

STEPFATHERS AND BIOLOGICAL FATHERS – EDUCATION-SPECIFIC ROLES OF FATHERHOOD  
FOLLOWING A DIVORCE

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## ***Introduction***

Over the last decades, many countries have experienced a substantial increase in divorce rates. For men, marriage dissolution often implies that biological parenthood and practiced parental roles become disconnected. The most common custody arrangement is that the children live in the mother's household, although the proportion of divorced parents who share more equally childrearing obligations has increased over time. For the divorced men, having the children from first marriage living in the expartner's household implies that they do not practice parenting at home, unless they form a new family. Divorced men can (re-)attain a domestic parental role when conceiving children with the new partner but also when repartnering a woman with children from a previous relation. The latter arrangement turns men into stepfathers. Depending on the new couple's fertility and the presence of children from previous unions, divorced men can experience multiple father roles when combining biological and social fatherhood. The diversity and the complexity of family structures in the post-divorce life course has motivated research on repartnering and stepfamilies. One important aspect is the potential selectivity in the characteristics of individuals entering post-divorce nuclear families and stepfamilies (Sweeney, 2010). Our study adds to this line of research by focusing on the role of educational background in the residential parental roles that men fulfill in terms of biological and social fatherhood. As the men's perspective has only recently been taken up in family research, the study of men is necessary to gather a deeper understanding of trends in family life and demographic behaviour, especially in times of high union instability (Goldscheider and Kaufmann, 1996).

Commonly, men are assigned the role of economic providers in the family. In this sense, men's educational background informs about their capacity to fulfill the provider role. Having biological ties to residential children seems to determine the man's willingness to step in this role: stepfathers feel less obliged to financial support the family than do biological fathers (Marsiglio, 2004; Sweeney, 2010). Education-specific differences in father roles can therefore have important social implications. Single mothers are at very high risk of being poor and repartnering could be a key to increase living conditions because the mothers might rely on an additional income (Sweeney, 2010). But, repartnering may implicate little changes in the family's economic situation, if the man has few socio-economic resources or if he remains in the – less committed – role of a stepfather (Adler-Baeder, Robertson, and Schramm, 2010). Furthermore, research showed that couples with stepchildren but no common children have high disruption risks and thus, single mothers and their children are at risk of repeated episodes of poverty. Highly educated men create more often biological ties with their partners, which means that they are not only more able, but also more willing to act as the economic provider. Their post-divorce relationships may thus be more similar to their first marriage relationship compared to the relationships of their lower educated counterparts. Moreover, the existence of joint children is stabilizing their unions. In sum, the education-specific pathways of post-divorce fatherhood are likely to reproduce social inequalities.

So far, there exist however no studies that investigate in detail the link between divorced men's educational background and their father roles. We know from previous research that education works as a clear divider of men's life course patterns with the less educated having other family structures than the more educated (Lappégaard and Ronsen, 2013; Thomson et al., 2014). Studies have shown that socioeconomic differentials in men's fertility remain large and have even increased over time. Childlessness is more common among men with little education (Lappégaard and Ronsen, 2013; Miettinen et al., 2015). Among the divorced men, the likelihood of living with the children from first marriage and of fathering children from different partners (so-called multipartner fertility) is highest among the highly

educated (Lappégaard and Ronsen, 2013; Vanassche et al., 2015a). Low educated men in contrast live less often with their children after a divorce, but with the children of their new partner (Vanassche et al., 2015a). The cited studies are important for an in-depth understanding of specific life course events or transitions such as repartnering and post-divorce fertility, but they do not give us a comprehensive picture of how different parental roles unfold across the life course of men. Looking on the father roles that men fulfill after divorce in a more integrative perspective will enhance our insights in how education works as a clear divider of life course patterns in terms of fatherhood.

