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later, but with whom?

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Abstract

Despite the large literature on the long-term effects of parental divorce, few studies have analyzed the effects of parental divorce on spouse selection behavior. We use register-based event-history data from Finland to study the effects of parental divorce on spouse selection according to education with conditional multinomial logistic regression (CMLR) models. The results show that Finnish children of divorce postpone their marriages. They have a lower likelihood of marrying spouses with higher secondary education or more, but given this constraint, they have a higher likelihood of marrying people with higher levels of education than themselves. The results suggest that children of divorce are less preferred spouse candidates, but nonetheless prefer marrying better educated spouses than themselves.

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Introduction

A whole industry has studied the effects of parental divorce on children's psychological, educational, and socio-economic outcomes, both in the United States and elsewhere (e.g., Cherlin 1999; Dronkers 1999; Fischer 2004; McLanahan and Sandefur 1994; Pong, Dronkers and Hampden-Thomson 2003). A common conclusion is that children of divorce fare worse than those with intact family backgrounds. Another, smaller, literature has analyzed the implications of parental divorce for demographic behavior (Amato 1996; Diekmann and Engelhart 1999; Engelhart, Trappe and Dronkers 2002; Wolfinger 1999; 2005). Here again the general conclusion is that parental divorce has an effect. Children of divorce show differences in marriage formation and dissolution, in early fertility behavior, and even in menarche.

Few studies have analyzed the effects of parental divorce on spouse selection behavior (see, however, Wolfinger 2003a; 2005: 45-52; Teachman 2004). The question of spouse selection is, however, an important one. While marriage can in itself have positive welfare effects (e.g., Kohler, Behrman, and Skytthe 2005), returns to marriage are apparently shaped by the characteristics of one's spouse. Similarly, differences in spouse selection may explain part of the intergenerational effects of divorce, if children of divorce choose or have access to different spouses than those from intact families. Furthermore, if children of divorce exhibit different spouse selection behavior than those from intact families, this can help explain the results pointing to postponement of marriage (e.g. Wolfinger 2003b). In other words, children of divorce may not reject marriage as such, but only certain kinds of candidates. Alternatively, children of divorce may find it harder than other people to marry people with preferred characteristics.

In this paper, we analyze the effects of parental divorce on the chances of marrying spouses with different educational qualifications using register-based data on a sample of 38,011 individuals from Finland. Marital matching according to educational levels has received wide interest in the social sciences (e.g. Blossfeld and Timm 2003; Kalmijn 1994; 1998). A robust result is that "likes marry

likes”, leading to a practically universal tendency for educational homogamy (Hout and DiPrete 2006; Kalmijn 1998). This can result from two-sided preferences for marrying candidates with the highest possible resources or from a preference for marrying within one’s own group (Kalmijn 1994; 1998).

The paper continues as following. First we take a look at studies on the effects of parental divorce on offspring marital behavior. We then discuss theory and findings on search and matching in the marriage market, after which we combine these two literatures to formulate hypotheses of the effects of parental divorce on spouse selection behavior. After that we consider the Finnish context as an example of a social-democratic welfare state with high divorce rates but low levels of poverty among divorcees. We describe the dataset and methods, and finally, present the analyses. We conclude with a discussion of our findings.

The effects of parental divorce on marital behavior

Children of divorce differ in their demographic behavior from those with intact family backgrounds. An often reported regularity is the intergenerational transmission of divorce: children with divorced parents have a higher likelihood of divorcing themselves (Amato 1996; Diekmann and Engelhardt 1999; Diekmann and Schmidheiny 2004; Engelhardt, Trappe and Dronkers 2002; Wolfinger 1999). More interesting for this paper are the findings pointing to different entry rates to marriage, discussed by Wolfinger (2003b; 2005).

According to Wolfinger, in recent American cohorts, children from divorced backgrounds postpone marriage more than others. This pattern used to be the opposite in earlier cohorts. Moreover, the postponement effect becomes visible only after the age of 20, and in the younger groups, the odds of marrying are actually higher for children of divorce. The author suggests that the recent lower tendency to marry has been replaced by “...an increasingly acceptable alternative” of cohabitation (Wolfinger 2003).

Suggested explanations for this postponement effect include more negative views and values towards marriage, lower interpersonal skills, and emotional problems. Several studies have found that children of divorce have more negative attitudes towards marriage than the general population (e.g., Amato and Booth 1991; Amato and DeBoer 2001; Axinn and Thornton 1996). Other studies have found that parental divorce is associated with lower interpersonal skills and more emotional problems, which are also major explanatory factors behind the intergenerational transmission of divorce (e.g., Amato 1996; Cherlin 1999; Wolfinger 2000). These factors can also explain how parental divorce translates into lower marriage rates.

It has also been suggested that parental divorce can increase the offspring's willingness to marry. In his review of research, Wolfinger (2003) found that children of divorce entered marriage relatively faster in the older cohorts. A speculative explanation for this is that children of divorce have "inner neediness that leads them to seek out romantic involvement" (ibid., 340). Evidence for this claim could be found from the early sexual initiation of those with divorced parents. However, as seen above, the postponement effect has gained more empirical backing in the recent literature.

How can these mechanisms affect the kinds of marital candidates children of divorce marry, especially with regard to their educational qualifications? To seek an answer to this question, we next discuss the literature on search in the marriage market and marital matching according to education. We then combine these two literatures and form hypotheses of the effects of parental divorce on offspring spouse selection.

Search in the marriage market and educational attainment

Theories of marriage entry and spouse selection often build on search models similar to those in the job search literature (cf. Blossfeld and Timm 2003; Oppenheimer 1988). In such models, marriage entry and spouse selection are inseparable processes occurring in a marriage market with search costs and time limits, a given supply of potential candidates, and importantly, two-sided search. Basically,

the models assume that individuals looking for a marital partner search as long as they find a “suitable” (which need not be the optimal) spouse, who is willing to marry the ego.

There have been numerous studies on marriage entry and spouse selection according to education, and a stable result is that “likes marry like”. See Blossfeld and Timm (2003) and Kalmijn (1998) for reviews. This pattern can result from two processes. First, all people may prefer to marry high-status candidates (e.g., De Graaf et al. 2003; Kalmijn 1998). Highly educated individuals may be valued as partners due to their economic prospects, cultural capital, prestige connected with education, or other factors. Due to the two-sided search process, highly educated (and thus most attractive) candidates may, as a result, end up marrying other highly educated candidates, while those with less education marry those alike, or remain unmarried (endnote 1). The ways preferences translate into actual marital outcomes depend obviously also on other factors, such as the (partly endogenous) opportunities of meeting preferred spouse candidates. Such social environments as schools (Blossfeld and Timm 2003) and workplaces (e.g., South 2001) provide contexts for meeting prospective spouses. Secondly, the availability of candidates with valued characteristics constrain the possibilities for preferred matches. For example, the continued female preference for marrying up has limited the number of marital candidates for the increasing numbers of Japanese women with high levels of education (Raymo and Iwasawa 2005).

