Effects of Parental Cohabitation on Romantic Relationships of Adult Children

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Abstract

Although an extensive body of literature has been written on cohabitation, little information exists on how parental cohabitation affects the lives of their adult children. I present evidence for an intergenerational effect of cohabitation using nationally representative data. Additionally, I explore the effects of parent cohabitation on the divorces and nonmarital births of adult children. Data for this study was taken from Cycle 20 of the Canadian General Social Survey, collected in 2006. Findings indicate that parental cohabitation significantly increases the likelihood of offspring cohabitation, even after inclusion of controls. Individual cohabitation remains a strong predictor of divorce and nonmarital childbearing. Successful parental cohabitations (i.e. not ending in divorce) decrease likelihood of divorce for adult children. Parental cohabitation increases odds of nonmarital childbearing for adult children through their increased likelihood of cohabitation.

Keywords: cohabitation, divorce, nonmarital birth, children and cohabitation, children and divorce, life course, Canada

Introduction

Premarital relationships have changed dramatically in the last forty years. Cohabitation has become a normative step in relationship formation, with over half of all marriages now beginning with cohabitation (Bumpass & Lu, 2000). Stigmas against cohabitation have also decreased, further spurring its integration into contemporary societal norms (Amato & Booth, 1997). Two facts have been widely cited in regards to this relationship type: rates of cohabitation have risen, and cohabitations are relatively unstable (Smock, 2000). Between 1990 and 1994, over 50% of couples cohabited prior to marriage compared to about 10% of those couples marrying between 1965 and 1974. Correspondingly, the number of women in their late 30s who reported ever having cohabited increased from 30% in 1987 to 48% in 1995 (Bumpass & Lu, 2000). The stability of cohabitation has also been called into question. Of couples who cohabit, Bumpass and Lu (2000) showed that approximately 40% of these relationships end within five years while 55% marry during that same time period. This leaves only 5% of cohabitational relationships continuing as nonmarital five years after their inception.

However, much about cohabitation is still unknown, including how parental cohabitation affects children. Given increases of cohabitation rates, it stands to reason that even more children and adults will experience cohabitation in some form, either their parents or their own, at some point in their lives. What information does exist focuses largely on cohabiting partnerships which include the child's parent and non-biologically related boyfriend or girlfriend (Manning & Lamb, 2003; Raley & Wildsmith, 2004). Little is known about how cohabitation between two biological parents affects children. Further, no studies to date have focused on how parental cohabitation may affect the romantic and family relationships of their children into adulthood. Because family context can exert a strong influence on the lives of children, understanding how parental

cohabitation affects children even into adulthood is important in assessing how relationship patterns are formed across generations. Parent relationship histories may exert influence on the nonmarital cohabitations, marriages, divorces and childbearing patterns of their adult children. It is important to examine the relationship between parent and child family formation behavior because it may foretell how partnerships and other family relationships will unfold for children later in life.

I explore the effects of parental cohabitation on adult offspring relationship formation. I address four main questions. First, are children whose parents cohabited more likely to cohabit themselves? Research has shown that couples who cohabit prior to marriage are at greater risk of divorce (Axinn & Thornton, 1992; Lillard, Brien, & Waite, 1995). Axinn and Thornton (1992) found cohabiters to be less committed to their relationships and more accepting of marital dissolution. Selection effects, such as liberal personal ideologies and family of origin characteristics, are frequently used to explain why marriages formed by cohabiting couples are more likely to end in divorce. Moreover, parents who divorce are more likely to have children who also divorce (Amato, 1996). This intergenerational effect may be present for parental cohabitation as well, leading to a second and third research question. Does parental cohabitation increase the likelihood of divorce among adult children? And, does parental cohabitation moderate the effect of parental divorce on children's divorce such that the effect of parental cohabitation and parental divorce is much stronger than parental cohabitation by itself?

Fourth, does parental cohabitation affect the likelihood of offspring having a nonmarital birth? Increasing rates of births to cohabiters have largely been driven by increases in the overall number of people cohabiting and may suggest that cohabitation has been accepted by couples as a marriage alternative (Raley, 2001). Families formed by cohabiters with children are also less

stable than married families, and children within cohabiting families often suffer from greater disadvantages than do children growing up in married households (Wu, Bumpass, & Musick, 2001; Wu & Musick, 2008). As many nonmarital births are increasingly born into cohabitational relationships, knowing how parental factors influence the likelihood of nonmarital births among adult children will be advantageous to understanding family formation across generations. Finally, interaction effects will be tested in attempt to answer how parent cohabitation and divorce affects child relationship formation as well as how parent cohabitation may work through child cohabitation to affect likelihood of divorce and nonmarital birth.

Analyses are performed using Cycle 20 of the Canadian General Social Survey. This survey was collected in 2006 and is unique in that it includes retrospective questions about relationship history of the respondent's birth parents, including whether the parents cohabited nonmaritally prior to the respondent's birth, if their cohabitation continued after the birth occurred or transitioned to marriage, and if the parents remained together through the respondent's adolescence. The recentness (2006) of this data combined with its cross-sectional design offer an opportunity to assess parental cohabitation as an explanatory mechanism for a representative sample of adults.

