cohabitation show that changes in personal social status as young women and men age have strong influence on their likelihood of forming a cohabiting union. Employment influences formation of cohabiting unions among women, but not among men. Compared to women who were employed all year, women who were employed only part of the year are 37% more likely to cohabit, the main contributors to this difference coming mostly from the youngest cohort (not shown here). Every additional year of schooling reduces the likelihood of cohabitation among women from Panel 1 by a factor of 0.9. Respondent's personal income exhibits significant, and generally positive, impact on forming a cohabiting union for both men and women. Every additional $10,000 increase makes cohabitation more likely by a factor of 1.20 among women in Panel 1 and by a factor of 1.04 among men from Panel 2. This is true especially of younger cohorts (not shown here). The largest impact of personal income is found among women aged 21-23 from Panel 1 (a factor of 1.47), among women aged 18-20 from Panel 2 (a factor of 1.27), and among men aged 18-20 from both Panels 1 and 2 (by a factor of 1.36 and 1.29 respectively). Thus, the positive influence of personal income on forming a cohabiting union is found mostly among younger cohorts who are more likely to cohabit in the first place. These results may imply that young people with more income are more able to afford their own independent living with a place of their own as opposed to continue living in the parental home. Data on home-leaving would be useful to verify this.

6.2. First Marriage

In the marriage model, we include one more covariate, namely whether an individual cohabited before or not, in order to assess the impact of earlier cohabiting union on proceeding to a legal marriage. Controlling for all other covariates, the results from Cox models for first marriage for all age groups together given in Table 6 show that compared to the youngest cohort of women and men, older age groups have progressively higher chance of entering into marriage. This is what we normally expect: Chance of marriage should increase over ages. Compared to the youngest cohort of women aged 18-20 in both the panels, women aged 27-29 are almost twice as likely to marry. The hazard ratios for men are not as high as for women; only men from Panel 2 show a significant 67% higher chance of marrying compared to the youngest cohort.

As seen in Table 6, even after controlling for other relevant covariates, parental social class has significant effect on marriages of men and women, more strongly in the case of men. Men of middle and high social classes are respectively 35% and 42% less likely to marry compared to men of low social class. Men from the missing category of social class are the least likely to marry, as was seen in the previous section. The same pattern is found for women as well; however, only the women from Panel 1 show a significant result.

Mother tongue exhibits no significant impact on marriages of young women and men. Examining the results by age groups (not shown here), we do not find any definite pattern either except for the fact that in general men and women of "other" mother tongues are more likely to marry than the English or French-speaking.

Table 6: Hazard ratios from Cox models of First Marriage, classified by gender and panels.

HR = Hazard Ratio

	Men				Women			
	Panel 1		Panel 2		Panel 1		Panel 2	
	HR	P-value	HR	P-value	HR	P-value	HR	P-value
Time-invariant covariates								
Age in 1993 or 1996								
18-20 (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
21-23	1.16	0.522	1.20	0.411	1.31	0.142	1.69	0.001
24-26	1.26	0.309	1.41	0.107	1.37	0.090	1.74	0.000
27-29	1.21	0.394	1.67	0.013	1.93	0.000	1.95	0.000
Social Class								
Low (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Middle	0.65	0.001	0.73	0.012	0.93	0.556	1.10	0.389
High	0.58	0.001	0.65	0.005	0.73	0.049	0.85	0.291
Missing	0.45	0.001	0.70	0.095	0.71	0.110	1.00	0.984
Mother Tongue								
English (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
French	1.36	0.145	1.16	0.430	0.92	0.671	1.10	0.582
Other	1.44	0.085	1.02	0.889	1.02	0.889	1.34	0.053
Visible Minority								
No (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Yes	0.98	0.938	1.01	0.957	1.76	0.013	0.94	0.717
Region in 1993 or 1996								
Atlantic (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Quebec	0.45	0.001	0.41	0.000	0.62	0.024	0.69	0.051
Ontario	0.89	0.441	1.01	0.925	1.26	0.048	1.26	0.045
Prairie	1.16	0.277	1.24	0.118	1.26	0.051	1.51	0.000
BC	0.95	0.779	0.84	0.366	0.98	0.929	1.23	0.152
Urban in 1993 or 1996								
Urban (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Rural	1.19	0.140	1.24	0.070	1.13	0.246	1.61	0.000
Time-varying covariates								
Employment status								
Employed all year (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Employed part year	0.92	0.542	0.79	0.089	0.70	0.002	0.68	0.001
Unemployed all year	0.60	0.264	0.51	0.001	0.79	0.491	1.04	0.719
Years of schooling	1.00	0.834	1.01	0.380	0.93	0.000	0.99	0.191
Personal income	1.18	0.000	1.05	0.000	1.06	0.128	0.98	0.586
Cohabited before								
No (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Yes	0.77	0.100	0.75	0.029	0.64	0.001	0.50	0.000
No. of Cases	2885		2962		2655		3050	
No. of Marriages	865		892		1045		1306	
Log Pseudolikelihood	-4318		-4236		-5197		-6742	

Significant impact of visible minority status is found in Table 6 only for women from Panel 1; they are 76% more likely to marry compared to non-visible minority women. Models built for separate age groups (not shown here) reveal much higher hazard ratios for some cohorts (up to two and half times higher). Such a significant effect is found in the case of visible minority men aged 21-23 in Panel 2 with 2.3 times greater likelihood of marrying.

There are some regional differences in the occurrence and timing of marriage among young women and men. In contrast to (or consistent with) what was found for cohabitation, men and women from Quebec are significantly less likely to marry than those from the Atlantic region. Ontario and Prairie women from both the panels are 26% significantly more likely to marry than Atlantic women. The chance increases for women from the Prairies to 51% in Panel 2.

Generally, rural women have higher chance of marrying than urban women. Although statistical significance is found only for women from Panel 2 in Table 6, some specific age groups show as high as 80% more chance of marrying (not shown here). Unlike in the case of women, urban-rural differentials are not significant in the case of men.

Life course variables play a more significant role in marriage than what was observed for cohabitation. Unemployed men are the most hesitant to enter into marital union for well-known reasons; their likelihoods are lower by 40 to 50%, compared to men employed all year. In contrast, it is women who are employed part year who are hesitant to enter into marital union. The first finding confirms Becker's economic independence hypothesis, but for men only. The second confirms Oppenheimer's career entry hypothesis, but for women only. Both are partial confirmations with respect to employment opportunities available to men and women. What stand out clearly however are the gender differences in employment that affect the likelihood of marriage.

Years of schooling have no significant impact on men's marriage but they do on women's. Additional years of schooling reduces the likelihood of marriage by a factor of 0.93 among women in Panel 1, but this has become non-significant in Panel 2, implying the marriage differentials by schooling may be disappearing in more recent cohorts and other considerations than schooling may be playing in women's decision to marry. But this is something that needs to be checked with the data available from later panels.

An additional $10,000 in income shows a significant positive effect in the case of men from both the panels, increasing their chance of marrying by as large a factor as 1.18 (Panel 1). Models for separate age groups for men (not shown here) exhibit as high a factor as 1.36. Such a significant impact of additional income is not to be seen for women in any of the age cohorts. Again, Becker wins!

Cohabitation does reduce the likelihood of marriage of both men and women. Women from both Panels 1 and 2 who had cohabited before are 36 to 50% less likely to go for marriage, this difference arising mainly from the two "older" cohorts of women aged 24-26 and 27-29 (not shown here) who would have been in their full adulthood by the end of the panel. Women aged 27-29 from Panel 2 and who had cohabited before show even a much lower chance (80% lower) of getting into legal marital union at all. All these results indicate that cohabitation is no longer

being considered by young men and women as a prelude but a replacement of marriage altogether, particularly by women. In contrast, men who had cohabited before show mixed results. Although men from Panel 2 have a significant 25% lower chance of marrying, specific models for age groups (for example men aged 21-23 from Panel 2) show two times greater likelihood of marriage. These gender differences in the impact of cohabitation on marriage need to be studied in greater depth.

6.3. First Birth

Table 7 presents the hazard ratios from Cox models of first birth for all age groups together. As with marriage, the age effects are clear – the higher the age group, the higher the chance of having first birth. This is particularly true for "older" cohorts.