Optionally, people may prefer to marry those with similar status. Education is correlated with other traits than economic resources, such as values, cultural capital, intelligence, and tastes, which are good complements in the marriage market (Becker 1981; Kalmijn 1994; 1998). According to Kalmijn (1994), the preference to marry people with similar non-economic characteristics is stronger than the preference to marry someone with high economic status. The positive value of homogamous marriage is also shown by their lower rates of dissolution (Blossfeld and Müller 2002). The tendency to marry likes has also been observed in the case of children of divorce. The results from these studies suggest that they are more likely to marry someone with divorced parents (Wolfinger 2003a; 2005).

Hypotheses

Based on the discussion above, we can present some hypotheses of how parental divorce affects offspring spouse selection behavior. We start from the expectation that the postponement effect of parental divorce can be found in our recent Finnish cohorts. We expect that the effect of parental divorce on spouse selection operates through two mechanisms. First, we expect children of divorce to have more negative attitudes towards marriage. Furthermore, we expect them to be more aware of the risks of marital break-up and its consequences than those with intact family backgrounds and thus engage in more risk-averse behavior in the marriage market (cf. Kahneman and Tversky 1979). As in other kinds of behavior, such as educational choice (Breen and Goldthorpe 1997), risk aversion may outrun the tendency to maximize outcomes in the marriage market. However, these factors may not lead children of divorce to reject marriage as such, but only certain types of candidates. In other words, children of divorce can be “pickier” in the marriage market. Second, since emotional problems and low interpersonal skills are likely to be observable before marriage, one would expect that such children not only make marital decisions differently to others, but also are less attractive marital candidates.

Our first hypothesis predicts that *children of divorce do not marry candidates with low educational qualifications, or candidates with different qualifications from their own, relative to children from intact marriages*. As discussed above, children of divorce may set higher standards for the candidates they consider marrying. If people seek to marry as high as possible, children of divorce would avoid candidates with low educational qualifications. If educational homogamy is the driving preference, children of divorce would avoid marrying those with a different level of education than themselves.

Opposite to the first, our second hypothesis predicts that *children of divorce have less access to preferred spouses, and cannot marry candidates with high levels of education or same levels as themselves, relative to children from intact marriages*. Note that according to this hypothesis children of divorce do not differ in their preferences from the others; instead general preferences to marry children of divorce are lower. This can result from two mechanisms. Firstly, as suggested by

Wolfinger (2005: 47), people with higher attained education may exercise more discretion in choosing spouses and may avoid those from divorced backgrounds (endnote 2). If children of divorce show less interpersonal skills and other valued traits, those with high education (and more demand) may avoid children of divorce in the hopes of finding a more suitable spouse. Optionally, people with higher attained education may be more informed or more calculative in their marital behavior. Either way, we expect that children of divorce have lower rates of marriage with highly qualified candidates. If similar characteristics (here, social status) and interpersonal skills are also supplements, children of divorce may also show relatively lower rates of homogamous marriage. Secondly, children of divorce may have less access to highly educated partners simply because they are less likely to be in higher education, an effective marriage market in itself (Blossfeld and Timm 2003). This was the explanation given by Wolfinger (2005: 47) to his finding that those with higher educational qualifications are less likely to marry someone from a divorced background. In this case, controlling for own education should erase lower access to highly educated spouses.

Context: marriage, divorce and education in Finland

Until the late nineties, the crude marriage rate in Finland was low in the European context, and decreasing. During the last few years there has been an increase in the marriage rate, from 5.05 of 2000 to 5.58 in 2005 for thousand persons, which is higher than in France, Germany, the UK, and Sweden, but lower than in Denmark (Eurostat 2007). Cohabitation before marriage has become nearly universal and only a small minority of unions begins directly as marriages (Finnäs 1995). The crude divorce rate has not changed much from 1990 to 2005, ranging from 2.6 to 2.7 divorces for thousand persons, rates similar to those in Germany and the UK, and higher than in Sweden and Norway, but lower than in Denmark (Eurostat 2007).

There have been notable increases in educational levels in Finland during the last decades, with the largest changes at the lowest end. Whereas in 1975, around 60 percent of Finnish men and women had only primary education and around 6 and 3 percent had university degrees, respectively, in 2000 around 10 percent had university degrees, and 20 and 25 percent of women and men, respectively, had

attained primary education only. In the marriage market, women with higher levels of attained education are more likely to transform their cohabitations into marriages (Finnäs 1995).

There is little research on marital homogamy in Finland. However, Pöntinen (1980: 27-30) found that Finnish women were more likely to marry up in the class than in the other Nordic countries, although the prevailing pattern was class homogamy. As to the intergenerational effects of divorce, Dronkers and Härkönen (2006) that children of divorce had a higher risk of divorce than those from intact families and the relationship was stronger than in the United States or Sweden. Otherwise, intergenerational associations in socio-economic status are weaker in Finland than in most other Western societies (Björklund and Jäntti 2000; Erola and Moisio 2007) and the welfare implications of divorce are less severe than in many other countries (Aassve et al. 2007).

Data and variables

Our data come from the Finnish Census Panel, provided by Statistics Finland. The data are formed from national registries, making them of very high quality. The data are based on a sample drawn from the 1970 census, and is extended to cover all members of the household. Each family member is followed to next censuses, and new family members are included in the follow-up. Our sample consists of 38,011 children born between 1970 and 1980. We have data on their demographic and socio-economic living conditions from the years 1970, 1975, 1980, 1985, and 1987, after which we have annual records until 2001. Therefore, while we need to resort to the quintannual data for many cases to construct the measure on parental divorce, we can use annual measures to construct event-history data for entry into marriage starting from age 17 to the maximum observed age of 31 (endnote 3).