Prior Research and Research Hypotheses

Much like in the United States, cohabitation in Canada has become increasingly common phenomenon for adults of all ages. Cohabitation is the first union type for fifty percent of young Canadians (Wu, 2000). For young people, cohabitation can be seen as a trial or test run at a more permanent union. However, couples who cohabit prior to marriage without being engaged or having plans to soon become so have been found to have less stable unions (Brown & Booth,

1996). These relationships dissolve frequently and have been found to be less satisfying than marriage (Smock, 2000; Carlson, McLanahan, & England 2004; Manning & Smock, 2005).

Previous work on cohabitation in the United States found that its meaning has changed across birth cohorts with younger people being more likely to cohabit and more likely to divorce (Dush, Cohan, & Amato, 2003). The authors assessed marital quality and stability for two marriage cohorts – couples married between 1964 and 1980 and those married between 1981 and 1997. As cohabitation increased, marital satisfaction and quality decreased regardless of economic and demographic factors. Other studies have shown that cohabitation is a less integrated union than marriage. Cohabiting couples are less likely to join finances and support each other monetarily (Blumstein & Schwartz, 1983; Heimdal & Houseknecht, 2003; Winkler, 1997). Compared to those who are married, cohabiters are also more likely to be unfaithful to their partner, an effect that remains even after controlling for personal values regarding extramarital sex (Treas & Giesen, 2000).

Cohabitation has increasingly involved children as well. As rates of nonmarital births continue to rise, many single parent families are in reality constituted of cohabiting couples. Increasing rates of births to cohabiters have largely been driven by increases in the overall number of people cohabiting and may suggest that cohabitation has been accepted by couples as a marriage alternative (Raley, 2001). Families formed by cohabiters with children are also less stable than married families, and children within cohabiting families often suffer from greater disadvantages than do children growing up in married households (Wu, Bumpass, & Musick, 2001; Wu & Musick, 2008). While both findings may be exacerbated by selection of the parents into cohabitation, recent work has found that lower marital quality among cohabiters, particularly

for whites, is mainly driven by the influence of nonmarital births on the relationship (Tach & Halpern-Meekin, 2009).

Although cohabiting couples have fewer children than married couples and are more likely to remain childless (Bachrach, 1987; Rindfuss & VandenHeuvel, 1990), over one third of births in the United States now take place outside of marriage, with a large percentage of these nonmarital births occurring within cohabiting relationships (Freid, Prager, MacKay, & Xia, 2003). Among births to unmarried women under age 40, Bumpass and Lu (2000) estimated that those occurring to cohabiting parents increased from 29% in the early 1980s to 39% in the early 1990s. Furthermore, this increase accounts for nearly all the rise in nonmarital childbearing between these two periods (Bumpass & Lu, 2000).

New research on serial cohabitation has also suggested that individuals who cohabit with multiple partners are more likely to experience a divorce in their lifetimes (Lichter & Qian, 2008). This provides support for what has been termed the "cohabitation effect hypothesis," suggesting that cohabiters select themselves into relationships which are more likely to end in divorce (DeMaris & MacDonald, 1993; Bennett, Blanc, & Bloom, 1988). This argument suggests that people who are less suitable for marriage are more likely to cohabit than are their peers. Rhoades, Stanley and Markman (2006) found that men who cohabit prior to engagement are less committed to their relationship than are their spouses which may lead to divorce.

Cohabiters have also been found to possess certain characteristics which make them more prone to divorcing later (Teachman, 2003). Number and type of family transitions experienced by children increased their likelihood of cohabiting as adults. Teachman (2003) found that time spent in a cohabiting parent family as a child decreased marriage and increased cohabitation rates for adults as did living in a stepparent family. However, this study reflects

whether the respondent's biological parents were cohabiting after the respondent was born, constituting only 2.3% of the sample, and did not assess whether the respondent's parents had ever cohabited. Teachman and Polonko (1990), however, found that this increased risk of divorce among cohabiters can be explained once duration of the relationship is measured at the beginning of the cohabitation, rather than at marriage. They found no increased risk of divorce among cohabiters once this had been taken into account.

Several studies have shown that cohabiters are more likely to come from divorced households (Axinn & Thornton, 1993; Thornton, 1985, 1991). Using data from the early 1980s, Axinn and Thornton (1993) showed that parental divorce increased likelihood of cohabitation, particularly among women, regardless of whether or not the parent had remarried. Attitudes toward cohabitation by mothers showed a strong influence on the likelihood of cohabitation for their children. Mothers were more likely to hold favorable attitudes toward cohabitation if their child had cohabited. Moreover, children reported more favorable attitudes toward cohabitation after cohabiting themselves, suggesting the behavior has a reciprocal effect for parent and child. However, this study looked only at child cohabitations and did not take into account whether or not the parents themselves had cohabited prior to marriage, further affecting their attitudes in regards to cohabitation.

In another study by the same authors, parental divorce was shown to increased acceptance of cohabitation and premarital sex by mothers, which was strongly correlated with favorable attitudes towards the same among children (Axinn & Thornton, 1996). This transmission of attitudes may also be linked to transmission of family formation behaviors. Amato (1996) found that parental divorce was linked to an increased risk of divorce among children. This effect multiplied when both partners grew up in divorced households and held true

regardless of attitudes toward divorce. Child cohabitation significantly increased likelihood of divorce, an effect that was mediated by parental divorce. Parental cohabitation may then work in a similar fashion, mediating not only parental divorce but also offspring cohabitation and divorce.

