THE ROLE OF DEFAMILIALIZATION IN THE RELATIONSHIP BETWEEN PARTNERSHIP AND SELF-RATED HEALTH: A CROSS-NATIONAL COMPARISON OF CANADA AND THE UNITED STATES

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Abstract

Partnered individuals live longer, healthier lives. It has been hypothesized that both social causation (partnership benefits) and health selection may explain this association. Since much of this literature is focused in the U.S., comparative studies of the potential impact of policy on the causation and selection components of this association have been scant. Using comparable data from the U.S. Panel Study of Income Dynamics and the Canadian Survey of Labour and Income Dynamics, we test the selective and causal relationships evident during entrance into partnership. We use fixed change-point analysis with multilevel models (MLM) to fit trajectories of change in both Canada and the U.S. to understand the role of both health selection and partnership benefits. In Canada, partnership benefits were evident, while health selection was only marginally significant. In the US, health selection was prominent in both men and women, but partnership benefits were not significant. We argue that the differences in the extent of defamilialization of social policy between the two countries may impact the way and extent to which people choose partners and benefit from those partnerships.

Introduction

Married men live an average of 10 years longer than single men, while for married women the gain is only 4 years (Waite 1995). Reasons often given for the difference between single and partnered individuals can be summarized by four general hypotheses with gendered implications: *partnership benefits*, where men receive the vast majority of the benefits provided usually by women; *positive selection*, when partners select healthier, more ‘competitive’ spouses. However, a careful reading of the literature indicates that selection and benefits may occur in tandem. Moreover, since partnership market-related factors specific to the context determine who is a ‘risky’ partner, the role of health selection may differ substantially by both country and gender. Thus, partner selection and benefits do not

operate in a vacuum, and may be subject to policy intervention. For instance, incentives towards picking healthy mates (positive selection) will be more important in places where healthcare and disability insurance are delegated to the family, contexts that have been theorized as being less “defamilialised” (Esping Andersen 1999). The purpose of this paper is to explore the selective and causal mechanisms involved in forming cohabiting and marital unions, or ‘partnerships’, in two different policy realms.

Partnership Benefits

Researchers who argue that there are benefits to marital and cohabiting partnerships often suggest that these partnerships are highly beneficial for the health and economic wellbeing of individuals and populations (Lillard and Waite 1995, Becker 1991, Kiecolt-Glaser and Newton 2001). Proponents of this argument have suggested that the overall health benefits resulting from being in a cohabiting partnership like marriage “may be as large as the benefit from giving up smoking” (Wilson and Oswald 2005, p. 3). Some have explained that benefits result because cohabiting partnerships often act as health, sickness and disability insurance when healthcare is expensive or unavailable (Smith et al. 2000).

Many have recently suggested that stable partnerships may provide more health benefits with time and therefore any perceived health benefits may accrue slowly and with time (Wilson and Oswald 2005), while others have noted that singlehood is harmful to health and thus any partnership seems beneficial (Joutsenniemi et al. 2006). In all cases partnerships are seen as beneficial to the health of the partners (Hughes and Waite 2009, Tucker et al. 1996). However, it has been just as clear that gender defines the types and impacts of benefits from partnership, with women generally benefitting less in health than men (Murphy et al. 2007, Gove 1973, Waite 1995, Wu et al. 2003, Trovato and Lauris 1989).

Positive Health Selection

Evidence suggests that people are highly selective of their partners, generally finding that when individuals search for partners they select those with better educational attainment, higher incomes, who are employed, among other things (Mare 1991, Mare 2008, Smits and Park 2009, Groothuis and Gabriel 2010, Blossfeld 2009). Moreover, in his analysis Becker (1991) further suggests that positive health selection (hereafter called the more generic ‘health selection’) may be important when choosing a partner because it ensures that the partner will be able to fulfill their anticipated responsibilities. This has led some to suggest that partnerships are not immediately beneficial but rather are highly health selective (Williams and Umberson 2004). However, support for positive health selection outside of the U.S. has been less enthusiastic, showing for instance that in the U.K., health selection was more prevalent for women who were not employed full-time (Waldron et al. 1996). Such a difference may depend on policy context however. Indeed, in places where individual risk is ‘defamilialized’, i.e. where the state assumes risks such as health insurance, selection may not be as important as in places where these risks are devolved individuals or their families. The following provides a comparative discussion of the U.S. and Canadian policy context.