As seen with cumulative proportions in the previous sections, parental social class makes a conspicuous difference in the case of first birth, especially for women of high social class. As seen in Table 7, women of high social class and from both the panels have about 45% lower chance of experiencing a first birth than women of low social class, much of it due to women aged 27-29 (not shown here) who were in their full adult years by the end of the panel and therefore could be expected to have a birth by then. Women of high social class from the younger age groups, who were aged 21-23 at the beginning of the panels, show even lower chance of becoming parents, the hazard ratios being 0.38 and 0.26 for panels 1 and 2 respectively. Parental social status affects men's transition to parenthood as well in the expected direction, but with statistical significance only in the case of Panel 2. Men of middle and high social classes are respectively 30% and 57% less likely to become fathers. Examining the results by age groups, we see that the expected pattern gets clearly established from the cohorts aged 24-26 in 1996 onwards and, if this is any indication, this pattern will be followed by the younger men as well.

Francophone men and women from Panel 2 show 50% significantly higher chance of experiencing first birth compared to Anglophone counterparts, this significant difference arising mainly from cohorts aged 27-29. It is interesting to note that, unlike what we usually hear about the low *fertility* of the French-speaking Canadians, the hazard ratios for francophone men and women aged 27-29 from both the panels (not shown here) exhibit almost two times higher chance of experiencing *first birth* by age 35. Combining this result with what we found earlier regarding cohabitation and marriage, we can say that most first births among the francophones are possibly occurring within cohabiting unions.

Visible minority status plays no significant role in men' or women's transition to parenthood. Urban/rural differentials persist – rural women and men are 30 to 40% more likely to become parents than their urban counterparts. There are some significant regional differentials, especially in the case of women, possibly capturing cultural and economic structures in the regions. Women from Ontario and the Prairies are 30 to 50% more likely to become mothers by age 35, compared to women residing in the Atlantic region. This may be again due to the large immigrant population residing in these two regions or possibly due to labour out-migration of men in the Atlantic region.

Table 7: Hazard ratios from Cox models of First Birth, classified by gender and panels.

HR = Hazard Ratio

	Men				Women			
	Panel 1		Panel 2		Panel 1		Panel 2	
	HR	P-value	HR	P-value	HR	P-value	HR	P-value
Time-invariant covariates								
Age in 1993 or 1996								
18-20 (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
21-23	1.28	0.311	1.13	0.605	1.50	0.089	1.26	0.116
24-26	1.66	0.034	1.30	0.217	1.58	0.053	1.19	0.236
27-29	1.61	0.040	1.63	0.020	2.01	0.003	1.28	0.092
Social Class								
Low (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Middle	0.88	0.406	0.70	0.005	0.85	0.227	0.84	0.119
High	0.68	0.054	0.43	0.000	0.56	0.002	0.53	0.000
Missing	0.56	0.017	0.85	0.445	0.82	0.397	1.05	0.782
Mother Tongue								
English (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
French	1.19	0.442	1.49	0.035	1.40	0.055	1.51	0.013
Other	0.97	0.904	0.90	0.598	1.01	0.975	0.95	0.721
Visible Minority								
No (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Yes	0.90	0.741	0.85	0.498	1.21	0.531	0.98	0.889
Region in 1993 or 1996								
Atlantic (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Quebec	0.76	0.270	0.74	0.156	0.78	0.212	0.82	0.278
Ontario	0.87	0.388	1.03	0.857	1.32	0.048	1.20	0.128
Prairie	0.97	0.850	1.38	0.038	1.28	0.066	1.49	0.001
BC	0.77	0.237	0.79	0.264	0.94	0.732	1.12	0.450
Urban in 1993 or 1996								
Urban (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Rural	1.25	0.056	1.41	0.007	1.04	0.737	1.32	0.005
Time-varying covariates								
Employment status								
Employed all year (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Employed part year	1.02	0.851	0.72	0.016	1.28	0.046	1.19	0.115
Unemployed all year	0.43	0.090	0.90	0.548	0.73	0.382	1.96	0.000
Years of schooling	0.93	0.000	1.00	0.665	0.88	0.000	0.90	0.003
Personal income	1.12	0.000	1.05	0.000	0.98	0.654	0.97	0.450
No. of Cases	2917		2962		2572		3050	
No. of First Births	745		809		891		1450	
Log Pseudolikelihood	-3430		-3848		-4329		-7286	

Employment status has strong influence on first birth process. In Table 7 we see that men employed part year have 28% lower chance of becoming fathers compared to men who are employed all year. But the impact of employment status acts the other way in the case of women. Compared to women employed all year, women employed part year have 28% greater chance of becoming mothers, and women unemployed all year are twice more likely to become mothers. The last pattern is not clearly established however, it is true only in the case of women from Panel 2, irrespective of age groups (not shown here). Again, this is something worth pursuing in later panels.

Comparing the impact of employment status on first birth with what we observed in the last section on marriage, it is clear that women's employment status affects their marriage and first birth processes differently. These two processes need to be studied together, not separately as Becker-Oppenheimer debate has looked at it.

An additional year of schooling delays first birth by a factor of 0.9 for all age groups together (Table 7). Examining the hazard ratios by cohorts and by panels (not shown here), we see increasing and significantly delaying impact of years of schooling on younger cohorts, especially in the case of women.

Increase in income (by $10,000) multiplies the likelihood of becoming fathers by a factor of at least 1.05 but does not have significant impact on women's chance of becoming mothers (Table 7). Examining the hazard ratios by age cohorts, we see that increase in income is significantly associated with even as high factors as 1.35 or 1.44 in the case of men (not shown here). But in the case of women, there is only one significant effect of personal income which goes in the opposite direction; the likelihood of becoming mothers is reduced by a factor of 0.84 among women aged 27-29 from Panel 2.

We have not included in Table 7 another important time-varying covariate, namely marital status before the time of first birth of respondents. Since marital status is highly correlated with the age variable, the problem of multicollinearity creeps in and changes the direction of the impact of the age variable. Just to illustrate this phenomenon, we provide the model that includes two more variables - marital status and unemployment rate (see footnote 10) - in Appendix Table 2. As seen in that table, in comparison to men and women who married directly, men and women who only cohabited have respectively 40% and 40-57% lower chance of experiencing first birth, while men and women who married after cohabiting are no different from those who married directly. This insight confirms more than what was found by Musick (2007) for the US: it is not only *intended* but also *actual* childbearing that is less among cohabiting *men and women* in Canada.

7. Trajectories to Parenthood

For studying trajectories to parenthood, we are considering six states: Origin, Postsecondary Education, First Job, First Cohabitation, First Marriage, and First Birth, the last of which is considered to be an absorbing state (that is, analysis ends with first birth, and we do not consider transitions that might happen after first birth). Since the Origin state acts only as a "dummy"

state to start the processes, the number of distinct sequences of transitions (or trajectories) is 120 (= 5!), but in reality not all of them will be realized. Besides, considering first birth as an absorbing state reduces further the number of distinct sequences. Table 8 presents the life course trajectories to parenthood for women and men respectively in terms of conditional probabilities of making a sequence of transitions that finally end in parenthood.[14] Considering transitions and their timings together, the table also provides age at which a specific trajectory is completed. For simplicity of presentation and also for reasons of confidentiality, we present here only the trajectories to parenthood for all age cohorts together and followed by 10 or more respondents. Analysis for different social classes is retained and is presented in Table 9.

To illustrate how these probabilities are obtained, let us consider all men and women aged 18-29 at the start of Panels 1 and 2. The first transition from the Origin state at age 13 has five outcomes with probabilities as follows:

Transition	Probability			
	Panel 1		Panel 2	
	Women	Men	Women	Men
Origin → Postsecondary education	.165	.124	.251	.236
Origin → First Job	.606	.789	.485	.630
Origin → First Cohabitation	.055	.019	.048	.024
Origin → First Marriage	.089	.025	.095	.048
Origin → Parenthood	.074	.025	.095	.038
Total	.989	.982	.974	.976

The transitions to different states are all from the same Origin state (hence, it is a multiple decrement life table), and therefore the probabilities can be summed, giving the probability of making at least one of the transitions. A total probability of 0.989 above implies that there is a probability .011 of not making any transition from the Origin state. Thus about 1.1% of women from Panel 1 do not at all experience any event considered in this study. We also note that the first transition for both men and women are predominantly to First Job or entry into labor force, although this probability has declined by 12 to 15% in Panel 2. In contrast, the probability of first transition to postsecondary education has increased by 9 to 11%. Likewise, the probability of direct transition to marriage and to first birth have also slightly increased in Panel 2, and it would be worth watching this trend over later panels.