The study is structured as follows: First, we illustrate the different post-divorce partnership and family trajectories of men by their educational background, accounting for the parental status of the men and their new partners. Next, we estimate the likelihoods of being after the dissolution of the first marriage in the role of a residential biological father, a stepfather, or both. To allow for a better understanding of the mechanisms that drive education-specific roles of fatherhood, we estimate then the men's likelihoods of repartnering and of post-divorce fatherhood. These estimates give a more precise picture of the link between men's education and their post-divorce father roles. While previous studies often had to deal with small sample sizes for stepmother families (e.g. Buber and Prskawetz, 2000; Henz and Thomson, 2005), we overcame this problem by focusing on the Belgian context using detailed survey data ([www.divorceinflanders.be](http://www.divorceinflanders.be)). Belgium is known to have a much higher proportion of residential biological fathers among the divorced due to a high incidence of shared residence of children, and in consequence, also higher proportions of stepmother families (Sodermans, Vanassche & Matthijs 2013)).

## ***Background***

### ***Educational differences in men's fertility***

In Western countries, the large majority (around 80%) of men become biological fathers at some point in their life course (Priskorn et al., 2012; Ravanera and Beaujot, 2014; Rotkirch et al., 2015). A body of studies have shown that the educational level of men is positively related to their reproductive outcome, both in terms of having children and the number of children (Fieder and Huber, 2007; Goodman and Koupil, 2010; Kravdal and Rindfuss, 2008; Lappégaard and Rønse, 2013; Nisén, Martikainen, Kaprio, and Silventoinen, 2013).

There are several mechanisms through which men's education influences their fertility outcome. Kravdal and Rindfuss (2008) argue that the positive association between education and fertility is mainly an income effect. More educated men can more easily afford more children due to their often higher income levels compared to less educated. The authors draw this back to the fact that even in modern dual-earner families, traditional differences between mother and father roles persist and that the man's contribution to the household is essential for the financial wellbeing of the family. Another reason is that more educated individuals are in a better (economic as well as cognitive) position to marshal arguments to resist the prevailing social norm of having two children (Kravdal and Rindfuss 2008: 858). More educated men are also shown to have more egalitarian gender role attitudes; and consequently, they are more involved in household and childrearing tasks (Goldscheider et al., 2014, Thornton and Young-DeMarco, 2001). This has been found to be beneficial for a couple's decision to have another child.

In addition to these arguments, part of the educational difference in men's fertility outcome can be explained by their partnership histories. Union formation is a strong predictor of fertility and more educated men are shown to have higher likelihoods to enter a partnership (Sweeney, 2002; Dijkstra and Poortman, 2009). They are more likely to marry and to remain married compared to the less educated. In

consequence, the relationship between socioeconomic status and reproductive success for men is also driven by the greater likelihood of singlehood among low status men (Barthold, Myrskylä, & Jones, 2012; Fieder & Huber, 2007; Fieder et al., 2011; Goodman, Koupil, & Lawson, 2012; Hobcroft, 2015). This might be explained with female mating preferences that rate high income men higher as other potential mates (Becker 1991). Explanations are sought in the higher attractiveness of higher educated men as potential breadwinners and the associated economic security of the household, as well as the potential they have of being ‘a good father’ (Becker, 1991; Lappégård and Rønse, 2013; Pasteels et al., 2013). Lappégård and Rønse (2013) argue that both self-selection into fatherhood by men and the selection of men into fatherhood by women are essential factors in explaining the link between men’s education and fertility.

### ***Father roles of divorced men***

Among men who live in stable unions, biological fatherhood and the domestic father role coincide. A separation can disconnect men’s fertility with their parental role. Once separated, biological fathers do not always fulfill a paternal role, childless men do not necessarily live without children, and residential and non-residential children have been found to affect the likelihood of a subsequent birth in a different way.