The State

The incentives involved in assortative mating may be more important in an environment where the state has left the healthcare and disability insurance responsibilities in individuals' and families' hands. Thus, the health selective and partnership beneficial patterns may be specific to the social context. If the state does not offer social protections or benefits, the family must do so in order to guarantee the safety of its members. This means that poor state protection may force potential partners to give more weight to the assessed health risks of potential mates in their selection process. Thus, a greater burden placed directly on the family rather than the state, might affect how and when benefits accrue within partnership, while also changing the incentive structure involved in selecting a partner.

Two countries that differ in their social protections, but are similar in many other respects, are Canada and the U.S. The following section discusses the important differences in gender and health policy between the countries.

Welfare State Comparisons

Welfare regime hypotheses often lump Canada and the U.S. together as 'Liberal' Welfare states (Esping-Andersen 1990). Yet, when a fuller range of policies are considered, differences in social policy between Canada and the U.S. are arguably vast (Scruggs and Allan 2006). Indeed, social and gender theorists have noted the differences in the degree of 'defamilialisation' due to differences in gendered social policy between Canada and the U.S. (Bambra 2004, Bernard and Boucher 2007). Taken together, these policies can be seen as creating gendered logics under which the structure of society itself is altered (Kershaw 2010). Moreover, when carrying out comparative policy analyses, some have argued that focusing on specific instances of variations in social policy may be more fruitful than larger generalized hypotheses (Olsen 1994). This paper compares Canada and the U.S. to understand how specific public policy differences might change the ways that partnership interacts with health (see e.g. Siddiqi and Hertzman 2007). The following discusses some of the most important gender and health policies (including maternity leave, sickness insurance and healthcare) relevant to partnership and health in the U.S. and Canada, noting briefly that the lack of one policy is as telling as is the existence of another.

Cross-national differences in policies pertinent to Gender and Health

Family programs in the U.S. provide much less support to parents than those in Canada. Indeed, while the number of mandatory weeks of maternity leave puts Canada and the U.S. in the same low coverage category among OECD countries (van den Berg et al. 2004), important differences in specific health and gender policies remain. Since 1982 Canada has stood in sharp contrast to the U.S. in terms of its financial support, parental leave and population coverage by offering at least 17 weeks of maternity leave in every province (Baker and Milligan 2008). In Canada, 17 weeks of maternity leave are insured for up to 55% of the mothers' wages via the employment insurance (EI) program, with many employers supplementing the level of pay as part of benefits packages. Since 1999,¹ this has been extended to include 35 additional weeks of parental leave, thus providing at least a

year's worth of parental leave in every province of Canada (TBCS 2009). The Canadian system nevertheless leaves 10% of employed mothers ineligible for benefits, notably because it imposes a minimum level of earnings and doesn't cover self-employed individuals. Maternity leave is substantially different in the U.S., where the only mandate is for 14 number of weeks unpaid leave. As this only applies to businesses of more than 50 employees, these policies limit potential users to about 46% of the female labor force (OECD 2001, pp. 151).

Sick leave in Canada is covered through the Employment Insurance (EI) program and covers up to 80% of people who fall ill, with benefits paying out for up to 15 weeks of illness (Scruggs and Allan 2006). On top of this coverage, the Canada and Québec Pension Plans (C/QPP) cover extended leaves of absence due to illness or disability (Campolieti and Goldenberg 2007). This level of coverage is considered middling in strength in the OECD countries. Nevertheless, it stands in stark contrast to the benefits offered in the U.S. where sickness and disability insurance, available only from the private sector, covers only 30% of the workforce – low-income families simply cannot pay for coverage (BLS 2006).

Health insurance constitutes one of the most marked policy differences between the U.S. and Canada. In both countries, healthcare is primarily delivered privately by doctors on a fee-for-service basis. However, in Canada, physician and hospital services are primarily insured viand funded through a progressive income tax-based system, administered at the provincial level, and delivered universally to all Canadian residents (Goldsmith 2002). Yet, holes in public coverage exist, notably with regards to medication, dental and eye services. This explains why 30% of total health expenditures in Canada come from the private sector (split fairly evenly between out-of-pocket payments and private insurance). Private health insurance is primarily offered through employment benefits, and thus only covers about 36% of those aged 18–29 and 72% of those aged 30–49 (Clouston and Quesnel-Vallée 2006). However, as this supplementary private health insurance is perceived to play only a marginal role in care provision, it is not likely to affect partnership to the same extent as primary private health insurance does in the U.S.