Now, let us consider those men and women who completed postsecondary education as their first transition. For illustrative purpose, we shall do this for men and women from Panel 1. Following them further, we can obtain the *conditional* probability of making the second transition to First

[14] For constructing the sequences of transitions, data on timing of events should be as precisely measured as possible, at least with years and months. For two of the events considered in this study, namely postsecondary education and first full-time job, even the microdata files accessible at Research Data Centres provide only the years in which events occur. Although this may "contaminate" the sequences of transitions to some extent, the overall pattern of sequences follows what we theoretically expect. Yet, this is a point for consideration by data collection agencies such as Statistics Canada: More sophisticated techniques require more refined data, and future research in social science will be seriously handicapped if this problem is not addressed now.

Job given that they made the first transition to Postsecondary education, the conditional probability of making a third transition to First Marriage given that they made the two earlier transitions to Postsecondary education and to First Job, and the conditional probability of making the fourth transition to Parenthood given that their previous transitions were to Postsecondary education, First Job and First Marriage, in that order. These transitions make up a trajectory, and by multiplying the respective conditional probabilities, we obtain the *probability of making this specific trajectory to First Birth*, written as Origin→PostSec→FJob→FMar→Parent. This probability is *not* simply the probability of having a first birth but the probability of *making this specific trajectory to first birth*. One can also interpret it as the conditional probability of first birth given this *specific sequence* of transitions prior to first birth. Along with the conditional probabilities, we can obtain the mean length of stay in each successive state before making a transition. The associated conditional probabilities and mean lengths of stay for the trajectory Origin→PostSec→FJob→FMar→Parent are as follows:

	Women		Men	
	Prob.	Mean duration	Prob.	Mean duration
A) Origin→PostSec	.165	8.7	.124	9.4
B) PostSec→FJob |A	.721	0.8	.739	0.9
C) FJob→FMar | A,B	.488	3.2	.368	3.1
D) FMar→Parent | A,B,C	.954	3.4	1.00	3.7
Trajectory	.055	16.1	.034	17.1

The notations "|A" and "|A,B" in the above illustration mean "conditional on A" and "conditional on both A and B". Thus, the probabilities of making this specific trajectory to first birth are 5.5% (= 0.165 x 0.721 x 0.488 x 0.954) and 3.4% (= 0.124 x 0.739 x 0.368 x 1.00) for women and men respectively. In other words, 6% of all possible trajectories to first birth that women can make follow this trajectory. These probabilities can also be interpreted in terms of proportions of persons making this specific trajectory. Thus, 6% of women and 3% of men from Panel 1 follow this trajectory to parenthood.

And, on the average, women take about 16 years to complete this trajectory (that is, they complete this trajectory by age 29)[15], while men take about 17 years, a large portion of this duration coming from years spent for postsecondary education. Only these final results are given in Table 8 (values in Table 8 are more accurate since they have not been rounded off as in the illustration above).

Table 8 presents the probabilities of completing selected trajectories (that vary in number from 16 to 24 by gender and panels due to the suppression rule for confidentiality reasons) and overall mean ages at completion of these trajectories. For ease of interpretation, the trajectories have been arranged by the number of transitions. Depending on the theoretical orientations underlying

[15] That is, 16.1 + 13 since the Origin state started at age 13. One can use any arbitrary age but it is better to use it as consistently as possible, depending on the data one works with.

Table 8: Probabilities and ages at completion of selected trajectories to parenthood, Men and Women ages 18-29, SLID 1993-98 and 1996-2001 Panels

	Panel 1993-1998				Panel 1996-2001			
	Women		Men		Women		Men	
	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion
1) Origin→Parent	0.074	18.7	0.025	19.3	0.095	19.4	0.038	21.4
2) Origin→Postsec→Parent	0.007	26.0	–	–	0.007	26.3	–	–
3) Origin→FJob→Parent	0.062	23.3	0.046	24.7	0.071	23.2	0.055	24.7
4) Origin→Fcohab→Parent	0.013	22.5	–	–	0.015	22.8	0.006	23.5
5) Origin→Fmar→Parent	0.042	21.4	0.005	23.1	0.051	23.9	0.015	26.7
6) Origin→Postsec→Fjob→Parent	0.007	27.9	0.006	28.0	0.010	27.3	0.010	28.8
7) Origin→Postsec→FMar→Parent	0.007	25.4	–	–	0.012	24.8	–	–
8) Origin→Fjob→Postsec→Parent	0.037	28.7	0.042	31.3	0.006	23.5	0.013	28.9
9) Origin→Fjob→Fcohab→Parent	0.043	27.4	0.048	28.5	0.035	26.3	0.047	28.5
10) Origin→Fjob→FMarr→Parent	0.129	25.7	0.135	27.5	0.109	25.4	0.125	28.7
11) Origin→Fcohab→Fjob→Parent	0.013	25.0	–	–	0.007	25.3	0.004	24.5
12) Origin→Fmar→FJob→Parent	0.016	22.9	0.008	24.6	0.015	24.6	0.022	29.6
13) Origin→Postsec→Fjob→FCohab→Parent	–	–	0.009	28.9	0.022	29.3	0.027	32.8
14) Origin→Postsec→Fjob→Fmar→Parent	0.055	29.0	0.034	30.0	0.096	30.3	0.072	31.6
15) Origin→Postsec→Fmar→Fjob→Parent	0.012	25.7	–	–	0.007	26.5	–	–
16) Origin→Fjob→Postsec→Fcohab→Parent	0.051	31.6	0.043	30.6	0.007	27.1	0.013	29.3
17) Origin→Fjob→Postsec→FMar→Parent	0.106	29.7	0.119	31.2	0.085	29.8	0.070	31.5
18) Origin→Fjob→Fcohab→Postsec→Parent	0.016	30.0	0.014	29.7	0.016	29.1	0.006	28.7
19) Origin→Fjob→Fcohab→Fmar→Parent	0.006	27.7	0.010	29.9	0.005	27.5	0.013	29.5
20) Origin→Fjob→FMar→Postsec→Parent	0.043	27.6	0.042	29.5	0.019	27.9	0.028	31.3
21) Origin→FCohab→Fjob→Postsec→Parent	–	–	–	–	0.014	29.8	–	–
22) Origin→Fmar→Postsec→Fjob→Parent	0.011	24.0	0.005	26.3	0.006	27.8	–	–
23) Origin→Fmar→Fjob→Postsec→Parent	0.012	26.0	–	–	0.012	26.7	–	–
24) Origin→Postsec→Fjob→Fcohab→Fmar→Parent	0.019	29.6	–	–			–	–
25) Origin→Fjob→Postsec→Fcohab→Fmar→Parent	–	–	–	–	0.020	32.3	–	–
26) Origin→Fjob→FCohab→Postsec→Fmar→Parent	–	–	–	–			–	–
Total probability	**0.781**		**0.590**		**0.742**		**0.564**	
Probability of trajectories passing thro' (percentage of total probability in brackets)								
a) Direct	**.074 (9%)**		**.025 (4%)**		**.095 (13%)**		**.038 (7%)**	
b) Postsec	**.383 (49%)**		**.314 (53%)**		**.327 (44%)**		**.239 (42%)**	
c) Fjob	**.638 (82%)**		**.561 (95%)**		**.562 (76%)**		**.505 (90%)**	
d) Fcohab	**.161 (21%)**		**.124 (21%)**		**.141 (19%)**		**.116 (21%)**	
e) Fmar	**.458 (59%)**		**.358 (61%)**		**.437(59%)**		**.345 (61%)**	

a study, the trajectories leading to family formation can be grouped under such categories as "career oriented", "family oriented", "traditional", "modern", and so on.

Let us consider an example to interpret the pattern of trajectories shown in Table 8. As seen in this table, 22 to 24 trajectories have been identified for women from Panel 1 and Panel 2, and these trajectories make up a total probability of 0.781 and .742 respectively, implying that 78 and 74% of all possible trajectories have been captured by them. Among these trajectories, five stand out as dominant ones:

	Panel 1		Panel 2	
Trajectory	Prob.	Age at completion	Prob.	Age at completion
Origin→Parent	.074	18.7	.095	19.4
Origin→FJob→Parent	.062	23.3	.071	23.2
Origin→FJob→FMar→Parent	.129	25.7	.109	25.4
Origin→PostSec→FJob→FMarr→Parent	.055	29.0	.096	30.3
Origin→FJob→PostSec→FMarr→Parent	.106	29.7	.085	29.8
Total	.426		.456	

These five dominant trajectories make up 43 and 46% of all possible trajectories that women from Panel 1 and Panel 2 respectively traced in their early life course [or, one can say that 43-46% of women followed these dominant five trajectories]. Changes over panels in the conditional probabilities of making these trajectories are interesting and worth pursuing with later panels. In contrast, changes in ages at completion are minimal; however, these ages at completion of respective trajectories vary a great deal from 19 years to 30 years. The last two trajectories are a concrete manifestation of the strong effect of education on the postponement of women's childbearing - a delay of three years or more compared to the other three trajectories. These dominant trajectories are experienced by men as well (see Table 8), in particular the trajectories Origin→FJob→FMar→Parent and Origin→FJob→PostSec→FMarr→Parent.