I expand upon current literature in several key ways. First, I address whether children whose parents cohabited are more likely to cohabit themselves. Second, I address whether parental cohabitation increases the likelihood of divorce among adult children, either by itself or through its effects on respondent cohabitation. Third, I investigate the relationship between effects of parental cohabitation and divorce on children's divorce. Fourth, I assess whether parental cohabitation affects the likelihood of the respondent having a nonmarital birth. Finally, interaction effects are tested between parent cohabitation and divorce as well as parent cohabitation and child cohabitation to determine how these interactions affect child relationship formation.

I expect to find positive associations between parent and child cohabitation. Additionally, positive associations are expected between parent cohabitation and both divorce and nonmarital childbearing for adult children. Attenuation of these findings is expected once other variables are introduced to the model, including parental divorce. I also expect that accounting for respondent cohabitation will further attenuate the effect of parental cohabitation but that interaction effects between parent and child cohabitation will substantiate an intergenerational effect of cohabitation. Prior research suggests that parent divorce will have a positive association with the dependent variables in this study. Interactions between parent cohabitation and divorce are expected to have further positive associations with respondent cohabitation, divorce and nonmarital childbearing.

Methods

Data

Data used in these analyses were taken from Cycle 20 of the Canadian General Social Survey (GSS). This is one of the few datasets containing information on cohabitation for both parents and their adult children, making it ideal for this study. From June to October 2006, 23,608 people aged 15 or older and living in a private household in one of the ten Canadian provinces were interviewed. The target population for Cycle 20 was all Canadian residents ages 15 and older. The sampling frame excluded residents of the Yukon, Northwest, and Nunavut Territories, as well as full-time residents of institutions. Respondents contacted by the GSS were interviewed by telephone and were chosen according to a random digit dialing sampling method. This does introduce some bias to the study as it excludes residents without telephone access, estimated at 2% of the total population. This bias is likely minimal as some 88% of households in the lowest income bracket still reported having telephone access. Cellular telephones were also excluded from the sampling frame, excluding approximately 5% of the population. Of the telephone numbers dialed, 57% were households. One respondent was then randomly selected from a roster of eligible household residents. The overall response rate for the survey was 67%.

The sample was restricted for this study by using only respondents whose parents cohabited prior to the respondent's birth and eliminating respondents whose parents never married. Further, French-speaking households were also removed from the dataset. Within francophone Quebec, cohabitation has taken on a role in family formation that serves as a marriage substitute, similar to that within Scandinavian countries. Cohabitation in English-speaking Canada has increased at a much slower rate than in Quebec. In 2002, twelve percent of Canadians outside of Quebec reported having a common-law partner – with the highest rates

being seen in British Columbia and the Atlantic provinces – as opposed to thirty percent of Quebecois respondents. The former figure is close to estimates of cohabitation within the United States (Statistics Canada, 2002).

For analyses of cohabitation and nonmarital birth, the resulting sample of 18,619 respondents was used. However, for analyses of divorce, only those respondents who reported having ever been married were included in the sample, giving a sample of 13,629. Descriptive statistics are presented in Table 1. Due to the probabilistic nature of the GSS sampling frame, person weights were used to make the sample representative of the Canadian population in 2006. Analyses presented in this study are based on weighted data.

Measures

Dependent Variables. Three main dependent variables were used in these analyses: whether the respondent has ever cohabited, whether the respondent has ever divorced and whether the respondent has given birth to a child outside of marriage. Twenty-six percent of the sample report having cohabited at some point, either with their current partner or with a previous partner.

Respondent divorce is coded 1 if the respondent has ever experienced a divorce or is currently separated from a spouse. Thirteen percent of respondents reported being divorced or separated.

Nonmarital birth is a binary variable, coded 1 if the respondent gave birth to or fathered a child prior to the self-reported age at first marriage. This variable does not take into account births which may have taken place after respondent divorce or between a subsequent divorce and remarriage. Twelve percent of the sample gave birth to or fathered a child prior to their first marriage.

Independent Variables. Independent variables included in these analyses reflected characteristics of both parents and adult children. Parent variables include measures of education and relationship characteristics as reported by their adult children. In order to assess whether children whose parents cohabited are more likely to exhibit family formation pathways similar to their parents, parent cohabitation is used as the focal independent variable. Parental cohabitation is based on a question as to whether the respondent's biological parents ever lived together outside of marriage.

Additionally, parental divorce is included to determine if parent cohabitation has an effect over and above the effect of the parents' marital dissolution on respondents' family formation. Parental divorce is recoded from a question which asked respondents if their parents were still living together when the respondent was fifteen years of age.

Father's education is used here as a crude proxy for the socioeconomic status in which the respondent grew up. Although education as an indicator of socioeconomic status may not be a perfect measure, prior research has shown it is strongly correlated with future life outcomes and overall well-being (Axinn, Thornton, & Teachman, 1995; Landale, Oropesa, & Llanes, 1998). Categories included less than a high school education, high school graduate, some college, associate's degree or trade school diploma, college graduate and graduate or professional degree. Exploratory analyses showed these categories were best treated as a continuous measure of education, which is done in all analyses shown.