In contrast, as of 2011, despite recent reforms to health insurance, the U.S. does not offer universal health insurance or mandate health insurance coverage, instead relying primarily on employer provision of health insurance for the adult population of working age. Coverage is offered as a benefit to employees *and increasingly less frequently, to their spouses*. However, with marital homogamy, individuals and their spouses often share employment and educational characteristics, thus resulting in a double jeopardy for lower SES couples (Blau and Gilleskie 2006). Moreover, there is no governmentally-mandated minimum package in health insurance, and thus any existing coverage may be inadequate to cover the total costs of medical care. This undoubtedly underlies the fact that 62.1% of personal bankruptcies in the U.S. in 2007 were due to medical costs, and that 75% of those were to individuals with health insurance (Himmelstein et al. 2009). Thus, in the U.S., health

¹For all but British Columbia, where maternity leave was extended in 2001: Baker, M. & Milligan, K. (2008). How Does Job Protected Maternity Leave Affect Mothers' Employment? *Journal of Labor Economics*, 26..

insurance is an asset that is not randomly distributed in terms of either access or comprehensiveness (Adams et al. 2008, Olsen 2007).

The differences cited above may modify the risks and rewards that individuals face when finding partners in these two countries (Garrison 2007). Specifically, in Canada the universality of healthcare and the availability and coverage of both sickness and disability insurance reduce the risk posed by a partner for devastating health costs and financial loss, while comprehensive maternity and parental leave increases the family's ability to both maintain their earnings and spend time caring for others.

While we cannot say that those who are finding partners think explicitly about finances and health when choosing a partner, cross-national differences in public policy affect incentives involved when finding a partner. This implies that policy has the potential to change the ways that populations in the U.S. and in Canada select, are selected into, and finally benefit from partnerships.

Objectives

The objective of this paper is to examine the interplay of health selection and partnership benefits on health, focusing explicitly on how these processes differ by Gender and Public Policy.

Data

Data for this study include harmonized data from the Survey of Labour and Income Dynamics (SLID) collected by Statistics Canada (Canada 2009) and from the Panel Study of Income Dynamics collected at the University of Michigan (ISR 2009). The SLID is a six-year annually observed refreshing household panel study, from which we used panel 3 representing the period between 1999 and 2005 (Duddek 2007, Lutz et al. 1999). The PSID is a longitudinal panel dataset that originally followed 9000 families from which data on health was available from 1984–2005. We use all partnership transitions from these years, but limit the range of the analysis to match with the maximum range of those in Canada. Variables used here were harmonized for cross-national comparability by the Cross-National Equivalence File (CNEF) (Frick et al. 2007). Multiple imputation using both longitudinal model-based and nearest neighbor methods have been used to impute missing data on income by Statistics Canada and for the PSID similarly by analysts in the CNEF, any other missing data were included in the analyses as separate groups within the control procedure itself. There were 15,632 respondents in the SLID with 92,386 included observations, with similar numbers (25,862 persons over 100,512 observations) in the PSID. Response rates in the SLID are about 85% for the first year with follow response rates above 90% (StatsCan 2009). The PSID's response rates in 1968 were 76%, with longitudinal response rates maintaining at around 97% though the longer time period implies that more individuals have left the sample with time (ISR 2009). In both cases, weights provided account both for cross-sectional representativeness and for attrition with time.² Analyses and descriptive statistics have been weighted to the total populations using supplied weights. Because the nature of marital benefits and selection have been shown to differ substantially for those

getting married over 50 (Lillard and Panis 1996) and because those under 18 are largely prohibited from forming legal partnerships, we have excluded those who were over 50 or under 18 from the analyses.

Measures

Partnership Status

Both the SLID and PSID are household surveys. Thus, a cohabiting partnership was defined as a partnership where both persons were residing in the same household and responded as a couple. While cohabitation should not be equated with marriage indiscriminately, many of the proposed benefits of partnership argued for in the literature are similarly available to those who are in cohabiting partnerships, including economies of scale and availability of caretaking within the household. Thus, our definition of partnership as a cohabiting union is in line with current research on the benefits to couple-hood, which tends to focus more on the negative impact of being single, or indeed of separating, rather than the difference between partnership types (Waite and Gallagher 2000, Stolzenberg and Waite 2005, Joutsenniemi et al. 2006).