In general, the larger the number of transitions that make up a sequence, the larger the age at completion of that sequence, but it is not necessary to be so always. Most of these dominant trajectories have start of work as the first transition. Clearly, getting a job is important before getting married or starting parenthood, both for men and women. As seen in Table 8, men and women follow different trajectories to first birth, with different probabilities as well as different times to complete the trajectory (with different durations in each state).

The bottom panel of Table 8 shows the probabilities of trajectories that pass through specific events. These probabilities are obtained simply by adding the probabilities of those trajectories that go through a specific event of interest and therefore are not mutually exclusive. As seen in the table, the probability of selected trajectories going through completion of some form of postsecondary education (Postsec) ranges from .239 to .383, with a higher probability for women than for men. This probability, however, depends on the number of trajectories selected under the confidentiality criterion and therefore should be divided by the total probability for comparison purposes; the percentages thus obtained are given in brackets. These percentages

reveal remarkable stability over panels in the case of union formation. Thus, about 19-21% of young Canadian men and women would arrive at parenthood through cohabitation, while 59-61% would arrive at parenthood through marriage (these two phenomena being not mutually exclusive). The probability of direct transition to parenthood shows an increase over panels, while the probabilities of trajectories to parenthood through postsecondary education and first job show a decrease over panels - a possible explanation being that young Canadians in Panel 2 may be facing a difficult task of completing postsecondary education or finding an adequate job before taking on parental roles.

Table 9 highlights the differentials in trajectories by social class. The confidentiality requirement of at least 10 cases for publication purposes results in smaller number of trajectories, especially for the missing category of social class. It also highlights the complexity created by highly diverse life course trajectories of young women and men, complexity often being associated with small numbers. Some of the salient differentials by social class in trajectories to parenthood are pointed out here, focusing mostly on the dominant trajectories made by young women and men belonging to different social classes.

a) A direct transition to parenthood (without experiencing any other early life events considered in this study) among young Canadian women and men cannot be ignored. For example, among women from Panel 1 (see Table 9a), while only 2% of women belonging to high social status experience this direct transition, the percentage increases steadily to 7%, 10% and even as high as 16% for women belonging to middle, low and "missing" social status categories. The corresponding percentages for women from Panel 2 (see Table 9c) show a similar steady increase from 3% to 7% to 14% and 20% respectively, thus showing an overall increase over the panels as well. The same pattern can be found for men, although the corresponding probabilities are much lower (Tables 9b and 9d).

b) Considering those trajectories that have 5% probability or more, three dominant trajectories can be identified for women of high social class from Panel 1 (Table 9a), namely Origin→Fjob→Postsec→Fmar→Parent, Origin→Fjob→Fmar→Parent, and Origin→Fjob→Postsec→Parent. The probabilities of these three trajectories add to 0.23. Women from Panel 2 (Table 9c), however, made their transition to parenthood predominantly through two similar (or same[16]) trajectories, namely Origin→Fjob→Postsec→Fmar→Parent and Origin→Postsec→Fjob→Fmar→Parent, whose probabilities add to 0.38. In any case, getting a job and completing postsecondary education are important steps to marriage and parenthood. A similar picture can be seen also for men from both the panels, except for a singular variation among men from Panel 2 (Table 9d) who have a probability 0.07 of making a trajectory to parenthood through cohabitation (that is, Origin→Fjob→Fcohab→Postsec→Parent).

c) The trajectories to parenthood among women of middle social class from both the panels are similar to those for women of high social class but their dominant trajectory is:

[16] As was pointed out in footnote 13, the timings of completion of postsecondary education and first job were not precisely measured, thus leading to the possibility that the sequence program arranges these two events in any order if one follows another in the same year. Thus the sequences Origin→Fjob→Postsec→ Fmar→Parent and Origin→Postsec→Fjob→Fmar→Parent are not distinguishable.

Table 9: Probabilities and ages at completion of trajectories to Parenthood by social class and by gender, ages 18-29, SLID 1993-1998 Panel
a) Women

	High		Middle		Low		Missing	
	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion
1) Origin→Parent	0.024	19.5	0.072	19.1	0.102	18.0	0.163	18.5
2) Origin→Fjob→Parent	0.040	25.0	0.070	22.6	0.071	22.4	0.072	24.9
3) Origin→Fcohab→Parent	–	–	0.013	21.6	0.030	22.2		
4) Origin→Fmar→Parent	0.019	22.8	0.042	21.0	0.079	21.1	0.036	21.7
5) Origin→Postsec→Fjob→Parent	–	–	–	–	–	–	–	–
6) Origin→Postsec→Fmar→Parent	–	–	–	–	–	–	–	–
7) Origin→Fjob→Postsec→Parent	0.059	28.6	0.039	29.1	–	–	–	–
8) Origin→Fjob→Fcohab→Parent	0.043	26.4	0.029	28.1	0.053	26.6	–	–
9) Origin→Fjob→Fmar→Parent	0.078	26.2	0.111	26.1	0.137	24.8	0.120	26.2
10) Origin→Fcohab→Fjob→Parent	–	–	0.007	26.3	0.034	22.9	–	–
11) Origin→Fmar→Fjob→Parent	–	–	0.011	22.3	–	–	–	–
12) Origin→Postsec→Fjob→Fcohab→Parent	–	–	–	–	–	–	–	–
13) Origin→Postsec→Fjob→Fmar→Parent	0.048	29.1	0.048	29.0	0.049	26.7	–	–
14) Origin→Postsec→Fmar→Fjob→Parent	0.019	25.8	–	–	–	–	–	–
15) Origin→Fjob→Postsec→Fcohab→Parent	–	–	–	–	0.069	32.0	–	–
16) Origin→Fjob→Postsec→Fmar→Parent	0.095	29.1	0.084	29.7	0.078	26.5	–	–
17) Origin→Fjob→Fcohab→Postsec→Parent	–	–	–	–	–	–	–	–
18) Origin→Fjob→Fcohab→Fmar→Parent	–	–	–	–	–	–	–	–
19) Origin→Fjob→Fmar→Postsec→Parent	0.045	27.3	0.019	28.0	0.058	26.6	–	–
20) Origin→Fmar→Postsec→Fjob→Parent	–	–	0.005	24.5	–	–	–	–
21) Origin→Fmar→Fjob→Postsec→Parent	–	–	0.011	27.7	0.018	24.5	–	–
22) Origin→Postsec→Fjob→Fcohab→Fmar→Parent	–	–	0.029	30.5	–	–	–	–
Total Probability	**0.471**		**0.589**		**0.777**		**0.391**	
Probability of trajectories passing thro' a specific event (with percentage of total probability in brackets)								
a) Direct	**.024 (5%)**		**.072 (12%)**		**.102 (13%)**		**.163 (42%)**	
b) Postsec	**.266 (56%)**		**.235 (40%)**		**.272 (35%)**		–	
c) Fjob	**.427 (91%)**		**.463 (79%)**		**.567 (73%)**		**.192 (49%)**	
d) Fcohab	**.043 (9%)**		**.078 (13%)**		**.186 (24%)**		–	
e) Fmar	**.304 (64%)**		**.360 (61%)**		**.419 (54%)**		**.156 (40%)**	

d)

Table 9 Contd: Probabilities and ages at completion of trajectories to Parenthood by social class and by gender, ages 18-29, SLID 1993-1998 Panel
b) Men