Adult child characteristics include controls for age, sex, and educational attainment as well as measures of first language, personal income and church attendance. Because older respondents have had a longer exposure period, the effect of age is controlled. Age is a continuously coded variable reflecting the self-reported age of the respondent. Women may also

be at greater risk of cohabitation and nonmarital childbearing. Respondent sex has been coded 1 for female.

Race and ethnicity are composed of a single question, which asks if the respondent is considered a "visible minority." This term is used by Statistics Canada, the statistical arm of the Canadian federal government, to differentiate racial and ethnic minorities other than First Nations peoples from Caucasians in accordance with the Canadian Employment Equity Act of 1986. It includes the following racial and ethnic groups: Black, South Asian, Chinese, Korean, Japanese, Southeast Asian, Filipino, Arab/West Asian, and Latin American. The vast majority of minority residents in Canada are of Asian descent, mainly Chinese, Filipino and Southeast Asian immigrants and their descendants (Statistics Canada, 2009). Respondents who report being a visible minority are coded 1. A separate question is asked of respondents to determine if they are of First Nations or Métis (French-speaking Aboriginal peoples) descent and has been coded 1 for respondents who report being a member of these groups.

As with father's education, respondent education is used as a measure of current socioeconomic status. It was determined from a single question with categorical responses for less than a high school education, high school graduate, some college, associate's degree or trade school diploma, college graduate and graduate or professional degree. Again, these categories are treated as a continuous measure of education.

Although French-speaking households have been eliminated from the sample, Francophone respondents living in English-speaking households remain within the study as have respondents who reported speaking another language at home. In order to control for the effect of being exposed to a non-Anglophone culture, a measure of native language is included. Respondent first language was taken from a question asking the childhood language of the

respondent. Nominal categories were given as English only, French only, other language only, English and French equally, English and other equally, French and other equally, and English, French and other equally. To create non-overlapping dummy variables, categories are condensed so that respondents who spoke English only comprise the first binomial variable. A second group of respondents, those who spoke French only or English and French equally as a child, are coded as 1 for French being their first language. This was done in order to account for the effect of French-Canadian culture. Respondents who reported speaking some other language as a child, including those who reported speaking English or French as well, are coded as 1 in the third dummy variable. Because the largest minority group in Canada is Asian, this category accounts for effect of more conservative cultural groups. English only serves as the reference category.

In order to further control for the effect of socioeconomic status on family formation outcomes, personal income is included as an additional covariate. Respondent annual income was given as a bracketed range (in Canadian dollars) beginning with no income and increasing by $5,000 increments to $19,999 and then by $10,000 increments from $20,000 to $99,999. It was top-coded at $100,000 CAN or over. Exploratory analyses revealed income was most salient when treated as a continuous measure for cohabitation and divorce. For nonmarital birth, income was divided into thirds (below $20,000 CAN, between $20,000 and $49,999, and above $50,000).

As an extension of the proscriptions most religions have against premarital sex, religious attendance is expected to decrease the likelihood that a respondent would engage in cohabitation or nonmarital childbearing (Lehrer, 2000). Further, the pro-familial nature of religion is in conflict with marital dissolution (Teachman, 2002). Odds of divorce are then expected to decrease as religious attendance increases. Religious attendance was reflected by five ordinal

categories: at least once per week, at least once per month, a few times per year, at least once per year and not at all. These categories were reverse coded for analyses shown.

Analytic Strategy

Due to the binomial nature of the dependent variables of interest, logistic regression is used in these analyses. The key independent variable, parent cohabitation, is included in all models. Its effects are first shown in a zero-order model. For all regressions, Model 2 adds control variables as well as measures of parental separation. Predicting respondent cohabitation, Model 3 includes an interaction between parent cohabitation and separation. For regressions predicting respondent divorce, Model 3 adds the respondent's own cohabitation. The last stage of analyses, Models 4 and 5, then add interaction terms between parent and child cohabitation and parent cohabitation and divorce, respectively. Results are presented as odds ratios, equal to exponentiating the log odds coefficients, in each model for ease of interpretation.

Missing Data

Missing values were present in the Canadian General Social Survey if a respondent answered "don't know", refused to answer a question or if skip patterns were initiated due to a respondent's answers to previous questions. To retain as many cases as possible in order to maximize statistical power, missing values were imputed using multiple imputation (ICE) in Stata, which uses iterative multivariate regression (Royston, 2004). Forty datasets were created to minimize power falloff (Graham, Olchowski, & Gilreath, 2007). Responses imputed for missing values due to skip patterns were reset to missing after the imputation was complete.

Results

Descriptive Statistics and Parents' Unions

Descriptive statistics are presented in Table 1 for dependent and independent variables. Logistic regression results predicting likelihood of parents' cohabitation are shown in Table 2. This is done in attempt to tease apart factors influencing parents' relationship formation that may later affect adult children. The sample here was limited to only parents of respondents who reported to speaking English as their childhood language (N: 18,000) to remove confounding effects of Francophone influence. No information was available on parents' ages. Respondent's age by ten year birth cohort is used a proxy measure. As the respondent's age increases in ten year increments, the odds of their parents cohabiting decreased by half. As father's education increased, odds of the respondent's parents cohabiting decreased by 8%.