Notably, while we acknowledge that the distinction between marriage and cohabitation may meaningfully impact on selective and beneficial processes in both countries, it is also clear that they carry different meanings in Canada than the U.S. We therefore used the measure harmonized by the CNEF, which records whether an individual was in a cohabiting partnership (marital or otherwise). We should note that adding a marital status indicator (either time-invariant – the type of partnership the individual will form at time 0, or time variant – the type of relationship the individual is in) does not change the results for either country. Finally, because of the nature of the data, full information is often derived at the household level from spouses and respondents alike. However, spouses in Canada are only followed after they have begun cohabiting and thus do not add information to our analyses. In the U.S. cohabiting spouses are sometimes added to the data as single people who have moved into the household who, if not careful, then become partnered people (suggesting that there is a discordant change in their relationship status). Because these are actually cohabiting partners, we have recoded them appropriately using the relationship to household head variable available from the PSID database.

Health

Self Rated Health (SRH) was used for three reasons. First, its ability to work as a yearly measure of health allows us to consider both health selection and partnership benefits as people enter partnerships. Second it provides a comparable and consistent measure that correlates to a number of other more objective measures of health such as mortality, morbidity, and functional limitation (Idler and Benyamini 1997, Miilunpalo et al. 1997, Mossey and Shapiro 1982, DeSalvo et al. 2006). Third, it was the only comparable indicator

²Researchers involved in the early years of the PSID have suggested that this problem does not significantly affect findings relating to partnership Lillard, L. & Waite, L. (1990) Panel Versus Retrospective Data on Marital Histories: Lessons from the PSID. In H. Beaton, D. Ganni & D. Frankel (Eds.), *Individuals and Families in Transition: Understanding Change Through Longitudinal Data*.: US Bureau of the Census..

of health available on both surveys. SRH can be criticized for its reliance on subjective assessments (Bound 1991); however, as is well documented, this measure has excellent predictive validity for mortality in Canada, the U.S. and other countries (Miilunpalo et al. 1997, Mossey and Shapiro 1982, Subramanian et al. 2009, Quesnel-Vallée 2007). SRH was reverse coded from excellent (5) to poor (1) for the purposes of this study.

Controls

Gender was measured by self-report in both surveys. *Age* was measured in years since birth to adjust for the fact that health decreases with age. *Education* was included as a categorical measure signifying the highest level attained during the period. This was to help to control for selective differences in health that may accompany the understanding of higher education in the coming years. *Income* was included here using post-taxation individual income. In Canada, income was extracted directly from the tax files records for the 80% of respondents who consented to this, and self-reported for the remainder of the sample. Data for the U.S. were self-reported. Income was adjusted to dollars in 1999. In both files, missing data was imputed by the agency in charge of data collection and cleaning (Statistics Canada or the Institute for Social Research). *Employment Status* was self-reported, and distinguishes those who reported being employed at least part-time during the year from those who were not (those unemployed and out of the labour force). *Number of children* in the household was included, using the count for the number of people in the household who are less than 18 years of age.

Methods

Analysis of these hypotheses requires methods adequate to the task of looking at differences in health prior to a transition, and then of modeling change following that period. We use multilevel modeling (MLM) techniques with a fixed change point analysis. MLM allows us to model individual-level trajectories in a way that is methodologically appropriate for dealing with repeat measures over time within a clustered sampling framework. These are robust when using repeated measures over time and perform better than single-level models when clustering is present (Clarke 2008). It is particularly helpful because it is well suited to deal both with different specifications of time, auto-correlated data, and is unbiased by non-response in longitudinal studies. We then model time in two ways: first by centering the analysis on entrance into a partnership, then fitting a piecewise linear deviation that is anchored to this curve for those who enter into partnerships. This method, often used in analyses of age-related cognitive and health decline (Gerstorf et al. 2008, Sliwinski and Buschke 2004, Sliwinski et al. 2003), assumes that at a particular point in time there is a change in the nature of the trajectory that differentially affects the dependent. We further included analyses that interacted gender with health gain and type of partnership with health over time.