	High		Middle		Low		Missing	
	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion
1) Origin→Parent	0.018	23.1	0.021	15.8	0.028	18.4	0.049	23.2
2) Origin→Fjob→Parent	0.032	24.9	0.046	25.0	0.046	23.8	0.067	24.5
3) Origin→Fcohab→Parent	–	–	–	–	–	–	–	–
4) Origin→Fmar→Parent	–	–	–	–	–	–	–	–
5) Origin→Postsec→Fjob→Parent	–	–	0.008	27.8	–	–	–	–
6) Origin→Postsec→Fmar→Parent	–	–	–	–	–	–	–	–
7) Origin→Fjob→Postsec→Parent	–	–	–	–	–	–	0.139	32.8
8) Origin→Fjob→Fcohab→Parent	–	–	0.069	28.9	0.049	27.5	–	–
9) Origin→Fjob→Fmar→Parent	0.076	28.6	0.136	27.2	0.204	27.0	0.097	25.7
10) Origin→Fcohab→Fjob→Parent	–	–	–	–	–	–	–	–
11) Origin→Fmar→Fjob→Parent	–	–	0.011	24.0	–	–	–	–
12) Origin→Postsec→Fjob→Fcohab→Parent	–	–	–	–	0.032	28.2		
13) Origin→Postsec→Fjob→Fmar→Parent	–	–	0.036	30.0	–	–	0.028	27.1
14) Origin→Postsec→Fmar→Fjob→Parent	–	–	–	–	–	–	–	–
15) Origin→Fjob→Postsec→Fcohab→Parent	–	–	0.060	31.0	–	–	–	–
16) Origin→Fjob→Postsec→Fmar→Parent	0.222	34.5	0.111	30.2	0.171	30.6	–	–
17) Origin→Fjob→Fcohab→Postsec→Parent	–	–	0.023	30.4	–	–	–	–
18) Origin→Fjob→Fcohab→Fmar→Parent	–	–	–	–	–	–	–	–
19) Origin→Fjob→Fmar→Postsec→Parent	–	–	0.054	28.7	–	–	–	–
20) Origin→Fmar→Postsec→Fjob→Parent	–	–	–	–	–	–	–	–
21) Origin→Fmar→Fjob→Postsec→Parent	–	–	–	–	–	–	–	–
22) Origin→Postsec→Fjob→Fcohab→Fmar→Parent	–	–	–	–	–	–	–	–
Total Probability	**0.346**		**0.575**		**0.529**		**0.381**	
Probability of trajectories passing thro' a specific event (with percentage of total probability in brackets)								
a) Direct	**.018 (5%)**		**.021 (4%)**		**.028 (5%)**		**.049 (13%)**	
b) Postsec	**.222 (64%)**		**.292 (51%)**		**.203 (38%)**		**.167 (44%)**	
c) Fjob	**.330 (95%)**		**.554 (96%)**		**.502 (95%)**		**.331 (87%)**	
d) Fcohab	**–**		**.152 (26%)**		**.081 (15%)**		**–**	
e) Fmar	**.298 (86%)**		**.348 (60%)**		**.375 (71%)**		**.125 (33%)**	

Table 9 Contd: Probabilities and ages at completion of trajectories to Parenthood by social class and by gender, ages 18-29, SLID 1996-2001 Panel
c) Women

	High		Middle		Low		Missing	
	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion
1) Origin→Parent	0.035	18.7	0.066	18.0	0.139	18.4	0.196	21.5
2) Origin→Fjob→Parent	0.020	23.6	0.085	23.4	0.124	22.0	0.028	21.8
3) Origin→Fcohab→Parent	0.031	22.7	0.014	22.1	–	–	0.029	23.9
4) Origin→Fmar→Parent	–	–	0.043	23.2	0.063	22.4	0.072	26.7
5) Origin→Postsec→Fjob→Parent	–	–	–	–	–	–	–	–
6) Origin→Postsec→Fmar→Parent	–	–	–	–	–	–	0.030	26.3
7) Origin→Fjob→Postsec→Parent	–	–	0.012	25.7	–	–	–	–
8) Origin→Fjob→Fcohab→Parent	–	–	0.043	27.3	0.031	24.4	0.035	22.7
9) Origin→Fjob→Fmar→Parent	0.044	28.5	0.112	25.1	0.160	24.7	0.106	24.0
10) Origin→Fcohab→Fjob→Parent	–	–	–	–	–	–	–	–
11) Origin→Fmar→Fjob→Parent	–	–	0.010	25.5	0.035	22.7	–	–
12) Origin→Postsec→Fjob→Fcohab→Parent	–	–	0.022	28.4	–	–	–	–
13) Origin→Postsec→Fjob→Fmar→Parent	0.193	32.67	0.096	28.1	0.049	29.6	–	–
14) Origin→Postsec→Fmar→Fjob→Parent	–	–	0.012	26.5	–	–	–	–
15) Origin→Fjob→Postsec→Fcohab→Parent	–	–	0.044	30.4	–	–	–	–
16) Origin→Fjob→Postsec→Fmar→Parent	0.188	30.01	–	–	–	–	0.047	28.7
17) Origin→Fjob→Fcohab→Postsec→Parent	–	–	–	–	–	–	–	–
18) Origin→Fjob→Fcohab→Fmar→Parent	–	–	–	–	–	–	–	–
19) Origin→Fjob→Fmar→Postsec→Parent	–	–	0.027	28.1	–	–	–	–
20) Origin→Fmar→Postsec→Fjob→Parent	–	–	–	–	–	–	–	–
21) Origin→Fmar→Fjob→Postsec→Parent	–	–	0.011	26.3	–	–	–	–
22) Origin→Postsec→Fjob→Fcohab→Fmar→Parent	–	–	–	–	–	–	–	–
Total Probability	**0.512**		**0.595**		**0.602**		**0.542**	
Probability of trajectories passing thro' a specific event (with percentage of total probability in brackets)								
a) Direct	**.035 (7%)**		**.066 (11%)**		**.139 (23%**		**.196 (36%)**	
b) Postsec	**.381 (74%)**		**.224 (38%)**		**.049 (8%)**		**.077 (14%)**	
c) Fjob	**.445 (87%)**		**.474 (80%)**		**.399 (66%)**		**.216 (40%)**	
d) Fcohab	**.031 (6%)**		**.123 (21%)**		**.031 (5%)**		**.064 (12%)**	
e) Fmar	**.425 (83%)**		**.311 (52%)**		**.307 (51%)**		**.255 (47%)**	

Table 9 Contd: Probabilities and ages at completion of trajectories to Parenthood by social class and by gender, ages 18-29, SLID 1996-2001 Panel
d) Men

	High		Middle		Low		Missing	
	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion	Trajectory Probability	Age at completion
1) Origin→Parent	0.013	18.4	0.027	18.5	0.032	17.7	0.110	24.6
2) Origin→Fjob→Parent	0.020	24.2	0.077	24.9	0.082	24.2	0.024	23.5
3) Origin→Fcohab→Parent	–	–	–	–	–	–	–	–
4) Origin→Fmar→Parent	–	–	–	–	–	–	0.047	24.9
5) Origin→Postsec→Fjob→Parent	–	–	–	–	–	–	–	–
6) Origin→Postsec→Fmar→Parent	–	–	–	–	–	–	–	–
7) Origin→Fjob→Postsec→Parent	–	–	–	–	–	–	–	–
8) Origin→Fjob→Fcohab→Parent	–	–	0.053	29.0	0.082	27.8	0.037	25.3
9) Origin→Fjob→Fmar→Parent	0.057	27.3	0.131	27.3	0.228	28.9	0.052	27.3
10) Origin→Fcohab→Fjob→Parent	–	–	–	–	–	–	–	–
11) Origin→Fmar→Fjob→Parent	–	–	–	–	–	–	–	–
							–	–
12) Origin→Postsec→Fjob→Fcohab→Parent	–	–	0.036	32.6	–	–	–	–
13) Origin→Postsec→Fjob→Fmar→Parent	0.093	33.9	0.050	29.4	–	–	–	–
14) Origin→Postsec→Fmar→Fjob→Parent	–	–	–	–	–	–	–	–
15) Origin→Fjob→Postsec→Fcohab→Parent	–	–	–	–	–	–	–	–
16) Origin→Fjob→Postsec→Fmar→Parent	0.140	32.1	0.058	32.5	0.055	30.4	–	–
17) Origin→Fjob→Fcohab→Postsec→Parent	0.069	33.9	0.022	29.3	–	–	–	–
18) Origin→Fjob→Fcohab→Fmar→Parent	–	–	0.017	30.2	–	–	–	–
19) Origin→Fjob→Fmar→Postsec→Parent	0.037	30.6	0.024	29.7	–	–	–	–
20) Origin→Fmar→Postsec→Fjob→Parent	–	–	–	–	–	–	–	–
21) Origin→Fmar→Fjob→Postsec→Parent	–	–	–	–	–	–	–	–
22) Origin→Postsec→Fjob→Fcohab→Fmar→Parent	–	–	–	–	–	–	–	–
Total Probability	**0.429**		**0.494**		**0.480**		**0.269**	
Probability of trajectories passing thro' a specific event (with percentage of total probability in brackets)								
a) Direct	**.013 (4%)**		**.027 (5%)**		**.032 (7%)**		**.110 (41%)**	
b) Postsec	**.339 (79%)**		**.190 (38%)**		**.055 (11%)**		–	
c) Fjob	**.416 (97%)**		**.468 (95%)**		**.447 (93%)**		**.113 (42%)**	
d) Fcohab	**.069 (16%)**		**.128 (26%)**		**.082 (17%)**		**.037 (14%)**	
e) Fmar	**.327 (76%)**		**.280 (57%)**		**.283 (59%)**		**.099 (37%)**	