Analyses are then turned to how parent cohabitation affects likelihood of parental divorce. In Table 3, logistic regression results showed parents who cohabited had odds of divorcing nearly three times higher than the odds of parents who did not cohabit. As the respondent's ten year age cohort increased, the odds of their parents having divorced before the respondent was fifteen decreased by 4%. As father's education increased, odds of the respondent's parents' divorce decreased by 5%.

My results indicate that parents of older respondents in the sample were both less likely to cohabit and less likely to divorce, suggesting that the same may be true for older respondents themselves. More highly-educated fathers were also less likely to have cohabited or divorced. This suggests that highly educated respondents may also engage in these behaviors less often than respondents with lower educational achievement. In keeping with previous literature on cohabitation, parents who cohabited prior to their marriage were more likely to experience divorce.

Respondent Cohabitation

Analyses now address whether children whose parents cohabited are more likely to cohabit themselves. Table 4 begins with a zero-order model predicting the effect of parents' cohabitation on likelihood of the respondent ever having cohabited himself. Respondents' whose parents cohabited had odds of cohabiting themselves which were 60% higher than the odds of respondents whose parents had no history of cohabitation. Model 2 of this table adds respondent- and parent-level control variables. Even after controlling for parental divorce, respondents whose parents cohabited had significantly higher odds (24%) of their own cohabitation than those of respondents whose parents did not cohabit. This suggests an intergenerational transmission of cohabitation as a family formation choice.

Similar to results for parents, older respondents were less likely to cohabit. This may reflect both changes in the societal acceptance of cohabitation over time as well as greater conservatism among older adults. Women were more likely to cohabit, as were Caucasian respondents. However, odds of having participated in a cohabitational union for respondents of First Nations or Métis descent were 2.43 times higher than those of Caucasians, suggesting an increased acceptance of cohabitation within this community.

Education presented mixed findings. As respondent level of education increased, odds of cohabitation increased by 7%, implying more educated respondents were more likely to cohabit. However, as level of paternal education increased odds of cohabitation for respondents decreased by 5%.

Childhood language of the respondent was strongly associated with likelihood of cohabitation. Respondents who spoke French as children had odds of cohabiting 1.5 times greater than Anglophone-only children. This finding is in line with previous work on cohabitation within Canada (reviewed above). Similar to odds ratios shown here for visible

minorities, Canadians who spoke a non-English and non-French language as children also had significantly lower odds of cohabiting – nearly half the odds of Anglophones.

Income was included as a socioeconomic control and proved a significant predictor of likelihood of cohabiting. As respondent income increased odds of cohabiting increased by 10%. As hypothesized, religious attendance was also associated with lower overall odds of cohabitation. Odds of cohabiting decreased by 27% as level of religious attendance increased.

Parental divorce was also an important predictor of child cohabitation. If the respondent's parents divorced by age fifteen, his or her odds of cohabiting were 58% higher than respondents who grew up in intact families. Results shown here for parents indicated that parents who cohabited were more likely to divorce. Model 3 includes an interaction between parent cohabitation and parent divorce. The inclusion of the interaction to the model changes the reference category for each of the constituent variables. The odds ratio for parent cohabitation in Model 3 reflects the odds for respondents who parents cohabited but did not divorce. These respondents were 44% as likely to have cohabited. The odds ratio for parental divorce reflects odds for respondents whose parents divorced but had not cohabited prior to marriage. Here, the respondent's odds of having cohabited themselves increased by 67%.

The combined effect of parent cohabitation and divorce is equal to an odds ratio of 1.59 (1.44 X 1.67 X 0.66). This combined effect of parent cohabitation and divorce is greater than that of parent cohabitation alone and equal to the effect of parent divorce. Therefore, respondents whose parents both cohabited and divorced were equally likely to cohabit as children of divorced parents and more likely to cohabit than respondents whose parents cohabited but did not divorce.

Respondent Divorce

Analyses now focus on the second and third questions posed by this study: whether parental cohabitation increases the likelihood of divorce among adult children and if parental cohabitation moderates the effect of parental divorce on children's divorce. Contrary to study expectations, among respondents who have ever been married, parental cohabitation was linked to a decreased risk of divorce after controlling for age at first marriage. Respondents who married later also had lower odds of divorce. Model 2 introduced control variables. Parental divorce was associated with a 26% increase in odds of divorcing for respondents. There was a 27% decrease in odds of divorce for adult children whose parents cohabited. Older respondents had greater odds of divorce. Minority respondents were 32% less likely to divorce than Caucasians. Odds for First Nations and Métis respondents were 56% higher than those for Caucasian respondents.

Respondent education was associated with greater odds of divorce. As level of education increased odds of divorce increased by 7%. Native Francophones were at no increased risk of divorce compared to English-speakers. However, speaking a non-English and non-French language in childhood served as an insulating factor. Compared to Caucasian respondents, these respondents showed a decrease in their odds of divorce by 27%.

Increases in respondent income were associated with a modest increase in odds of divorce (4%). As hypothesized, attendance of religious services was associated with a strong decrease in a respondent's likelihood of divorce. As religious attendance increased odds of divorce decreased by 18%.

In order to determine if parents' cohabitation influences their child's divorce through its effects on the child's cohabitation, Model 3 adds whether the respondent reported ever having cohabited. In this sample, odds of divorce among respondents who have cohabited are 6 times

greater than the odds of divorce for respondents who did not cohabit prior to marrying. After controlling for respondent cohabitation, respondents whose parents cohabited see 42% lower odds of divorce than respondents whose parents did not cohabit. The effect of parental divorce ceases to be significant once the respondent's cohabitation is included in the model.