Our dependent variable indicates whether the individual was married or not, and if yes, the level of educational attainment of the spouse. Thus, we have six outcome categories. The five categories of completed education were coded according to the internationally comparable CASMIN scheme (Braun and Müller 1997). This scheme differentiates not just between levels of education, but also

types of education. This makes sense in an educational system such as the Finnish one, where students are tracked into different paths (general/academic and vocational). This also means that the scheme is strictly speaking not ordinal. We focus on marriages rather than cohabitation because the former sends a stronger signal of commitment and in this respect marriages and cohabitations form a very heterogeneous group.

All Finnish children take nine years of compulsory primary education (Level 1: Compulsory schooling). After these nine years, students choose either the vocational track that mainly prepares for working class jobs (Level 2a+b: Intermediate secondary) or the high school track (Level 2c: Secondary), which is the normal route to university education. Before 1991, high school graduates could continue either to obtain further secondary, usually vocational, education (Level 2c: Secondary) or university education, leading either to a bachelor's degree (3a: Lower tertiary) or more often, directly to a Master's degree (3b: Higher tertiary). After the introduction of tertiary degrees in Polytechnics (or "Universities of Applied Sciences") in 1991 (degrees awarded from 1994 onwards), students could also obtain lower tertiary degrees (3a) from these institutions, which are geared towards advanced vocational training. We summarize the Finnish educational system and the coding used in Table 1. This coding is also used to measure the level of educational attainment of the respondent.

- TABLE 1: The CASMIN educational qualifications scheme in the Finnish context. -

These five educational groups are also used to measure the educational attainment levels of mothers. Mothers in group 3a have bachelor's degrees from universities. Those having only primary schooling (Level 1) are a more heterogeneous group, with some having only six years (*kansakoulu*), while others had nine to twelve years of schooling (*kansakoulu* 4-6 years plus *keskikoulu* 5-6 years), which was the track to high school and further education.

Experience of divorce in childhood, that is the experience on parental divorce before the age of 17, is the main explanatory variable of interest. We include information both from marital divorces and marital separations (endnote 4). The control variables can be divided into three broadly defined groups: age and period variables; social background, and educational attainment. The first group consists of year (linear) and age, which is entered with a linear parameter and $\log(\text{age}-16)$, a combination which fit the data best. The background variables are gender, mother's education at age 16, and mother's age at birth. Women enter marriage faster than men and there are gender differences in spouse selection. As in other countries, parental background is related both to the experience of divorce (Härkönen and Dronkers 2006) and marital behavior (Finnäs 1995). The same can hold for the mother's age at birth of the child: younger mothers have a higher risk of marital dissolution and young age of the mother can affect outcomes in adulthood (e.g., Kalmijn and Kraaykamp 2004).

In addition to the five-class education variable, we measure schooling of the respondent with a dummy indicating whether one is still in education and a linear measure of the years after finishing education (zero if in education). These account for the facts that marriage is less likely while in education (Blossfeld and Huinink 1991) and that the longer people have been out of education, the higher their chances of meeting marital candidates with different educational levels (for example at work) (Blossfeld and Timm, 2003).

To analyze entry into marriage, we transformed the data into discrete-time event history form with years as our time unit (Yamaguchi 1991). Event-history models are commonly used multivariate techniques used to analyze the transition rates from one discrete state to another. In our case, we use these methods to analyze marriage rates. The discrete-time specification enables us to better handle time-varying covariates and ties in the data. Due to the large number of cases (38,011; 326,191 cases in person-year form), we do not experience a notable loss in efficiency due to the discrete-time form of the data.

- TABLE 2: Means and percentages of the variables, person-years -

Table 2 presents descriptive information on the variables in person-years both for all cases and by parental divorce. The distributions are as expected. Approximately 20 percent of our respondents come from broken homes. Children of divorce have less education and are less likely to be in education. They have a lower likelihood of being married and if married, their spouses have less education. Their mothers were younger at birth and had lower levels of education. A limitation to our data is that we are not able to exclude non-biological mothers, who apparently increase the observed maximum age at birth.

Method

Discrete-time event-history data are commonly analyzed using logit regression methods. When analyzing event-history data with competing risks – as in our case where the ego can marry candidates with different educational qualifications – multinomial logit regression analysis is the standard procedure. However, since we also want to analyze effects that are conditional on the educational level of the ego (educational homogamy and heterogamy), we use conditional multinomial logistic regression (CMLR) models (see Breen 1994; Dessens et al. 2003). CMLR models are in many ways similar to multinomial logit models. Their main advantage is their flexibility in including equality and other restrictions in model specification. The equation for the conditional logit model is

$$p(y_{it} = k \mid k_{t-1} = j, z_{ikt}, x_{it}) = \exp(z_{ikt} \gamma + x_{it} \delta_k) / \left[\sum_{k=0}^K \exp(z_{ikt} \gamma + x_{it} \delta_k) \right] \quad (1),$$

which gives the probability that someone with characteristics x will marry a candidate with educational level k at age t , given that she is not yet married (and has not been married before) and given the attributes z of marriage with someone with educational level k . x are individual-level covariates, such as educational attainment and experience of parental divorce, which we would find from a multinomial logistic regression model for competing risks event-history data. The conditional model differs from these more familiar models because of the alternative specific covariate z , which is

often interpreted as giving the “value” of alternative k for the individual. In our case, it gives the educational level of the spouse, conditional on that of the ego (for example, same level of education). To save degrees of freedom, these conditional parameters are expressed as single parameters, so that, for example, we have a single dummy variable for educational homogamy. In practice, a positive estimate for this parameter tells that people have a higher probability of entering marriage with someone with the same level of education. Similar models are commonly used in social mobility research (Breen 1994; Dessens et al. 2003).

Results

Parental divorce and entry into marriage: descriptive results

We first take a look at the differences in the cumulative hazard estimates of entering marriage by age by parental divorce (Figure 1). The postponing effect is rather clear. In the Finnish case, children of divorce are constantly less likely to enter marriage. These results are very similar to recent findings in Norway (see Stroksen et al. 2007). While the general pattern is similar to the recent U.S. cohorts (Wolfinger 2003b), we do not find an age threshold of 20 years, before which children of divorce have a higher propensity of marriage. These findings provide a starting point for our further analyses.

- *FIGURE 1: Cumulative hazard estimates of entering marriage by experience of parental divorce as a child.* -

Parental divorce and spouse selection according to educational qualifications

We next analyze the effects of parental divorce on marrying someone with a given level of education (Table 3). In other words, we analyze whether children of divorce have higher or lower probabilities of entering marriage with, say, someone with a Master’s degree (3b: Higher tertiary). Regarding model specification, the results from these competing risks models are the same as those returned by multinomial logistic regression models.