When studying post-divorce fertility, the fertility history of men and their new partners is important to take into account. Educational differences in pre-divorce fertility (cf supra) might also explain an important part of the fatherhood trajectory after divorce. A growing number of studies explored the nature of so-called multi-partner fertility or childbearing across different partnerships. Lappégård and Rønse (2013) demonstrated that the relationship between educational background and multi-partner fertility is U-shaped, which the medium educated men being less likely to have children with several partners compared to the low and highly educated men. On the one hand, selection processes explain the high rates

of multi-partner fertility among the low educated men: a low level of education is associated with higher union instability and thus, the less educated are more often exposed to the risk of multi-partner fertility. The high rate of multi-partner fertility among the highly educated men can be explained in term of attraction to women as partners and fathers of future children (see also Thomson et al., 2014), as well as men's preferences for children (see also Hopcroft, 2015). Lappégaard and Rønse (2013) reflect that divorced highly educated fathers may possess values or preferences that are more child- and family-oriented.

A first paternal role after divorce results from co-residence with children from the previous union(s). For many decades, children lived almost exclusively full-time with their mother after parental divorce, reflecting the logic of the male breadwinner system. Since the 1990's, the evolution towards a dual-earner family model and more gender-neutral childrearing patterns has reduced the gender asymmetry in custody arrangements of children with divorced parents (Cancian et al. 2014). ). Across a larger number of Western countries a significant proportion of children from previous relations spend time in the divorced father's household (Bjarnason and Arnasson, 2011). This also means that with the start of a new union, the female partner enters the role of a stepmother. Highly educated men remain more involved into childrearing in the sense that they have more often the children from the dissolved marriage living at least some part of the time in the household ((Bjarnason and Arnasson, 2011 Cancian et al., 2014; Vanassche et al., 2015). Explanations for these educational differences have been sought in a higher awareness of alternative custody arrangements, a higher ability to pay the extra costs of shared residence, more child- and family-orientated values or preferences of higher educated men, and their higher involvement in childrearing before union dissolution (e.g. Cancian et al., 2014; Sodermans, Swicegood & Matthijs 2013).

A second parental role results from co-residing with children from a previous relationship from the current partner. If men repartner a woman with residential children from a previous union, they are theoretically considered to become the stepfather of these children. Many studies have investigated the

actual parental role that stepparents fulfill towards stepchildren. One of the guiding questions in this area has been the question whether parents are inclined to invest in other children than their own biological offspring. On the one hand stepfathers were found to feel less obliged to financial support the family than do biological fathers (Marsiglio, 2004; Sweeney, 2010). On the other hand, studies have demonstrated that stepfathers frequently have a good relationship with residential stepchildren and that they are frequently involved childrearing (King 2006; Vanassche 2013;).

Empirical studies have reported a positive relationship between the educational level and the likelihood of men to repartner (De Graaf and Kalmijn, 2003 Pasteels, Corijn, and Mortelmans, 2013; Poortman, 2007 Vanassche et al., 2015, Wu and Schimmele, 2005). Studies that included information on the parental status of the new partner into the model have shown that higher educated men more frequently repartner a childless woman, whereas lower educated men more frequently repartner a woman with residential children (Goldschneider and Sasser 2006; Vanassche et al., 2015). Consequently, lower educated men more often become a stepfather compared to higher educated men.

Finally, different parental roles might be combined within one household. If both partners bring residential children from a previous union, they each find themselves in the role of a biological parent and a stepparent. As divorced parents often repartner another parent, this is often the case (Vanassche et al. 2015). Also in case children from previous unions are involved and a common child is born, parents combine residential childrearing responsibilities towards biological children and stepchildren. In “stepparents” families (= both have children from previous relations), not the multiple parent roles of each partner make it less likely that the couple decides for a further child (Buber and Prskawetz, 2000; Vikat, Thomson, and Prskawetz, 2004). But research has also shown important differences between men and women in the association between parental roles and subsequent childbearing. Couples in which the woman is childless and he has residential children have higher likelihoods of conceiving a common child than couples in which both are childless or only the woman has children (Beaujouan and Wiles-Portier,