Model 4 further tests how parents' cohabitation influences their child's divorce by introducing an interaction term between parent and child cohabitation. Parent cohabitation is no longer significant once this interaction is added. This shows that the effect of parent cohabitation works through its effect of child cohabitation. Odds of divorce for respondents whose parents cohabited and who cohabited themselves are 2.86, less than half the odds of divorce for first generation cohabiters (6.23). The effect of cohabitation on divorce is decreased substantially if the respondent's parents had also cohabited.

To test multiplicative effects between parent-level family formation and dissolution, Model 5 includes an interaction between parents' cohabitation and parents' divorce. This interaction was not significant, showing that parental cohabitation does not moderate the intergenerational effect of divorce. However, odds of divorce for respondents who parents cohabited and remained married are half the odds of the reference category, respondents who parents neither cohabited nor divorced. A separate interaction between parental divorce and child cohabitation was tested but findings were not significant (available upon request).

Nonmarital Birth

The final question of this study asked whether parental cohabitation affects the likelihood of the respondent having a nonmarital birth. Model 1 shows that parental cohabitation is associated with an increase in the odds of a nonmarital birth for respondents by 52%. Model 2 introduces control variables, including parental divorce. Odds of having a nonmarital birth were

74% higher for adult children if their parents separated before the respondent was 15 years old. After controlling for parent divorce, parental cohabitation was no longer significant.

Age of respondents in years was not associated with a change in their odds of a nonmarital birth. Women and First Nations respondents were more likely to have a child outside of marriage. Respondents of First Nations or Métis descent saw odds which were 3 times greater than their Caucasian counterparts.

Education was a significant influence on odds of nonmarital birth. As respondent education increased odds of having a nonmarital birth decreased by 11%. Fathers' educational achievement was also associated with decreased odds of nonmarital childbearing for respondents. As father's education level increased, odds of the respondent having a nonmarital birth decreased by 9%.

Adult francophone children saw no significant association between first language and odds of a nonmarital birth when compared to Anglophones. However, respondents who spoke another language as a child had 42% lower odds than those of English-speakers.

Respondent income was associated with decreased odds of nonmarital birth in this model. Middle income respondents had 35% greater odds of nonmarital birth when compared to low income respondents. Odds of a nonmarital birth for high income respondents were 22% higher than those with annual income below $20,000 CAN. Religious attendance was associated with lower odds of nonmarital birth. As religious attendance increased, respondents were 12% less likely to have a nonmarital birth.

Model 3 controls for whether the respondent has ever cohabited. Compared to respondents who have never lived in a cohabitational relationship, cohabiters had odds of giving birth to a child outside of marriage which are 5.8 times greater. After controlling for this effect,

respondent age, gender, income and religious attendance were no longer significant. However, respondents whose parents divorced prior to their fifteen birthday had odds of giving birth to a child outside of marriage which were 51% higher than odds of a nonmarital birth for respondents living in with both parents through adolescence. Compared to Model 2, odds of nonmarital birth for visible minorities increased in comparison to Caucasians.

Model 4 introduces an interaction term between parent and child cohabitation to determine if the effect of parent cohabitation on their child's odds of a nonmarital birth works through the increased odds of the child cohabiting. The significance of this interaction confirms the influence of an intergenerational cohabitation effect. Individuals who had cohabited and whose parents cohabited were over seven times more likely to have a nonmarital birth based on their multiplicative odds ratio (0.69 X 5.55 X 1.89). This is strong evidence that the combined effect of parent and child cohabitation increases the respondent's odds of having a nonmarital birth over and above the effect of his or her own cohabitation alone. Odds for those cohabiters whose parents did not cohabit remained significantly higher than the odds of non-cohabiting respondents. This group was 5.5 times as likely to have a child outside of marriage as were respondents with no history of cohabitation for themselves or their parents. The effect of parental cohabitation on its own was not significant in this model, suggesting that respondents whose parents cohabited but who did not cohabit themselves were at no significant increased risk of a nonmarital birth. In this model, respondents from divorced families still saw increased odds of a nonmarital birth (52%) compared to respondents from intact families.

Model 5 tests for interaction effects between parent cohabitation and subsequent divorce. This interaction was not significant. Based on these findings, the hypothesized relationship

between parents' cohabitation and child's nonmarital birth through influences on the child's cohabitation is strengthened.

Discussion and Conclusions

Discussion

These findings present new information about how parents' cohabitation affects the family formations of their adult children. The issue of intergenerational effects of cohabitation has received little empirical attention due to the lack of adequate data sources on the subject. My analyses improve current knowledge about cohabitation in several key ways. First, I addressed whether children whose parents cohabited are more likely to cohabit themselves. Findings from this study show strong evidence that parents who cohabited are more likely to have children who cohabit as well. I also addressed whether parental cohabitation increases the likelihood of divorce among adult children. No support was found for this hypothesis. Indeed, parental cohabitation seems to decrease divorce among adult children in these findings. The respondent's own cohabitation was a strong predictor of odds of divorce. Contrary to my expectations, parental cohabitation seemed to diminish the effect of respondent cohabitation on future odds of divorce.