- *TABLE 3: Parental divorce and the probability of marrying someone with given educational attainment.* -

We only show the parameter estimates for the effects of divorce on entering marriage with a spouse with a given level of education. However, we provide the estimates for the control variables in the Appendix. Each model has its own column and the estimates for the educational level categories of the spouse are shown on separate rows. We chose this presentation for consistency with the later models.

The first model includes parental divorce and the age and period effects. This baseline model already shows that the postponing effect has a lot to do with entry into marriage with certain types of candidates: there is no significant postponing effect in marrying people with the two lowest levels of education, but children of divorce are less likely to marry those with higher levels of education. Children of divorce are approximately half as likely to marry someone with higher tertiary education compared to those from intact family backgrounds. This result gives initial support for our second hypothesis.

The second model controls for gender, maternal education, and the mother's age at birth. The gap to entering marriage with someone with tertiary education decreases, whereas the other estimates remain rather stable. Therefore, the fact that children of divorce have a lower likelihood of marrying someone with secondary level education or more is not an artefact of our measures of family background.

In the third model, we include the schooling variables (obtained level of education, currently in education, and years since finishing education) to assess whether our findings are due to differences in educational qualifications and careers. Indeed, the three statistically significant estimates become smaller. This suggests that marriage postponement and spouse selection according to parental divorce are partly an outcome of the differences in educational careers. Children of divorce are less likely to achieve higher educational qualifications, which decreases their probability of marrying highly educated marital candidates. However, the difference does not disappear, supporting our second

hypothesis that children of divorce are less attractive spouses regardless of their inferior family background and educational qualifications.

Parental divorce and spouse selection with homogamy/heterogamy

In the theoretical section we argued that instead of marrying as high on the educational scale as possible, marriage candidates may look for mates with similar, or possibly higher/lower educational qualifications than themselves. These preferences may differ between those from divorced and intact family backgrounds or they may shape the marriage opportunities these groups face. Our next analyses take these possibilities into account. We present these results in Table 4.

- TABLE 4: Parental divorce and the probability of marrying someone with given educational attainment conditional on own education -

The first five rows present the estimates for the same parameters as in Table 3, now controlling for the conditional parameters (including homogamy and heterogamy). The next six rows show the conditional parameters themselves, while the last rows show the general marriage hazards by education, discussed in Model 7 below.

Model 4 controls for the main and interacted (with parental divorce) effects of entry into a homogamous marriage. To avoid multicollinearity, we exclude own educational qualifications from the model, but we return to this issue in Model 7. The estimate for homogamous marriage is positive and rather strong. This result supports the hypothesis that people seek marriage market candidates with similar educational qualifications as themselves. We also find that the probability of entering a homogamous marriage is smaller for children of divorce, even though children of divorce also seem to prefer homogamous marriages. Otherwise, we find that controlling for homogamous marriages

does not change the estimates of the first five rows compared to Model 3, with the exception of marrying someone with tertiary education.

In the next step, we add the main and interacted effects for upward marriages into the model (Model 5). We find a general tendency for not marrying up, but with children of divorce this tendency is weaker than among those with intact family backgrounds. With this control, the main effect estimate for homogamous marriage becomes clearly smaller, and the interaction effect with parental divorce loses its significance. Therefore, we conclude from this model that children of divorce have lower entry rates to homogamous marriages because they have higher entry rates into marriages with people with higher qualifications than themselves. The effects of parental divorce on marriage entry with spouses with secondary education or more become bigger. This suggests that the relatively higher likelihood of marrying up shown by children of divorce (who also have lower levels of education themselves) partly hides the lower access to highly educated spouses.

In Model 6, we omit the homogamy parameters and replace them with parameters for downward marriages. The results show a general tendency for not marrying down, but that children of divorce do not differ in this respect from those from intact backgrounds. The estimates for marrying spouses with given educational are slightly bigger than in Model 5.

The results from Models 4 to 6 suggest that children of divorce prefer to marry candidates with higher educational qualifications than themselves. This can be an outcome of the fact that children of divorce have lower educational qualifications which makes them more likely to marry upwards because on average the spouse candidates are likely to have higher educational qualifications than they have. Therefore, in Model 7 we include the conditional effects for the differences in marrying in general according to the educational qualification of the respondent. The parameters tell that those with higher qualifications are more likely to enter marriage (cf. Finnäs 1995). More interestingly, the parameter estimate for marrying up for children of divorce remains positive and significant, although it becomes smaller in size. Therefore, although a part of the result that children of divorce have a higher

probability of marrying upwards than others is explained by the lower educational qualifications of these individuals, it nevertheless seems that they tend to marry candidates with higher education than themselves. Children of divorce also continue to have lower marriage rates to spouses with secondary qualifications or more.

Discussion

In this paper we have used register data from Finland to analyze whether children of divorce have different marriage rates to spouses with different educational qualifications than those from intact family backgrounds. Previous research has shown that these groups differ with respect to many demographic behaviors. According to Wolfinger (e.g. 2003b; 2005), in the recent cohorts, children of divorce have a relatively lower entry rate to marriage. Starting from these results, we hypothesized that instead of postponing marriage as such, children of divorce have lower marriage rates only with certain types of people, in our case according to educational qualifications (endnote 5). We formed two main hypotheses. Building on theories that suggest that people prefer to marry as high up as possible or alternatively, to marry those with similar levels of education, our first hypothesis states that children of divorce are pickier in the marriage market: they have lower rates of marriage with spouses with low education or with different educational qualifications than themselves. According to our second hypothesis, children of divorce are less valued spouse candidates due to their lower interpersonal skills and higher levels of emotional distress and therefore, they have lower rates of marriage with people with high levels of education or the same levels as themselves. We tested these hypotheses by fitting conditional logit models to competing risks discrete-time event history data.

Our results showed that children of divorce have lower marriage rates to spouses with secondary education or more. We also found that children of divorce have higher marriage rates to spouses with higher educational qualifications than themselves. These results remained when controlling for age and period effects, the level of education of the mother, the mother's age at birth, gender, and own educational qualifications, educational enrolment, and years after exiting education.

How should these results be interpreted? First of all, they support our general hypothesis that children of divorce postpone marriage only to certain types of spouses instead of postponing or avoiding marriage in general. This result deepens the existing information on the effects of parental divorce on demographic behavior and suggests a refinement of the hypotheses. Second, the consistent result that children of divorce have lower marriage rates with spouses with secondary education or more suggests that children of divorce are less preferred spouses, for example because of low interpersonal skills, emotional problems, or other factors. If high attained education is a valuable resource in the marriage market, then highly educated spouse candidates can show more consideration in their marital decisions in hopes of finding better matches. This can partly explain the lower marriage rates of children of divorce. This result also shows that the lower chances of marrying highly qualified candidates adds to the other intergenerational effects of divorce and cannot be explained fully by the lower educational levels of the children of divorce.