For this analysis we specified a two-level analysis using the `xtmixed` command in Stata 11/IC. At level 1 we temporally separating the effect of time in study from time in a partnership. Furthermore, we added in known time-variant predictors of self-rated health shown above. We made particularly sure to include variables (for instance age, education

and employment status) that predicted both health and likelihood of partnership. Finally, because defamilialization at its heart suggests both gendered and policy differences, we performed within-country analyses and interacted the various time measures with gender. To create the proper time variables, we did this first by centering observational time (denoted t_p below) at 0, which we defined as the mid-point between two discordant observations (in particular, those measures that were first ‘single’ and then became ‘partnered’). We then created a time variable that measured time since the beginning of partnership (denoted t_d below), which takes the value 0 for everyone not in a partnership, and the marks years in a partnership for those who are in partnerships. Because partnership was not observed amongst those who were single, two possible time specifications exist: time in years or a randomized center point. This specification does not change the analytical outcome whatsoever, so we went with a randomized center point because we believed that it would be structurally similar to our time variable for those who entered partnership. This led us to specify the following statistical model:

$$y_{it} = \beta_{0i} + \beta_{1i}(t_{pit}) + \beta_{2i}(t_{dit}) + \beta_{3i}(sex_i) + \beta_{4i}(sex_i * t_{pit}) + \beta_{5i}(sex_i * t_{dit}) + \beta_{it}X_{it} + e_{it} \quad 1$$

At level 2, we assessed a random effects model that allowed for both random intercepts and slopes on observed variables. In particular, we analyzed a model where the dependent variable, here self-rated health, was allowed to vary both by age and by sex. This yielded the second-order random intercept model (2) and a random slopes model (3) below, noting that we use ‘k’ here to denote the full set of level 1 covariates:

$$\beta_{0i} = u_{00} + u_{01}(sex_i) + u_{02}(age_i) + r_{0i} \quad 2$$

$$\beta_{ki} = u_{k0} + u_{k1}(sex_i) + u_{k2}(age_i) + r_{ki} \quad 3$$

Together, these can be interpreted as running a individual-level fixed-effects model, from which we get the average slopes defined above, with the additional estimation power that we can estimate individual variance in the intercepts and in the slopes of those fixed effects as being determined in part by differences in gender and in age. These models assume an independent covariance structure for the random effects. It should be noted that we also ran models without sex and age, along with models that included education in level 2. Education did not significantly add to the random effects models, though adding substantially to the fixed effects. Removing age and sex from the random effects did not change the conclusions drawn here.

Results

Table 1 shows the descriptive characteristics for the sample after weighting. Some differences between the samples are immediately evident. There were more people in Canada who remained single throughout. The proportion of respondents who were

employed is higher in the U.S. as compared to Canada. There are more males in the Canadian data. Finally, self-rated health is not significantly different in Canada as compared to the U.S.

Table 2 shows the multilevel model results. In considering the controls we see that the resulting relationships are relatively stable between the models. In particular, the estimates for education, employment status, number of children, and age are in the same direction and are similar in size. Yet, a number of differences arise. Income was not significant in the Canadian analyses though income was highly significant in the U.S. The difference between those who partnered in comparison to those who were single was almost three times larger in the U.S. than in Canada. Finally, the negative gender effect in Canada was smaller than in the U.S. The random intercepts and slopes are significant, and the likelihood ratio test (which provides a conservative estimate) is also significant, suggesting that the second level analyses were important to the model.

To better understand the results of the partnership models, we provide figure 1 which provides the results in graphical format for U.S. data in section (a) and for the Canadian data in section (b). Both figures include: two comparison groups, men and women who were single throughout, along with two curves for those who entered into partnerships at time 0. A vertical line was also provided that visually defines the 'change point' (entrance into partnership) for those who entered partnerships. Analyses were run to analyze the impact of cohabitation as compared to marriage, but these results were non-significant in both datasets. We begin by discussing the American results first. Figure 1 shows the resultant health curves after adjustment for important indirect selectors like education and health-determining covariates such as age.

In terms of entry into partnership, results from the U.S. support arguments of positive selection. Here we see that there are substantively large differences in health between those who enter into partnerships as compared to those who remain single. These differences are on the order of 0.18, or about 19% of a standard deviation difference. However, perhaps more telling we see that those who entered into partnerships did not get better following partnership, but instead remained at their already elevated health levels. Similarly, being single or becoming partnered did not predict simple differences in changes in health over time.