Further, I investigated if parental cohabitation moderates the effect of parental divorce on children's divorce. Partial support was given to this hypothesis. The effect of parental divorce here was overshadowed by whether the respondent had ever cohabited prior to marrying. Results show that both respondents who cohabited prior to marriage and respondents who experienced the divorce of their parents are more likely to divorce themselves. However, parental cohabitation moderated the effect of the respondent's own cohabitation in regards to divorce. This suggests that while cohabitation alone continues to have a strong positive effect on divorce

for individuals, an intergenerational effect of cohabitation decreasing the likelihood of divorce is present. Respondents may be better able to navigate cohabitation if their parents successfully did so as well, suggesting that parents' marital quality plays a role in their children's adult romantic relationships. These results suggest that the behaviors parents model in regards to relationship formation may influence the behaviors of their adult children.

Finally, I assessed whether parental cohabitation affects the likelihood of the respondent having a nonmarital birth. Support for this hypothesis was substantial in zero-order models. After controlling for respondent cohabitation and parental divorce, the effect of parent cohabitation was no longer significant. Interactions between parent and child cohabitation suggest parental cohabitation increases odds of nonmarital childbearing for adult children through their increased likelihood of cohabitation.

Study Limitations

This study could be improved in several ways. Information on respondents' parents is sparse and limits the ability to fully explain factors affecting parents' cohabitation and divorce. A more complete relationship history for parents may provide important details in order to more accurately assess the effects generated by the parents' marital relationship.

The cross-sectional nature of the Canadian General Social Survey prevents further analysis of respondents over time. Longitudinal data following children into adulthood would allow the collection of better information as to the effect of parental cohabitation on offspring romantic relationships. Additionally, the dataset lacks the ability to assess effects among minority respondents because it does not differentiate between different minority groups. Because the Canadian government does not ask more detailed questions about race and ethnicity, it is impossible to make between group comparisons. This study also eliminates respondents

living in Francophone households from the sample. Previous work addressing cohabitation in Quebec has emphasized the cultural differences between Francophone and Anglophone Canadians (Le Bourdais & Lapierre-Adamcyk, 2004). Results shown here confirm those differences based on the increased likelihood of cohabitation for Francophone children but nonsignificance of odds ratios predicting divorce. Future research is needed to explore how parent effects differ by racial groups and between language groups in Canada.

Conclusions

Cohabitation literature has not yet addressed the lives of adults whose parents cohabited before marriage. The analyses here present strong evidence of intergenerational transmission of cohabitation as well as the how this effect plays out in the lives of adult children of cohabiters. Previous studies have shown that those who cohabited or who knew someone who had cohabited became more accepting of cohabitation overall (Axinn & Thornton, 1993). However, this attitudinal shift was assumed to take place as a by-product of the experience of cohabitation itself. This study suggests that interaction with someone who cohabited can also affect attitudes toward cohabitation. Previous research has addressed the impact of an adult's cohabitation on his or her parents' attitudes (Axinn & Thornton, 1993). The major contribution of this research is to show that parent cohabitation may increase the child's own acceptance of cohabitation through modeling behaviors. In the case of parents who cohabit, their children may see this behavior as an acceptable model for their own romantic relationships.

However, cohabitation has far-reaching consequences for parents and children. Results shown here add to a body of research stating adults who cohabit are more likely to have marriages that fail, having long-term implications for themselves and for their children. If children model their own relationship(s) on that of their parents, what does this mean for the

children of cohabiters? Because their parents cohabited, they may have more favorable attitudes toward cohabitation. It may mean that cohabitation will seem like a normal step in family formation for this group in adulthood. Considering that cohabiting couples are also more likely to have a child outside of marriage, effects of cohabitation may then affect not only parents and children but grandchildren as well. Future research is needed to explore this possibility.

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Table 1: Descriptive Statistics, Weighted

Variable	*Mean*	*SD*
Dependent Variables		
Respondent has ever cohabited	25.70%	
Respondent has ever divorced	12.59%	
Respondent has had a nonmarital birth	11.69%	
Parent Relationship Characteristics		
Parents cohabited before marriage	7.19%	
Parents divorced before R. was age 15	16.01%	
Individual Characteristics		
Age of respondent in years	44.26	0.16
Female	50.37%	
Visible minority	15.56%	
First Nations or Métis	3.69%	
Respondent Education		
Did not graduate from High School	20.67%	
High School graduate	14.71%	
Some college	13.80%	
Associate's or Trade School graduate	27.90%	
College graduate	16.62%	
Postgraduate degree	6.29%	
Parent Education		
Father did not graduate high school	46.48%	
Father is a high school graduate	22.40%	
Father has some college	5.57%	
Father has associate's or is a trade school graduate	10.20%	
Father is a college graduate	10.31%	
Father has postgraduate degree	5.04%	
Respondent First Language		
First Language is English	71.69%	
First language is French	4.24%	
First language other than English or French	24.06%	

Table 1: Descriptive Statistics, Weighted (cont.)