The finding that children of divorce are more likely to those with higher attained education than themselves is harder to interpret. We expected that children of divorce may show more risk awareness by marrying candidates that are similar to them according to, say, education, and avoid marrying those with different levels of education than themselves. A first explanation to our finding could be that children of divorce may try to secure the benefits of marriage and gain from it by marrying candidates with higher resource than themselves. However, we would also have expected to observe lower entry rates to marriages in which the spouse has lower qualifications as a way of avoiding relative losses through marriage. A second explanation can build on the combination of the general findings of “likes marry likes” and the general educational underachievement of those from divorced backgrounds. Table 1 shows that in Finland, like in many other places, children of divorce have lower educational qualifications than others. The most likely explanation is the disturbance of their educational career caused by parental divorce and its aftermath (endnote 6). As a consequence, children of divorce are often educational underachievers and have lower educational qualifications than their actual academic skills and performance would imply. They may still prefer marrying people

with similar cognitive capabilities, who on average have achieved better educational qualifications. And persons with a higher educational level may be willing to marry a child of divorce, despite lower educational qualifications, because of similar cognitive capabilities.

There are three potential weaknesses related to the findings. First, having observations of the first marriages after the age of 31 could reveal a different pattern, especially given the increasing ages at first marriage. We should nonetheless be able to observe the possible change in the trend already before the age of 31; now this is not the case. Further, we do not control for unobservable background factors that may partially explain the observed effects. Nevertheless, our general results remain after controlling for a number of important confounding and intervening factors. Third, the mechanisms may be gender-specific. However, despite the size of the dataset we were not able to distinguish these interactions from the significant effects we found.

Most importantly, the results show that parental divorce has long-term effects, not only for the divorcees themselves, but also for their children. This long-term effect of parental divorce on spouse selection by the children of divorce does not occur in a society with strong stigma against divorce or with poor social benefits for divorced mothers. Finnish society has a high level of tolerance of divorce by parents with children, a generous welfare state, and high rates of social mobility. Although these factors can reduce the intergenerational impact of parental divorce, the long-term effect of parental divorce on spouse selection remains significant even in Finland. Effects of parental divorce on demographic behavior have also been found from Norway, another example of a Nordic welfare state (Storksen et al 2007). This underlines the importance of recalling that divorce is not only a decision which affects the two separating partners, but can have long-term consequences for their children (endnote 7). Current divorce legislation and welfare states may not recognize the full intergenerational implications of these family processes.

Endnotes

(1) This theory has been mainly used to explain the choices of women. However, as the importance of female economic resources have for the economic position of the family has increased, they have become more important for marriage entry and spouse selection (Sweeney 2002; Sweeney and Cancian 2004). Due to the traditionally high rates of female labour market activity and gender equality in Finland, similar results can be expected.

(2) Based on the finding that parental socio-economic status does not affect the chances of marrying a child of divorce, Wolfinger (2005) argued against this hypothesis.

(3) The legal age of marriage in Finland is 17 for women and 18 for men. Marriages at younger age were permitted on the decision of the President of the Republic.

(4) Around 5 per cent of the mothers in the sample have been single parents but not divorced or separated from a marriage during the childhood of the children.

(5) According to our additional analyzes the average length of cohabitation before marriage was 3.2 years for children of divorce and 2.8 for others. Controlling this did not have significant effects on the timing differences according to educational level of the spouse.

(6) Although parental divorce in early childhood might also have a negative effect on cognitive abilities.

(7) Their divorcing parents cannot be seen as good representatives of the interests of their children, although most legal divorce laws in practice assume this.

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Tables and figures

Table 1. The CASMIN educational qualifications scheme in the Finnish context.

Level	Coding	Content
Primary level	1: Primary schooling	Compulsory primary school, 9 years (or less, for mothers)
Secondary level	2a+b: Intermediate secondary	Intermediate general or (usually) vocational education, typically 1-2 years
	2c: Secondary	High school, advanced vocational qualification (possibly post-high school)
Tertiary level	3a: Lower tertiary	B.A. equivalents, from university or polytechnics (1991 onwards)
	3b: Higher tertiary	Master's degrees

Table 2. Means and percentages of the variables, person-years

Continuous variables				
	Mean	Std.	Min.	Max.
Year	10.3	3.5	1	15
<i>Divorce children</i>	10.4	3.5		
<i>Others</i>	10.2	3.5		
Age	21.4	3.3	17	31
<i>Divorce children</i>	21.4	3.3		
<i>Others</i>	21.3	3.3		
Mother's age at birth	26.6	5.1	15	64
<i>Divorce children</i>	25.8	5.3		
<i>Others</i>	26.6	5.1		
Year's after ending studies	2.2	2.8	0	15
<i>Divorce children</i>	2.5	2.9		
<i>Others</i>	2.1	2.8		
Categorical variables, percentages and total N				
	All	Children divorce	of	Others
Experienced divorce, %(N)		19.8 (64,558)		
Women, %(N)	47.6 (155,255)	47.9 (30,944)		47.5 (124,311)
Still studying, %(N)	38.3 (124,901)	32.9 (21,238)		39.6 (103,663)
Spouse's education				
<i>Not married</i>	97.8	98.0		97.7
1	0.7	0.7		0.7
2a+b	0.8	0.8		0.8
2c	0.3	0.3		0.4
3a	0.2	0.1		0.2
3b	0.2	0.1		0.2
% (N)	100 (326,191)	100 (64,558)		100 (261,633)
Own education				
1	61.7	63.8		61.2
2a+b	27.5	28.6		27.2
2c	7.0	5.3		7.4
3a	2.2	1.5		2.4
3b	1.6	0.8		1.8
% (N)	100 (326,191)	100 (64,558)		100 (261,633)
Mother's education				
1	40.7	45.1		39.5
2a+b	35.5	36.4		35.3
2c	14.7	11.7		15.5
3a	5.1	3.5		5.5
3b	4.0	3.3		4.2
% (N)	100 (326,191)	100 (64,558)		100 (261,633)

Figure 1. Cumulative hazard estimates of entering marriage by experience of parental divorce as a child.