Discussion

If cultures, partnership, and marriage are similar in both countries, why do the selective patterns and benefits differ so substantially? In this study, we used cross-nationally harmonized data to argue that the importance of health as a selector in partnerships is reduced when health is not deemed 'risky'. Indeed, the results shown here support the concept that the importance of health selection in partnership creation, and the impact of partnership on health may be determined by social policy contexts affecting not only health but families and gender as well. In the following discussion, we consider the role that defamilialization of public policy plays in changing the incentives related to selecting a partner, while also defining who gains from partnership.

There are a number of limitations to this research that may help to provide direction to future research efforts. First, though the data have been harmonized by leading international comparative researchers as part of the Cross National Equivalence File (CNEF) (Frick et al. 2007), there remain some underlying differences in the nature of social life in both countries that may deserve further research. For instance, the nature of emerging families and their structures with regards to within-family gender wage gaps may influence the balance of power along with the extent to which different genders or indeed people within different families benefit from partnerships. Second, in our analyses we used a conventional change-point analysis, which assumes that there is a fixed time-point at which health trajectories change. This may not always be the case, and indeed, as Duncan et al. (2006) show, it is possible that people begin benefitting from relationships prior to partnership. Similarly, there are a number of reasons to believe that people may start benefitting from partnership once a partnership has maintained a certain level of stability and both individuals feel more comfortable within that partnership. Future analyses fitting random change points along with non-linear trajectories may provide us with greater detail into the nature of partnership benefits. Finally, here we have fit an ‘average trajectory’ for the entire sample. However, it is likely that trajectories of health differ substantially and that only some people are susceptible to health selection while others are not. For instance, it is possible that some populations enjoy a particularly privileged position in the partnership market if partnerships are strongly determined by one aspect, such as gender or race, and they are few. If this is true, the selectivity of those partnerships may be reduced and because of their privilege these benefits may also increase. As such, we believe that future research should consider the role of demographic differences in determining any potential selective, beneficial, and potentially harmful partnership outcomes. Despite these limitations, this study makes novel contributions to the literature that will be discussed next.

As we outlined in the introductory section, one of the fundamental questions in this field of research is not necessarily what does partnership entail, but rather who gets partnered and why. In Canada, we showed that it is not only the healthiest that find partners. Though positive selection did exist and was significant, it was more important in the year before partnership while four years before partnership this selection was non-significant. Moreover, upon entrance into a partnership individuals showed significant increases in self-rated health supporting approaches suggesting partnership benefits over those arguing health selection.

In contrast, in the U.S. we showed that those who partnered were much healthier than those who remained single, and that they did not get better following partnership. This upholds earlier work done by Williams & Umberson (2004) who suggest that marriage is generally selective of healthier people. In the U.S. a lack of state protections may make it riskier to partner with someone who is ill – indeed, we know for instance that health problems burden individuals and families more in the U.S. than in Canada (Clouston 2009, Himmelstein et al. 2005, Himmelstein et al. 2009). Moreover, benefits in Canada are not tied to formalized partnerships but are rather ascribed to individuals (including, for instance, health care, employment insurance), and while having a family may modify the extent of those benefits as well as an individual’s desire to sign up for the benefits, that those who are single are not differentially excluded. This suggests that those who enter into partnerships are not doing so for financial reasons to the same extent, but may be doing so for more relationship-oriented

reasons. Together, this supports theories that suggest that a country's level of defamilialization affect the ways that social life is organized (Garrison 2007, Bamba 2004, Bernard and Boucher 2007, Kershaw 2010). It is therefore not surprising that positive selection does not play nearly so significant a role in Canada that it does in the U.S.

Our results imply that the reasons that women enter into partnerships may differ depending on what benefits they stand to receive from partnership, supporting Garrison's (2007) thesis regarding the importance of public policy in generating the context in which people act. This is not a new hypothesis, and is indeed easily inferred from any incentives-based research such as that popularized by Levitt & Dubner (2005). In this case, the stakes to partnership are much higher in the US, where health problems, childcare, and the employment market are risky; whereas in Canada childcare and illness are less likely to lead to catastrophic losses and social systems exist that protect individuals regardless of their partnership status.

Though defamilialization literature is heavily focused on gender (Bamba 2004). We did not find that gender affected the nature of the relationship between health selection/partnership benefits and self-rated health. We did notice that there were substantial differences in the levels of gender inequalities between these two countries. This supports the defamilialization literature, if applied to health, which suggests that defamilialization of social policy increases women's equity in society and therefore decreases social inequalities in health due to gender.