Variable	*Mean*	*SD*
Respondent Income (CAN)		
No income	4.87%	
Less than $5,000	4.74%	
$5,000 to $9,999	6.60%	
$10,000 to $14,999	8.89%	
$15,000 to $19,999	7.32%	
$20,000 to $29,999	14.92%	
$30,000 to $39,999	13.94%	
$40,000 to $49,999	11.29%	
$50,000 to $59,999	7.88%	
$60,000 to $79,999	10.29%	
$80,000 to $99,999	4.22%	
$100,000 or more	5.05%	
Respondent Religious Attendance		
Never attends services	39.72%	
Attends services at least once per year	9.54%	
Attends services a few times per year	20.23%	
Attends services at least once per month	10.23%	
Attends services once a week or more	20.28%	
N	18619	
Age at first marriage	25.03	0.05
N	13629	

Table 2: Logistic Regression of Respondent Age and Parental Education on Parental Cohabitation, Weighted, English or Other First Language Respondents Only (N: 18,000)

Variable	Odds Ratio	Sig.
Respondent's age (10 year cohorts)	0.49	***
Father's education	0.92	**

Note: *p<.05 **p<.01 ***p<.001.

Table 3: Logistic Regression of Parental Cohabitation and Education on Parental Divorce, Weighted, English or Other First Language Respondents Only (N: 18,000)

Variable	Odds Ratio	Sig.
Parents cohabited before marriage	2.93	***
Respondent's age (10 year cohorts)	0.96	**
Father's education	0.95	**

Note: *p<.05 **p<.01 ***p<.001.

Table 4: Logistic Regression Models Predicting Likelihood of Ever Having Cohabited, Weighted (N: 18,619)

	Model 1		Model 2		Model 3	
Variable	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.
Parents cohabited before marriage	1.698	***	1.242	*	1.436	***
Individual Characteristics						
Age of respondent in years			0.988	***	0.988	***
R. is female			1.408	***	1.409	***
R. is a visible minority			0.519	***	0.521	***
R. is First Nations or Métis			2.437	***	2.437	***
R. educational level			1.078	***	1.079	***
R. father's educational level			0.945	***	0.945	***
R. annual income			1.102	***	1.102	***
R. religious attendance			0.733	***	0.734	***
Respondent First Language						
First language is French			1.502	***	1.505	***
First language other than English or French			0.591	***	0.590	***
Parent Relationship Characteristics						
Parents separated before R. was age 15			1.578	***	1.666	***
Parent Cohabitation x Parent Divorce					0.663	*

Note: *p<.05 **p<.01 ***p<.001.

Table 5: Logistic Regression Models Predicting Likelihood of Ever Having Divorced, Weighted (N: 13,629)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Variable	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.
Parents cohabited before marriage	0.755	†	0.727	*	0.578	***	0.986		0.484	***
Age at R. first marriage	0.911	***	0.910	***	0.890	***	0.890	***	0.890	***
Individual Characteristics										
Age of respondent in years			1.008	***	1.025	***	1.025	***	1.025	***
R. is female			0.997		0.918		0.916		0.918	
R. is a visible minority			0.679	**	0.876		0.875		0.876	
R. is First Nations or Métis			1.560	***	1.195		1.207		1.195	
R. educational level			1.065	***	1.093	***	1.092	***	1.092	***
R. father's educational level			1.003		1.005		1.005		1.005	
R. annual income			1.035	**	1.035	**	1.035	**	1.034	**
R. religious attendance			0.823	***	0.900	***	0.901	***	0.900	***
Respondent First Language										
First language is French			1.184		1.106		1.104		1.104	
First language other than English or French			0.731	***	0.860	†	0.854	†	0.862	
Parent Relationship Characteristics										
Parents separated before R. was age 15			1.258	***	1.074		1.074		1.049	
Respondent ever cohabited					6.112	***	6.232	***	6.122	***
Parent Cohabitation x Respondent Cohabitation							0.465	*		
Parent Cohabitation x Parent Divorce									1.500	

Note: †p<.07 *p<.05 **p<.01 ***p<.001.

Table 6: Logistic Regression Models Predicting Likelihood of Ever Having a Nonmarital Birth, Weighted (N: 18,619)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Variable	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.
Parents cohabited before marriage	1.517	***	1.119		1.057		0.689		1.058	
Demographic Characteristics										
Age of respondent in years			0.998		1.003		1.002		1.002	
R. is female			1.201	**	1.087		1.087		1.087	
R. is a visible minority			1.233		1.575	***	1.574	***	1.575	***
R. is First Nations or Métis			3.130	***	2.514	***	2.518	***	2.514	***
R. educational level			0.895	***	0.853	***	0.856	***	0.853	***
R. father's educational level			0.907	***	0.924	***	0.924	***	0.924	***
R. religious attendance			0.879	***	0.979		0.977		0.979	
Respondent First Language										
First language is French			1.200		1.053		1.053		1.053	
First language other than English or French			0.585	***	0.676	***	0.676	***	0.676	***
Respondent Income										
Annual income between $20,000 and $49,999 CAN			1.347	***	1.125		0.907		1.125	
Annual income above $50,000 CAN			1.223	*	0.969		0.881		0.969	
Parent Relationship Characteristics										
Parents separated before R. was age 15			1.738	***	1.518	***	1.604	***	1.519	***
Respondent ever cohabited					5.852	***	5.549	***	5.852	***
Parent Cohabitation x Respondent Cohabitation							1.892	**		
Parent Cohabitation x Parent Divorce									0.997	

Note: *p<.05 **p<.01 ***p<.001.