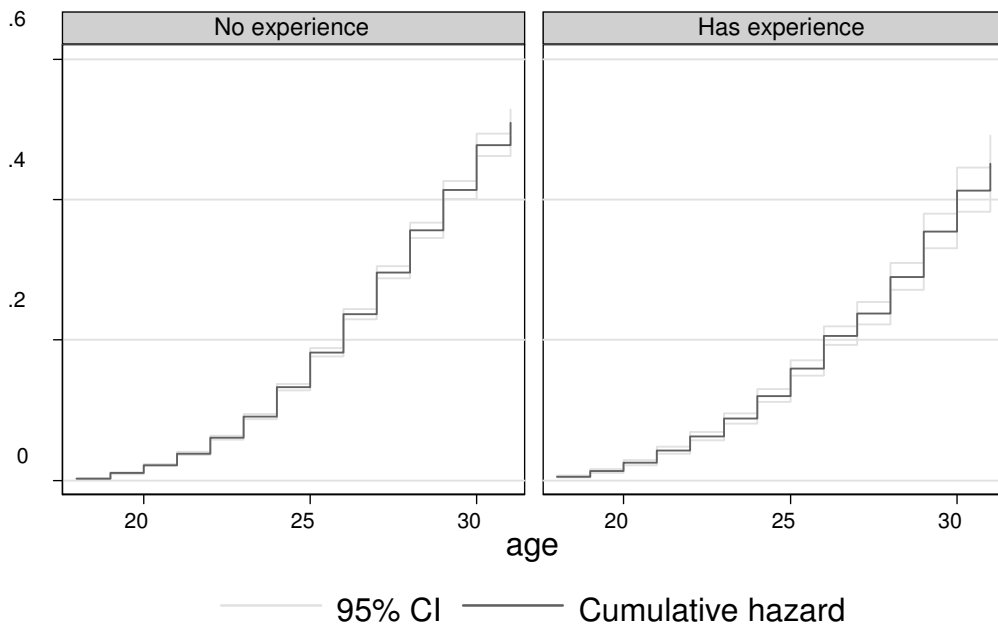


Table 3. Parental divorce and the probability of marrying someone with given educational attainment.

	Model 1		Model 2		Model 3	
	b	s.e.	b	s.e.	b	s.e.
<i>Education of the spouse</i>						
<i>(reference: not married)</i>						
1: Primary education	-0.02	0.05	-0.05	0.05	-0.07	0.05
2a: Intermediate secondary	-0.01	0.05	-0.07	0.05	-0.09	0.05
2b: Secondary	-0.28	0.08***	-0.30	0.08***	-0.22	0.08**
3a: Lower tertiary	-0.38	0.13**	-0.39	0.13**	-0.27	0.13*
3b: Tertiary	-0.65	0.13***	-0.57	0.13***	-0.35	0.14*
Person-years	1957146		1957146		1957146	
Degrees of freedom	25		55		85	
Log-likelihood	-41418.41		-40926.80		-40227.74	

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Omitted controls (estimates in Appendix):

Model 1: age, log(age-16), year

Model 2: age, log(age-16), year, gender, mother's education (cat.), mother's age at birth

Model 3: age, log(age-16), year, gender, mother's education (cat.), mother's age at birth, own education (cat.), in education, years after finishing education.

Table 4. Parental divorce and the probability of marrying someone with given educational attainment conditional on own education.

	Model 4		Model 5		Model 6		Model 7	
	b	s.e.	b	s.e.	b	s.e.	b	s.e.
<i>Education of the spouse (reference: not married)</i>								
1: Primary education	-0.02	0.05	-0.05	0.07	-0.10	0.06	-0.06	0.05
2a: Intermediate secondary	-0.01	0.05	-0.12	0.08	-0.17	0.07**	-0.13	0.06*
2b: Secondary	-0.25	0.08***	-0.37	0.12**	-0.42	0.11***	-0.36	0.11***
3a: Lower tertiary	-0.35	0.13**	-0.50	0.16**	-0.55	0.15***	-0.46	0.15**
3b: Tertiary	-0.48	0.13***	-0.66	0.17***	-0.70	0.17***	-0.62	0.16***
<i>Homogamy parameters</i>								
Homogamy	0.48	0.03***	0.14	0.04***				
Homogamy × parental divorce	-0.14	0.07*						
Upward marriage			-0.76	0.05***	-0.90	0.04***	-0.77	0.05***
Upward marriage × parental divorce			0.22	0.11*	0.27	0.09**	0.19	0.09*
Downward marriage					-0.14	0.04***		
Downward marriage × parental divorce					0.05	0.08		
<i>Likelihood of marriage, by own education (reference: primary education)</i>								
2a+b: Intermediate secondary							-0.02	0.04
2b: Secondary							0.03	0.05
3a: Lower tertiary							0.23	0.06***
3b: Tertiary							0.34	0.07***
N	1957146		1957146		1957146		1957146	
Degrees of freedom	67		69		69		71	
Log-likelihood	-40532.82		-40390.36		-40390.36		-40377.60	

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Omitted controls: age, log(age-16), year, gender, mother's education (cat.), mother's age at birth, in education, years after finishing education.

Appendix 1. Parameter estimates for models 1-7.