2011; Buber and Prskawetz, 2000; Toulemon, 2007; Vikat, Thomson, and Prskawetz, 2004); Wineberg, 1990). Vikat and Thomson (2004) conclude that the stronger negative effect of women's children from previous unions may be related to the fact that women incur greater costs of childbearing and childrearing than do men. Women who are already mothers may be less willing to take on additional costs in order to enable the partner to step in a biological parent role than are men who are already fathers. This tendency is confirmed by studies that looked on individual birth intentions: women's pre-union children have a stronger negative effect on birth intentions than do men's children from previous relationships (Thomson, 1997; Toulemon 1997; Stewart, 2002; Stewart et al., 2003). An alternative explanation for the low likelihood of a shared birth in stepfather families is that childless men entering stepfamilies are disproportionately selected from a population of individuals who would not have had biological children, whether or not they entered a stepfamily (Henz and Thomson, 2005). Moreover, men who are living with the children of their partner often do not consider themselves as parents (Marsiglio, 1991; McLanahan, Astone, and Marks, 1991). Whether men form new families and have new biological children rather depends on their biological fatherhood status and their level of involvement with previous children (Stewart, Manning, and Smock, 2001; Stewart, 2002).

We did not find studies that explored educational differences in the likelihood of combining parental roles towards biological children from previous unions, the present union and stepchildren, but we have different reasons to assume that they exist. First, selection processes in terms of co-residence with children from previous unions, the likelihood of union formation with a partner with or without residential children and the likelihood of higher-order union childbearing will translate into educational differences in the combined occurrence of these events. Second, roles in post-divorce families can be complex when one or both partners bring children from previous relations into the household and common children are born. Therefore, higher educated men might be more reluctant towards a high degree of complexity within the household in order to maintain high-quality parenting standards. On the other hand, higher education is

associated with more financial, social and cultural resources and therefore might facilitate higher educated men to deal with these complex family situations.

### ***Hypotheses on education-specific roles of fatherhood***

Divorced men can – depending on their household situation – experience different roles of fatherhood. Men without own biological children or with only non-residential children from previous relationships live in a childless household – they can be considered as “residential childless”. Men can also live with their children from the divorced marriage and/or their biological children from the new partnership. In this case, they have the role of a residential biological father. Men who live with the children of the new partner in a household are stepfathers. Men can also have multiple father roles when living with children from the previous relation and the children of the partner and/or with new shared children.

We assume that education determines men’s role in the family with less educated men being more likely to be stepfathers and more educated men being more likely to be biological fathers. Lower educated men have a higher risk to experience a divorce, which makes them more frequent ‘at risk’ of post-divorce father roles. But within the group of divorced men, higher educated men might benefit from their attractive characteristic as breadwinner to repartner and to live a biological father role. The observation that being highly educated increases a divorced man’s likelihood to repartner with a childless woman might be beneficial for his transition to a post-divorce birth. Conversely, lower educated men tend to repartner with single mothers, diminishing the likelihood of a post-divorce birth. More explicitly, we formulate the following hypotheses:

H1. Lower educated men are more likely than higher educated men to be in either no parental role, to be exclusively in the stepfather role, or to combine biological and stepfatherhood.

H2. Higher educated are more likely than lower educated men to be exclusively in the biological father role.

These hypotheses assume a proportional role of the educational gradient. But, for example, the coresidence with children from a previous union of either partner might affect the likelihood of post-divorce union formation and childbearing for lower and higher educated men in a different way. As there are no preceding studies on the link between educational background and the interplay of these three dimensions, this study is the first to test interaction effects between the educational level of men and parenthood characteristics in estimating the likelihood of becoming a stepfather, a (new) birth, or both.

## ***Data and methods***

### ***Data***

We analyzed the partnering and family trajectories of Dutch-speaking Belgian (=Flemish) divorced men. Data came from the DiF (Divorce in Flanders) project, collected in 2009-10 among first marriages of the 1971 to 2008 marriage cohorts. An advantage of the DiF data is that it allows considering the presence of children from the respondent and from the new partner. The sample was proportional to the marriage year, but over-represented divorced marriages. At the time of interview, one third of these marriages were still intact ( $n = 2,502$ ) and two thirds of them had dissolved ( $n = 6,004$ ). The sample of marriages were confined to native Belgian opposite-sex couples and neither partner could be divorced more than once. For our analytical sample, we only considered male respondents with a divorce between 1981 and 2005 and for whom full information on the first seven years following the date of marital separation was available ( $N=1,328$ ). Marital separation was defined as the date of residential separation from the first marriage partner, not as the date of legal divorce. A substantial period can lie between residential