Origin→Fjob→Fmar→Parent (with a probability 0.11 – see Tables 9a and 9c). Eight to 10% of women of middle social class pass through postsecondary education before marriage (Origin→Fjob→Postsec→Fmar→Parent). Another 7 to 8% become mothers after entering into labor force (Origin→Fjob→Parent). The most dominant trajectory among men of middle social class is the same as for women (Origin→Fjob→Fmar→ Parent) with a slightly higher probability of 0.13 (Tables 9b and 9d). As with men of high social class, men of middle social class show a singular pattern of passing through cohabitation: Origin→Fjob→Fcohab →Parent and Origin→Fjob→Postsec→Fcohab → Parent.

e) Apart from the conspicuous direct transition to parenthood whose probability has increased from 0.10 to 0.14 over the panels, women belonging to low social status have their dominant trajectory Origin→Fjob→Fmar→Parent with probability increasing from 0.14 in Panel 1 to 0.16 in Panel 2 (Tables 9a and 9c). Women from Panel 2 also have a high probability 0.12 of making the trajectory Origin→Fjob→Parent. Men of low social class from Panel 1 and Panel 2 have their dominant trajectory Origin→Fjob→Fmar→ Parent with much higher probabilities 0.20 and 0.23 respectively (Tables 9b and 9d). The second dominant trajectory for men of low social class from Panel 1 (Table 9b) is Origin→Fjob→Postsec→Fmar→Parent with a probability 0.17 that is higher than what was found for men of middle social class. This indicates that men of low social class from Panel 1 were able to have access to postsecondary education, but it is not clear why the same group of men from Panel 2 were not able to have a similar access or trace a similar trajectory. In contrast, the second dominant trajectory for men of low social class from Panel 2 (Table 9d) is either Origin→Fjob→Parent or Origin→Fjob→Fcohab→ Parent with probability 0.08.

f) As mentioned before, the "missing" category for social class comprises of men and women who are unique in their trajectory patterns. Confidentiality requirement allows us to present only a few trajectories for this category. Women belonging to this category have the highest probability (0.16 and 0.20 respectively for Panels 1 and 2) of making a direct transition to motherhood. The other two predominant trajectories of these women have the same pattern followed by women of middle and low social classes, that is, Origin→Fjob→Fmar→Parent with probability around 0.12 or simply through Origin→Fjob→Parent (with probabilities .07 and .03 for Panels 1 and 2) or Origin → First Marriage → Parenthood (with probabilities .04 and .07 for Panels 1 and 2). Men from Panel 2 and belonging to the missing category also have an appreciable probability 0.11 of experiencing a direct transition to fatherhood. And, like women belonging to the same category, they are also more likely to follow the trajectories through job and/or marriage. What is unique to them, however, is an additional trajectory through postsecondary education: Origin→ FJob→PostSec→Parent (with a probability .14) that is found only for men from Panel 1 (confirming again what was noted above about accessibility to postsecondary education for this group of men) and that is comparable to men of high and middle social classes. This finding highlights the possibility that men classified into this missing category would seem to be a heterogeneous group, and indeed they form an interestingly heterogeneous group is seen in Appendix 2.

By way of summarizing a rather complex picture of trajectories by social class, Table 10 reproduces the percentages of *reported* trajectories that pass through specific events, given at the bottom panels of Table 9 by rearranging them for clarity and for comparative purposes. As discussed earlier, increases in the reported direct transition to parenthood over the panels, especially among women of low social class and among men classified into the missing category of social class, should be of some policy concern.

There is an increase over panels in the percentages of reported trajectories that pass through postsecondary education among men and women of high social classes as well as among women in the missing category. But all other percentages show a decline, especially among men and women belonging to the low social class and among men in the missing category. This point, again, should be relevant to policy makers.

In contrast, passing through first job to parenthood is a rather steady phenomenon, except for men belonging to the missing category, for whom the percentages of reported trajectories have declined by half. This may reflect the availability of job opportunities to specific subgroups of the Canadian population, especially those who do not, or are not able to, avail themselves of some form of postsecondary education, as indicated above.

Passing through cohabitation to parenthood seems to be a steady phenomenon among men of middle and low social classes but a growing phenomenon among men of high social class. Surprisingly, the percentages of reported trajectories through cohabitation have decreased among women of low social class but increased among women of middle social class.

Percentages of reported trajectories that pass through marriage have increased over the panels, particularly substantially for women of high social class. But the percentages have decreased for men of high and low social classes, possibly because of the corresponding increase in the percentages of trajectories through cohabitation. This behavioural change among men and women of high social class is worth examining with future panels.

The above results highlight the importance of parental social status on transitions and trajectories young Canadian women and men make toward parenthood. The other pillar of sociological diversity, namely ethnicity, does not allow us to examine such detailed patterns of transitions and trajectories due to their small number of cases available in the data set.[17]

[17] We have done a multivariate multinomous analysis of specific *groups* of trajectories that allow incorporating ethnicity as a covariate. For limitations of space, these results are not presented here.

Table 10: Percentages of Reported Trajectories to parenthood that pass through specific events - classified by social class and gender, ages 18-29, SLID 1993-1998 and 1996-2001 Panels

Specific event	Panel	Women				Men			
		High	Middle	Low	Missing	High	Middle	Low	Missing
Direct	1993-98	5	12	13	42	5	4	5	13
	1996-01	7	11	23	36	4	5	7	41
Postsecondary	1993-98	56	40	35	–	64	51	38	44
	1996-01	74	38	8	14	79	38	11	–
First Job	1993-98	91	79	73	49	95	96	95	87
	1996-01	87	80	66	40	97	95	93	42
First Cohabitation	1993-98	9	13	24	–	–	26	15	–
	1996-01	6	21	5	12	16	26	17	14
First Marriage	1993-98	64	61	54	40	86	60	71	33
	1996-01	83	52	51	47	76	57	59	37

8. Discussion and Policy Implications

This paper examines the early life course trajectories toward parenthood among young Canadian men and women. The analysis is guided by the theoretical rationale that three pillars of sociological diversity still operate on young Canadians despite alternative claims based on postmodernist paradigms. These are socioeconomic status [class], ethnicity and gender – three proxies for opportunity. Most studies in the past have used cross-sectional or retrospective data on family formation. Using both the retrospective and prospective information collected by the longitudinal Survey of Labour and Income Dynamics, this study contributes to the advancement of our knowledge regarding family formation by examining the patterns and timing of some important transitions and trajectories toward union formation and parenthood.

In examining the transitions and trajectories toward family formation, this study specifically focused on four important research questions: 1) How different are the experiences of family-related events such as cohabitation, marriage, and parenthood of young Canadian men and women born during the period 1964 to 1978 who were mature adults by the beginning of the 21st century? 2) What impact does social status, either their own or of their parents, have on their early life transitions leading to parenthood? 3) Besides parental and personal social status, are there other salient factors that explain the differentials in their experiences of family-related events? 4) What specific advantages does longitudinal information provide in our understanding of young Canadians' experiences of family-related events? We summarize below the salient findings in this study based on these four research questions and point out the specific areas relevant for future social policies.

Discussions have been on-going in recent times on Canada's future needs for an educated workforce in the era of globalization and technological advances. It may be heartening to find that on average, about 65% of young Canadians go for postsecondary education sometime in their pre-adult and adult years and that more women than men do so. It is also found that over cohorts and over the two panels, completion of postsecondary education is taking place earlier and earlier. Yet, the differentials by parental social class are striking. While 90% of young Canadians of high social class take advantage of the opportunities provided to them by their parents to complete some form of postsecondary education, only about 55% of low social status can do so. Since life chances and greater opportunities in the era of globalization are available mostly to those who have some postsecondary education, it is a matter of legitimate concern how to increase these opportunities to young Canadians of low parental status. An innovative pilot project undertaken by the Millennium Scholarships Foundation and the Social Research and Demonstration Corporation (SRDC) to "help students who are most in need of support to access post-secondary studies" has a laudable objective of researching possible solutions to this situation, targeting "students from low-income families whose parents have little or no post-secondary experience" (see SRDC, 2007). There is some indication in this study that men from Panel 1 and belonging to low and missing social class categories were able to take advantage of accessibility to postsecondary education, but the same is not found for men (or women) from Panel 2. It would be worth examining this situation further with the later panels.