	Model 1					Model 2					Model 3				
	Spouse ed. 1	Spouse ed.2a+b	Spouse ed. 2c	Spouse ed. 3a	Spouse ed. 3b	Spouse ed. 1	Spouse ed.2a+b	Spouse ed. 2c	Spouse ed. 3a	Spouse ed. 3b	Spouse ed. 1	Spouse ed.2a+b	Spouse ed. 2c	Spouse ed. 3a	Spouse ed. 3b
Intercept	-3.29 (0.30)	-4.79 (0.26)	-7.69 (0.44)	-8.75 (0.69)	-10.85 (0.65)	-3.58 (0.34)	-5.47 (0.29)	-7.54 (0.48)	-9.02 (0.75)	-12.27 (0.70)	-2.61 (0.38)	-4.92 (0.32)	-6.69 (0.49)	-8.3 (0.78)	-10.02 (0.74)
Divorce child	-0.02 (0.05)	-0.01 (0.05)	-0.28 (0.08)	-0.38 (0.13)	-0.65 (0.13)	-0.05 (0.05)	-0.07 (0.05)	-0.3 (0.08)	-0.39 (0.13)	-0.57 (0.13)	-0.07 (0.05)	-0.09 (0.05)	-0.22 (0.08)	-0.27 (0.13)	-0.35 (0.14)
Age	-0.28 (0.02)	-0.19 (0.02)	-0.25 (0.05)	-0.45 (0.10)	-0.45 (0.13)	-0.28 (0.02)	-0.19 (0.02)	-0.24 (0.05)	-0.44 (0.10)	-0.42 (0.13)	-0.34 (0.03)	-0.23 (0.02)	-0.25 (0.05)	-0.39 (0.09)	-0.35 (0.11)
Log(age-16)	3.1 (0.16)	2.81 (0.15)	4.69 (0.47)	6.35 (0.91)	8.02 (1.28)	3.1 (0.16)	2.81 (0.15)	4.68 (0.46)	6.32 (0.91)	7.93 (1.28)	3.26 (0.17)	2.55 (0.15)	4.19 (0.44)	5.44 (0.82)	6.56 (1.07)
Year	-0.06 (0.01)	-0.05 (0.01)	-0.1 (0.01)	0.05 (0.02)	-0.06 (0.02)	-0.06 (0.01)	-0.04 (0.01)	-0.1 (0.01)	0.05 (0.02)	-0.08 (0.02)	-0.06 (0.01)	-0.04 (0.01)	-0.09 (0.01)	0.04 (0.02)	-0.08 (0.02)
Mother's ed. 2a+b						-0.08 (0.05)	-0.06 (0.04)	0.12 (0.07)	0.09 (0.10)	0.28 (0.11)	-0.06 (0.05)	-0.02 (0.04)	0.09 (0.07)	0.01 (0.10)	0.12 (0.11)
Mother's ed. 2c						-0.07 (0.07)	-0.46 (0.07)	0.17 (0.09)	0.12 (0.14)	0.95 (0.12)	-0.05 (0.07)	-0.27 (0.07)	0.17 (0.09)	-0.04 (0.14)	0.43 (0.12)
Mother's ed. 3a						0.04 (0.10)	-0.69 (0.12)	0 (0.15)	0.09 (0.21)	1.21 (0.15)	0.06 (0.10)	-0.4 (0.12)	0.06 (0.15)	-0.08 (0.21)	0.54 (0.16)
Mother's ed. 3b						0.16 (0.11)	-1.1 (0.17)	-0.38 (0.21)	0.15 (0.24)	1.68 (0.15)	0.17 (0.11)	-0.7 (0.17)	-0.23 (0.21)	-0.01 (0.24)	0.87 (0.15)
Mother's age at birth						-0.02 (0.00)	-0.02 (0.00)	-0.02 (0.01)	-0.02 (0.01)	0 (0.01)	-0.02 (0.00)	-0.01 (0.00)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)
Gender (women)						0.5 (0.04)	0.8 (0.04)	0.15 (0.06)	0.41 (0.09)	0.42 (0.08)	0.53 (0.04)	0.88 (0.04)	0.05 (0.06)	0.23 (0.09)	0.16 (0.09)

Own ed. 2a+b	-0.15 (0.05)	0.64 (0.05)	0.46 (0.08)	0.23 (0.13)	-0.77 (0.17)
Own ed. 2c	-0.21 (0.08)	0.57 (0.06)	1.05 (0.09)	0.83 (0.14)	0.41 (0.14)
Own ed. 3a	0.12 (0.11)	0.59 (0.10)	1.17 (0.13)	1.5 (0.16)	0.95 (0.16)
Own ed. 3b	0.56 (0.12)	0.09 (0.15)	0.87 (0.15)	1.28 (0.18)	2.08 (0.14)
In education	-0.27 (0.07)	-0.43 (0.07)	-0.3 (0.11)	-0.09 (0.14)	-0.1 (0.14)
Years after finishing education	0.03 (0.01)	0.05 (0.01)	0.01 (0.01)	-0.03 (0.02)	-0.08 (0.02)
N	1957146	1957146	1957146	1957146	1957146
AIC	82886.8	81963.6	80625.5		
BIC	83199	82650.4	81686.9		

	Model 4				Model 5					
	Spouse ed. 1	Spouse ed.2a+b	Spouse ed. 2c	Spouse ed. 3a	Spouse ed. 3b	Spouse ed. 1	Spouse ed.2a+b	Spouse ed. 2c	Spouse ed. 3a	Spouse ed. 3b
Intercept	-3.83 (0.35)	-5.26 (0.31)	-7.2 (0.48)	-9.46 (0.75)	-12.76 (0.68)	-3.34 (0.35)	-4.12 (0.32)	-5.56 (0.49)	-7.96 (0.76)	-11.52 (0.69)
Divorce child	-0.02 (0.07)	-0.05 (0.06)	-0.25 (0.08)	-0.35 (0.13)	-0.48 (0.13)	-0.05 (0.07)	-0.12 (0.08)	-0.37 (0.12)	-0.5 (0.16)	-0.66 (0.17)
Age	-0.29 (0.03)	-0.21 (0.02)	-0.23 (0.05)	-0.35 (0.10)	-0.27 (0.12)	-0.3 (0.03)	-0.24 (0.02)	-0.27 (0.05)	-0.39 (0.10)	-0.29 (0.12)
Log(age-16)	3.17 (0.17)	2.63 (0.16)	4.41 (0.46)	5.79 (0.86)	6.98 (1.19)	3.12 (0.17)	2.52 (0.15)	4.36 (0.44)	5.82 (0.85)	7 (1.17)
Year	-0.06 (0.01)	-0.05 (0.01)	-0.09 (0.01)	0.04 (0.02)	-0.08 (0.02)	-0.06 (0.01)	-0.04 (0.01)	-0.09 (0.01)	0.04 (0.02)	-0.08 (0.02)
Mother's ed. 2a+b	-0.05 (0.05)	-0.01 (0.04)	0.12 (0.07)	0.04 (0.10)	0.18 (0.11)	-0.06 (0.05)	-0.02 (0.04)	0.1 (0.07)	0.03 (0.10)	0.17 (0.11)
Mother's ed. 2c	-0.06 (0.07)	-0.27 (0.07)	0.18 (0.09)	0.04 (0.14)	0.7 (0.12)	-0.03 (0.07)	-0.26 (0.07)	0.13 (0.09)	-0.02 (0.14)	0.66 (0.12)
Mother's ed. 3a	0.04 (0.10)	-0.44 (0.12)	0.05 (0.15)	-0.01 (0.21)	0.88 (0.15)	0.09 (0.10)	-0.38 (0.12)	0 (0.15)	-0.09 (0.21)	0.81 (0.16)
Mother's ed. 3b	0.14 (0.11)	-0.78 (0.17)	-0.29 (0.21)	0.05 (0.24)	1.28 (0.15)	0.22 (0.11)	-0.68 (0.17)	-0.34 (0.21)	-0.06 (0.24)	1.19 (0.15)
Mother's age at birth	-0.02 (0.00)	-0.01 (0.00)	-0.02 (0.01)	-0.02 (0.01)	-0.01 (0.01)	-0.02 (0.00)	-0.01 (0.00)	-0.02 (0.01)	-0.02 (0.01)	-0.01 (0.01)
Gender (women)	0.55 (0.04)	0.92 (0.04)	0.1 (0.06)	0.34 (0.09)	0.3 (0.08)	0.54 (0.04)	0.89 (0.04)	0.03 (0.06)	0.31 (0.09)	0.29 (0.09)
In education	-0.44 (0.06)	-0.57 (0.06)	-0.59 (0.10)	-0.47 (0.14)	-0.68 (0.13)	-0.33 (0.06)	-0.35 (0.07)	-0.38 (0.10)	-0.32 (0.14)	-0.58 (0.13)
Years after finishing education	0.01 (0.01)	0.04 (0.01)	-0.02 (0.01)	-0.08 (0.02)	-0.17 (0.02)	0.02 (0.01)	0.06 (0.01)	0.01 (0.01)	-0.06 (0.02)	-0.16 (0.02)