separation and legal divorce; and during this period, persons might already repartner (Bastaits et al. 2011). Prior studies have shown that partnership and fertility events occur quite quickly after marital dissolution (Buber and Prskawetz 2000; Pasteels, Corijn, and Mortelmans 2012). Seven years appeared to be an appropriate time frame to observe men's transition into post-divorce fatherhood roles (Vanassche et al. 2015b). We disregarded respondents if information on educational level ( $N=5$ ) or the parental status of the new partner ( $N=263$ ) was missing. We decided against imputing missing values on the partner's parental status because we believe that these partnerships are selective and that the parental status cannot be easily deducted. The analytical sample amounted to 1,111 men. Of those, 29% ( $N=324$ ) were low educated, 43% ( $N=474$ ) were medium educated and 28% ( $N=313$ ) were highly educated.

## ***Measurement***

The empirical analyses consist of three parts. In the first part, we used descriptive methods of sequence analysis in order to illustrate the pathways of post-divorce fatherhood for men. We distinguished different family trajectories based on the household situation and depending on men's partnership status and the parental status of the divorced men and his partner. More concretely, men were considered to be partnered if they were living together with their partner in either cohabitation or marriage, whereas they were considered as single if they had no residential partner. We had information on the number and age of biological children that the divorced men had and whether these children were living with the men. Furthermore, there was information on stepchildren, defined as residential children of the new partner. Among the singles we distinguished between childless men, men who had only non-residential children and men who had children living at home. Among the partnered, the parental status was defined based on the presence of children from previous partnerships and the couples' common children in the household. Men who had only non-residential children from the divorced marriage and childless men were grouped together, because separate categories were small. We assumed that both groups had in common that they

did not hold a father role at home. There was no educational gradient in first-marriage biological fatherhood: 70% of the divorced men had children from the first marriage (see Table 2). Higher educated fathers were however more often living with the children after marital separation than the lower educated. We distinguish the following different family trajectories:

**Table 1: Men's partnership and family trajectories**

Men's partnership status	Men's parental status	New couple's fertility	Family trajectory
No partner	Childless	/	Single & childless
	No residential children	/	Single & non-residential father
	Residential children	/	Single & residential father
Partnered with a childless woman/ woman without residential children	Childless/without residential children	No common children	'Couple'
	Residential children	Common children	'Nuclear family'
		No common children	'Stepmother family'
Partnered with a woman with residential children	Childless/No residential children	Common children	'Stepmother family & child'
		No common children	'Stepfather family'
	Residential children	Common children	'Stepfather family & child'
		No common children	'Stepparents family'
		Common children	'Stepparents family & child'

The data set was split into monthly units. A specific status was assigned to each time unit in the respondents' partnership biographies. The distribution of the different states at each time unit is shown in a state-distribution plot (Figure 1). This chronogram shows patterns of fatherhood for different educational groups, whereas it hides individual continuity. For the illustration of individual trajectories, sequence index plots are added in the appendix (Figure 2a-2c).

In the second empirical part, we estimated in a multinomial logistic regression the likelihoods of being/becoming within the first seven years after the divorce (1) a childless man, (2) a non-residential biological father, (3) a residential biological father, (4) a stepfather, or (5) both a stepfather and a

residential biological father. The reference outcome was to be a residential biological father. Men's educational background was considered as a determinant influencing the outcomes.

In the third and last empirical part, we estimated in a multinomial logistic regression the effect of men's education on their repartnering strategies (staying single, repartnering a childless woman, repartnering a mother) and in a probit model the education effects on men's likelihood of having (another) child within the first post-divorce union.<sup>1</sup> To ease interpretation of the model results, they are shown as predictive margins. Margins are statistics calculated from predictions of a previously fit model at fixed values of some covariates and averaging or otherwise integrating over the remaining covariates.