This study also finds that norms surrounding the social obligation on young men and women to find a job before going for family formation still have their uniform effects across age cohorts irrespective of parental social class. Besides norms and social obligations, one can also say that this is the way young people themselves want it. Men mostly don't want to be house-husbands, and

women want to establish themselves in a career before taking on parenthood. Both want enough money to afford modern lifestyles. This may be very different from the conventional idea "you can't get married until you can support a family." From the theoretical orientations of this paper, the point is that all these opportunities are not available to everybody. Many go for a job first, even for the sake of completing postsecondary education that is necessary for a good paying job later. Thus, no matter what the parental social status is, labor force entry has become an important early transition among young Canadians in their life course trajectories to union formation and to parenthood. This does not mean, however, that social status has no more influence on labor force entry of young Canadians. Rather, as revealed by the trajectory analysis, a high percentage of reported trajectories to parenthood, especially among women of middle, low and "missing" social classes, does not pass through labor force entry at all. Besides, although the same patterns of labour force entry exist for both men and women irrespective of their parental social status, it would be more useful to examine further what jobs, hence what income and benefits associated with these jobs, young Canadians from different social strata are able to earn during their life course trajectories.

An examination of transitions to union formation reveals that roughly 25 to 30% of young men and women go for cohabitation in their transition to parenthood. Young Canadians start cohabiting not only at earlier ages but also at a faster rate. This is especially true for men and women from Quebec where the impact of the Quiet Revolution on post-1960 birth cohorts on family transformations is universally acknowledged. As with labour force entry, the proportions cohabiting classified by social class reveal no significant differences among younger cohorts. This is a possible indication that social class differences that used to exist in cohabitation process may be disappearing among more recent cohorts. New social norms and values surrounding cohabitation may be expected to make more profound changes in these and future cohorts. However, there are differences in the timing of entry into cohabitation by social class, as revealed by the dynamic hazards models presented in this study. Men and women of low and middle social classes generally start cohabitation early, while those of high social class start cohabiting later. This affects the percentages of reported trajectories to parenthood that pass through cohabitation, as confirmed by the trajectory analysis presented in the last section.

We see also a clear trend among young Canadians to delay their family formation through marriage, again revealing the disparity by social strata. Around 70% of women and 55% of men would be married by age 35, with their median ages at marriage being 28 and 32 respectively. Comparing the evolution of cohabitation and marriage processes in terms of the ages by which the cumulative proportions reach 10 and 25%, there is clear evidence that among young Canadians, cohabitation is no longer simply seen as a "prelude" to marriage. Rather, cohabitation is an end in itself. Not only that. Our analysis indicates that cohabitation reduces the likelihood of marriage of both men and women, thus indicating that it is slowly replacing marriage.

As mentioned earlier, the impacts of social status on earlier life course transitions such as postsecondary education, employment, cohabitation, and marriage, all accumulate over time to have its final impact on transition to parenthood itself. Postponement of first births to higher and higher ages has become a norm among younger Canadians, with a possible consequence of complete avoidance of first births in some specific groups. Thus, we get a final picture telling us that social class differentials are nowhere as striking as in entry into parenthood. As with marriage, first births

are not only being postponed to higher ages but the proportions of women having first births show a clear decline by social class categories. Young women belonging to high social class are either postponing their entry into parenthood or avoiding it altogether. An interesting finding in this study, not found in earlier studies, is the higher likelihood of French-speaking women to have first births than women in the rest of Canada, although they have been found to have the lowest fertility in the country.

According to the theoretical rationale behind this study, social class, specifically parental social class, is a primary explanatory variable for young Canadians' trajectories to family formation and parenthood. And, indeed parental social class comes out as a strong explanatory variable in many, if not all, of the transitions and trajectories considered in this study. But parental social class alone is not sufficient to explain the trajectories since in our modern globalization era, young Canadians can move up in the ladder of social status through their own efforts through postsecondary education and jobs with good wages and benefits.[18] Our finding that years of schooling and personal income earned by young men and women themselves have large effects on certain transitions confirms the idea that not only parental but also personal social status need to be considered in a study of trajectories to parenthood. Although personal income operates more strongly with men, its effect is in no way lessened in the case of women, which is not surprising given the spectacular entry of women into labor force. As the life table analysis revealed, the proportions of women entering into labor force are almost the same as those of men. And, it is all the more visible in the case of women of high parental social status; these women have greater opportunities to get employed than women of low parental social status. The cumulative impact of all these changes in labor force participation and postsecondary education among women can be seen in such a large difference between women of high and low social status in their entry into parenthood.

The trajectory analysis presented in this study brings out clearly the relevance and importance of labour force participation for family formation, no matter for men or for women, and the strong effects of postponement of marriage and/or parenthood, especially among women. At this juncture comes the much greater importance of parental (as well as evolving personal) social status that clearly defines the trajectories to family formation and parenthood among young Canadian men and women. Completing postsecondary education and getting a job are important steps to marriage and parenthood for women and men of high and middle social classes, and thus define their dominant trajectories. Passing through first job to family formation and parenthood seems to be an established phenomenon among young men and women. The polarization that exists between the different social status groups is clearly anchored, therefore, on completion of postsecondary education before family formation, either through marriage or cohabitation.

A specific point of discussion arises by way of revisiting the well-known hypotheses in the existing literature regarding family formation, specifically regarding marriage, such as Becker's economic independence hypothesis and Oppenheimer's career entry hypothesis. Given the larger perspective

[18] With this in mind, we did a multivariate analysis of specific trajectories (not presented in this Paper) to examine the net effects of both parental and personal social status in the presence of other variables like ethnicity and health conditions. The multinomous logistic regression analysis corroborated not only the importance of parental social status in specific trajectories but also of variables associated with personal social status such as years of schooling, employment status, and personal income.

that we have adopted in this study, we can extend the above hypotheses to cohabitation and first birth processes as well, and consider the impact of education, labour force participation and income on these processes.[19] We are looking at these three variables – education, labour force participation, and earnings – as constituting the evolution of personal social status of individuals in this study. The impacts of these three variables on the three *interdependent* processes of cohabitation, marriage and first birth as found in this study are as follows: 1) As for cohabitation, we find that additional years of schooling reduce the likelihood of cohabitation among women. Employment influences formation of cohabiting unions among women but not among men; that is, women who are employed only part of the year are more likely to cohabit than women employed all year. Personal earnings have significant and positive impact on forming a cohabiting union for both men and women, especially of younger cohorts (aged 18-23 in 1993 or 1996) who are more likely to cohabit in the first place. 2) As for marriage, we find that additional years of schooling have no significant impact on men's marriage but they do on women's; however, we also find that schooling may be losing its impact in more recent cohorts and that considerations other than schooling may be playing a role in women's decision to marry. Unemployed men are the least likely to marry (confirming Becker's hypothesis), while women employed part year are the least likely to marry (confirming Oppenheimer's hypothesis). Earnings have significant positive impact on marriage in the case of men (confirming again Becker's hypothesis) but such an effect is not seen for women at all (thus unable to substantiate Oppenheimer's hypothesis). 3) As for first birth, the increasing and significantly delaying impact of schooling is evident for younger cohorts, especially of women. Men employed part year have lower chance of becoming fathers compared to men employed all year. But employment impacts women the other way; women employed part year and women unemployed all year have greater chance of becoming mothers than women employed all year. Increase in earnings increases the likelihood of becoming fathers but not the likelihood of becoming mothers.