Conditional effects		
Homogamous marriages	0.48 (0.03)	0.14 (0.04)
Homogamous marriages of divorce children	-0.14 (0.07)	-0.05 (0.08)
Upward marriages		-0.76 (0.05)
Upward marriages of divorce children		0.22 (0.11)
Observations	1957146	1957146
<i>AIC</i>	81199.6	80918.7
<i>BIC</i>	82036.3	81780.3

	Model 6				Model 7					
	Spouse ed. 1	Spouse ed.2a+b	Spouse ed. 2c	Spouse ed. 3a	Spouse ed. 3b	Spouse ed. 1	Spouse ed.2a+b	Spouse ed. 2c	Spouse ed. 3a	Spouse ed. 3b
Intercept	-3.2 (0.35)	-3.98 (0.31)	-5.42 (0.49)	-7.82 (0.76)	-11.38 (0.69)	-2.8 (0.36)	-3.47 (0.32)	-5.16 (0.49)	-7.52 (0.77)	-11.21 (0.70)
Divorce child	-0.1 (0.07)	-0.17 (0.06)	-0.42 (0.11)	-0.55 (0.15)	-0.7 (0.17)	-0.06 (0.05)	-0.13 (0.06)	-0.36 (0.11)	-0.46 (0.15)	-0.62 (0.16)
Age	-0.3 (0.03)	-0.24 (0.02)	-0.27 (0.05)	-0.39 (0.10)	-0.29 (0.12)	-0.32 (0.03)	-0.27 (0.02)	-0.29 (0.05)	-0.41 (0.10)	-0.3 (0.12)
Log(age-16)	3.12 (0.17)	2.52 (0.15)	4.36 (0.44)	5.82 (0.85)	7 (1.17)	3.17 (0.17)	2.63 (0.15)	4.46 (0.44)	5.87 (0.85)	6.95 (1.16)
Year	-0.06 (0.01)	-0.04 (0.01)	-0.09 (0.01)	0.04 (0.02)	-0.08 (0.02)	-0.06 (0.01)	-0.04 (0.01)	-0.1 (0.01)	0.04 (0.02)	-0.08 (0.02)
Mother's ed. 2a+b	-0.06 (0.05)	-0.02 (0.04)	0.1 (0.07)	0.03 (0.10)	0.17 (0.11)	-0.06 (0.05)	-0.03 (0.04)	0.1 (0.07)	0.02 (0.10)	0.16 (0.11)
Mother's ed. 2c	-0.03 (0.07)	-0.26 (0.07)	0.13 (0.09)	-0.02 (0.14)	0.66 (0.12)	-0.03 (0.07)	-0.3 (0.07)	0.11 (0.09)	-0.06 (0.14)	0.63 (0.12)
Mother's ed. 3a	0.09 (0.10)	-0.38 (0.12)	0 (0.15)	-0.09 (0.21)	0.81 (0.16)	0.1 (0.10)	-0.44 (0.12)	-0.04 (0.15)	-0.14 (0.21)	0.77 (0.16)
Mother's ed. 3b	0.22 (0.11)	-0.68 (0.17)	-0.34 (0.21)	-0.06 (0.24)	1.19 (0.15)	0.23 (0.11)	-0.75 (0.17)	-0.4 (0.21)	-0.12 (0.24)	1.15 (0.15)
Mother's age at birth	-0.02 (0.00)	-0.01 (0.00)	-0.02 (0.01)	-0.02 (0.01)	-0.01 (0.01)	-0.02 (0.00)	-0.01 (0.00)	-0.02 (0.01)	-0.02 (0.01)	-0.01 (0.01)
Gender (women)	0.54 (0.04)	0.89 (0.04)	0.03 (0.06)	0.31 (0.09)	0.29 (0.09)	0.52 (0.04)	0.86 (0.04)	0.03 (0.06)	0.3 (0.09)	0.27 (0.09)
Studying	-0.33 (0.06)	-0.35 (0.07)	-0.38 (0.10)	-0.32 (0.14)	-0.58 (0.13)	-0.24 (0.06)	-0.3 (0.07)	-0.32 (0.10)	-0.24 (0.14)	-0.51 (0.13)
Years after studying	0.02 (0.01)	0.06 (0.01)	0.01 (0.01)	-0.06 (0.02)	-0.16 (0.02)	0.03 (0.01)	0.08 (0.01)	0.03 (0.01)	-0.04 (0.02)	-0.15 (0.02)

Conditional effects		
Upward marriages	-0.9 (0.04)	-0.77 (0.05)
Upward marriages of divorce children	0.27 (0.09)	0.19 (0.09)
Downward marriages	-0.14 (0.04)	
Downward marriages of divorce children	0.05 (0.08)	
Odds to marry in general when own ed. 2a+b		-0.02 (0.04)
Odds to marry in general when own ed. 2c		0.03 (0.05)
Odds to marry in general when own ed. 3a		0.23 (0.06)
Odds to marry in general when own ed. 3b		0.34 (0.07)
Observations	1957146	1957146
<i>AIC</i>	80918.7	80897.2
<i>BIC</i>	81780.3	81783.8