Policy Implications

Should partnerships be risky? Creating an environment of limited social supports both increases the risk of everyday life to a person's ability to continue living a productive and healthy life. However, the knowledge that such risk could affect a healthy person's own financial future may very well change the types of decisions that those individuals make as they progress through their lives. For instance, family-oriented strategies towards defamilialization of the welfare state can lead to greater gender equity in the labour market (Mandel and Shalev 2009). However, our results also suggest that the societal impact of policies is pervasive both in the health sphere and when individuals are creating families. As such, policies that are oriented towards better gender protections may also be good for the family and for the population, reducing unequal health-based selection while increasing the potential for partnership benefits.

Conclusion

In this study, we modeled health trajectories around the entrance into partnerships in two countries. In Canada, we found strong evidence for partnership benefits and somewhat weaker evidence for health selection, while in the U.S. health selection was primary and no partnership benefits were evident. Policy makers create the context within which people act, defining the benefits and employment structures within which people make choices through welfare state policy. Leaving social protections to the family creates greater inequality in two ways: first it leaves those without sufficient family protection behind, and second it reifies the social importance of selecting healthy partners. Partnerships are inherently risky, and the

level of risk that an unhealthy partner brings to the family depends on whether health has the potential to define the family's well-being.

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(a)

(b)

FIGURE 1. Health trajectories from multilevel model estimates by gender

(a) Men and women in the U.S.

In Canada, results are fundamentally different. Firstly, those who remained single became less healthy every year: those who entered into partnerships did not drop so much, and those in the U.S. who remained single did not deteriorate quite so much. Similarly, those who entered into partnerships begin the period only slightly healthier (at $t = -4$, the difference is 0.031 and is not significant) than those who remain single and do not deteriorate in health at the same rate as those who remain single. However, upon entrance into partnership, we found that there was change point that predicted a significant increase in the health of those who remained partnered. Moreover, this benefit, though slightly smaller for women, was not significantly different between genders but seemed instead to benefit all equally.

(b) Canadian men and women

TABLE 1

Descriptive Statistics

	Percent		Difference	
	Canada	U.S.	Canada-US	sig.
Single Throughout	36.27	28.23	8.04	***
Partnered Throughout	50.04	44.42	5.62	***
Entered Partnership	13.69	27.35	-13.66	***
Female	49.99	52.8	-2.81	***
Employed	78.82	85.64	-6.82	***
	Mean	SE	Mean	SE
Age	35.29	9.15	35.59	8.77
Age Cohort	32.81	9.28	30.26	8.37
Household Size	3.28	1.36	3.08	1.49
Number of Children	1.17	1.12	1.29	1.23
Hours Worked for Pay	1538.30	889.11	1489.33	1018.52
Income Groups	131.12	103.59	253.30	457.93
Self-Rated Health	3.90	0.97	3.81	0.95
Imputed Health	3.86	0.94	3.80	0.90

Table 2

Multilevel model estimates comparing estimates from the U.S to those from Canada

Fixed Effects	U.S.				Canada			
	Estimate	SE	sig.		Estimate	SE	sig.	
Partnered	0.065	0.025	*		0.181	0.019	***	
Time	-0.012	0.006	*		-0.002	0.002		
Partnered*Time	-0.007	0.010			-0.001	0.003		
Female	-0.119	0.019	***		-0.178	0.017	***	
Female*Time	0.009	0.008			0.002	0.002		
Change	0.052	0.017	**		-0.001	0.003		
Female*Time	-0.026	0.017			0.004	0.003		
Age	-0.030	0.001	***		-0.022	0.001	***	
Number of Children	-0.006	0.011			-0.003	0.004		
Employment Status	0.154	0.014	***		-0.140	0.033	***	
Income	-0.005	0.005			0.032	0.004	***	
High School								
<i>Less than</i>								
<i>High School</i>	0.274	0.019	***		0.213	0.019	***	
Education								
More than High School	0.479	0.027	***		0.490	0.020	***	
k	4.538	0.052			4.035	0.036		
<hr/>								
Random-Effects	Estimate	SD	sig.		Estimate	SD	sig.	
sd(sex)	0.175	0.018	***		0.078	0.036		
sd(age)	0.016	0.001	***		0.012	0.000		
sd(_cons)	0.259	0.041	***		0.514	0.019		
sd(Residual)	0.692	0.003	***		0.670	0.002		
<hr/>								
Likelihood ratio test	20430.95		***		7411.63		***	