The above summary of the findings from this study makes it clear that we can no longer look at marriage as *the* family formation process in Canada (the same possibly applies to other developed societies in general, despite the varying degrees of legal recognition of cohabitation). As revealed by the model of marriage, prior cohabitation reduces the likelihood of marriage of both men and women, thus confirming that cohabitation is no longer a prelude to marriage but has replaced marriage, particularly among women. Thus, we find that if women employed part year are the least likely to marry, they are also more likely to cohabit and are more likely to become mothers than women employed all year. It is a clear indication, as we argued elsewhere, that these three processes

[19] According to Becker, labor force participation and education have negative impact on women's marriage but positive impact on men's marriage. Specifically, the economic independence hypothesis argues that women's employment will increase the incidence of delayed marriage or of non-marriage. As Oppenheimer pointed out (1995:109), "the non-marriage alternative is the more popular interpretation" but according to her own career entry hypothesis, the effect of women's employment "is primarily to delay marriage, with perhaps some possible increase in the risk of non-marriage". Education obviously delays entry into marriage for both men and women, but Oppenheimer argued that women's labour force participation and earnings could have a positive impact on the timing of marriage. We shall examine these two perspectives here with the findings from this study, leaving aside the more obvious and less contentious perspective of the Blossfeld-Tsuya-Mason's family system hypothesis according to which the influence of labour force participation and earnings on family formation depends on the family system or family types in which individuals experience their transitions.

need to be studied together in any study on family formation. Studying only one of these processes as a family formation process does not capture reality adequately.

The picture of early life course trajectories to parenthood among young Canadian men and women as obtained in this study was feasible, thanks to the longitudinal data (both retrospective and prospective) available through the Survey of Labour and Income Dynamics. It would be worth pursuing the changes and trends over the next two panels of SLID. Longitudinal data, however, are not a panacea for all the ills of cross-sectional data. Longitudinal data have their own limitations, especially the problem of attrition as was pointed out elsewhere. It is difficult to estimate the bias introduced by higher and higher incidence of attrition over the panels, a topic that would be worth paying attention to in future studies.

A dynamic analysis of the type used in this study needs finer measurement of data on timings of events. Although most of the timing variables used in this study were measured in years and months, two of them – completion of postsecondary education and entry into labour force – were measured only in years which made the analysis of trajectories a bit difficult in terms of knowing the exact sequence of transitions. Apart from this single deficiency in SLID data, we found the results on trajectories obtained using the SLID data closely correspond to the results that we obtained in our earlier studies using other data sets such as those from the General Social Survey on Family and Friends. This only bears evidence to the excellent sampling procedures used by Statistics Canada.

Epilogue

Family formation has been one of the social processes to which national policies in the developed world have paid little attention in the past. And, Canada is no exception. With concerns about delays in transitions to adulthood and continuing below replacement levels of fertility, we may need to pay greater attention to one of the fundamental processes that build our future society. A study of patterns of life course trajectories experienced by younger cohorts as done in this paper is essential to understanding where the society is heading, and how the built-in social structures play their hidden roles in what are usually assumed to be “normal” life courses. We have focused in this study on three important social structures, namely gender, social class and ethnicity. Gender differences in life course trajectories to family formation and parenthood do exist, but it looks like that they are not as important as the differences due to social class, either parental or personal. That is where future policies can be directed. Future policies need to aim at ameliorating the conditions and opportunities available to socially disadvantaged young such that they too could fully use them in their life course not only toward self fulfillment in terms of satisfying intimate relationships and family ties but also toward the reproduction of Canadian society. The empirical findings presented in this study highlight the depth and complexity of the policy challenges arising from the diversity of life-courses among young Canadians. Whatever the validity of stereotypes of past, 'traditional' family-life-cycles, it is clear that heterogeneity is now the norm. Cultural norms and social structures provide more opportunity for choice than in the past, although these opportunities are far from being evenly distributed. 'One size fits all' policies will not suffice.

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Appendix Table 1: An illustration of output from Structural Equation Model of Social Class

Legend: EDUCFATH, EDUCMOTH = education of father, mother; HOMEOWN = home ownership; ECONINC = economic family income; *** = significant at 1% or less.

a) Women aged 18-29 – Panel 1

Sample Size = 3277

Covariance Matrix

	EDUCFATH	EDUCMOTH	HOMEOWN	ECONINC
EDUCFATH	0.5376			
EDUCMOTH	0.2814	0.4740		
HOMEOWN	0.0056	0.0022	0.2383	
ECONINC	0.3730	0.3728	0.6783	12.5020

Measurement Equations:

Path	Unstandardized	Standardized	Error	R^2
SOCCLASS → EDUCFATH	0.5246***	0.72	0.2624***	0.51
SOCCLASS → EDUCMOTH	0.5363***	0.78	0.1864***	0.61
SOCCLASS → HOMEOWN	0.0068	0.01	0.2383***	0.00
SOCCLASS → ECONINC	0.7015***	0.20	12.010***	0.04

Goodness of Fit Statistics:

Degrees of Freedom = 1

Normal Theory Weighted Least Squares Chi-Square = 0.3792 (P = 0.5380)

90% Confidence Interval for RMSEA = (0.0 ; 0.03914)

b) Men aged 18-29 – Panel 1

Sample Size = 3186

Covariance Matrix

	EDUCFATH	EDUCMOTH	HOMEOWN	ECONINC
EDUCFATH	0.5301			
EDUCMOTH	0.3138	0.4895		
HOMEOWN	0.0199	0.0255	0.2267	
ECONINC	0.4322	0.4460	0.6569	13.0995

Measurement Equations:

Path	Unstandardized	Standardized	Error	R^2
SOCCLASS → EDUCFATH	0.5700***	0.75	0.2049***	0.61
SOCCLASS → EDUCMOTH	0.5505***	0.82	0.1863***	0.62
SOCCLASS → HOMEOWN	0.04207***	0.08	0.2248***	0.01
SOCCLASS → ECONINC	0.7799***	0.21	12.507***	0.05

Goodness of Fit Statistics:

Degrees of Freedom = 2

Full Information ML Chi-Square = 2.1980 (P = 0.3332)

90% Confidence Interval for RMSEA = (0.0 ; 0.03605)

Appendix Table 2: Hazard ratios from Cox models of First Birth, classified by gender and panels. (the model includes marital status and provincial unemployment rate variables)

HR = Hazard Ratio	Men				Women			
	Panel 1		Panel 2		Panel 1		Panel 2	
	HR	P-value	HR	P-value	HR	P-value	HR	P-value
Time-invariant covariates								
Age in 1993\96								
18-20 (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
21-23	0.51	0.011	0.71	0.157	0.50	0.009	0.86	0.312
24-26	0.22	0.000	0.49	0.002	0.21	0.000	0.60	0.002
27-29	0.12	0.000	0.40	0.000	0.11	0.000	0.54	0.000
Social Class								
Low (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Middle	0.99	0.953	0.77	0.025	1.04	0.743	0.81	0.051
High	0.78	0.163	0.52	0.000	0.69	0.030	0.62	0.004
Missing	0.93	0.745	1.01	0.951	0.95	0.811	1.05	0.739
Mother Tongue								
English (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
French	0.96	0.850	1.20	0.262	1.55	0.013	1.29	0.148
Other	0.75	0.255	1.10	0.566	0.97	0.855	0.79	0.169
Visible Minority								
No (Ref)	1.00	-	1.00	-	1.00		1.00	-
Yes	1.28	0.387	0.81	0.286	0.96	0.897	0.90	0.576
Region93/96								
Atlantic (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Quebec	2.16	0.015	1.46	0.070	1.81	0.012	0.95	0.786
Ontario	4.63	0.000	2.16	0.001	4.49	0.000	1.23	0.184
Prairie	6.63	0.000	2.90	0.000	6.51	0.000	1.43	0.101
BC	4.26	0.000	1.42	0.152	4.48	0.000	1.17	0.383
Urban93/96								
Urban (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Rural	1.16	0.179	1.33	0.007	1.01	0.901	1.18	0.046
Time-varying covariates								
Employment status								
Employed all year (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Employed part year	1.11	0.342	1.03	0.791	1.38	0.004	1.26	0.026
Unemployed all year	0.60	0.259	1.66	0.002	0.88	0.645	2.03	0.000
Years of schooling	0.93	0.000	1.00	0.974	0.92	0.000	0.91	0.021
Personal income	0.97	0.487	1.05	0.000	0.87	0.003	0.93	0.102
Marital Status								
Married only (Ref)	1.00	-	1.00	-	1.00	-	1.00	-
Cohabited only	0.60	0.000	0.60	0.000	0.43	0.000	0.60	0.000
Married after cohabitation	0.94	0.793	1.27	0.231	0.75	0.174	1.40	0.041
Single	0.07	0.000	0.05	0.000	0.12	0.000	0.17	0.000
Unemployment rate	1.24	0.000	1.12	0.000	1.28	0.000	1.03	0.325
No. of subjects	2917		2962		2572		3050	
No. of failures	745		809		891		1450	
Log pseudolikelihood	-3406		-3509		-4080		-7028	