### ***Control covariates and sample description***

Different models of fatherhood roles, union formation and post-divorce fertility rely on different sets of covariates. Information referring to the man's characteristics and his living situation around the time of his divorce enter the analysis of fatherhood roles and union formation (see Table 2). Information referring to the man's and his partner's characteristics at the time a post-divorce union is formed enter the analysis of post-divorce fertility (conducted for repartnered men only, see Table 3). These results of the chi<sup>2</sup> test indicate that if there was a statistically significant relationship between the considered characteristics and men's level of education.

Within the sample of divorced men, the mean age at the dissolution of the first marriage was 34. The average divorce year was 1997 (1996 for low educated men, respectively). More than two Thirds of the men fathered children in the first marriage. At the time of marital dissolution, the youngest child was on average between seven and eight years old. Around half of the fathers had residential children and the

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<sup>1</sup> Since Henz and Thomson (2005) emphasized the interrelation between stepfamily union stability and shared birth risks, we considered also the union's separation as one of the outcomes, next to the outcomes "staying childless, but partnered" and "having a post-divorce child". The results of this multinomial logistic regression did not substantially change from the results of the (simpler) probit model. Thus, we decided to display only the results of the latter model.

proportion was higher among the more-educated (although, this difference is not significant). For illustration, the concrete custody arrangement is displayed (this information did not enter the regressions due to its small category sizes). More-educated had the children more time living in their household and lived more often in an equally-shared custody arrangement with the children's mother than the lower-educated.

Table 3 displays some characteristics of the men and their female partner for the sample of divorced men who repartnered within the first seven years following marriage dissolution. Man's mean age when his first post-divorce union was formed was 35. His female partner aged 32 at the time of union formation. A substantive proportion of these women brought their children into the new union. More-educated men repartnered less often a mother than the less educated, confirming prior empirical findings. For a subsample of unions that were still intact at the time the survey was conducted (N=666), we had information on the female partner's level of education. The displayed information in Table 3 shows that highly and medium educated men were more often partnered with a similar educated woman, whereas low educated men where more often partnered with a more educated woman.

**Table 2: Sample composition of divorced men by men's level of education**

	Low educated (N=324)	Medium educated (N=474)	High educated (N=313)	$\chi^2$ test (2df) <sup>c</sup>
Mean age at dissolution of first marriage <sup>a</sup>	33.8 (.37)	34.0 (.28)	35.1 (.35)	**
Mean year of divorce	1996	1997	1997	*
% fathers	69%	68%	70%	n.s.
Fathers: mean number of children from first marriage <sup>a</sup>	1.8 (.05)	1.8 (.05)	2.0 (.07)	**
Fathers: mean age of youngest child at time of marital dissolution <sup>a</sup>	8.4 (.40)	7.2 (.29)	7.4 (.37)	*
Fathers: % residential fathers	49%	56%	56%	n.s.
Fathers: Custody arrangement of residential fathers <sup>b</sup>				
1%-33% of time with father	55%	42%	30%	***
34%-66% of time with father	17%	28%	48%	
67%-100% of time with father	28%	29%	22%	

<sup>a</sup> Standard errors in brackets

<sup>b</sup> not considered in multivariate analysis (due to small category sizes)

<sup>c</sup> Kruskal-Wallis equality-of-populations rank test for continuous variables, Pearson  $\chi^2$  test for categorical variables; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 3: Sample composition of divorced men in first post-divorce union, by men's level of education**

	Low educated (N=183)	Medium educated (N=287)	High educated (N=196)	$\chi^2$ test (2df) <sup>c</sup>
Man's mean age at union formation <sup>a</sup>	35.9 (.48)	35.8 (.34)	36.4 (.40)	n.s.
Female partner's mean age at union formation <sup>a</sup>	32.5 (.57)	31.6 (.47)	32.5 (.52)	n.s.
% female partners with residential children	55%	45%	36%	***
Female partner's level of education <sup>b, d</sup>				
Low educated	33%	13%	4%	***
Medium educated	40%	46%	30%	
High educated	16%	29%	58%	
Missing	11%	12%	8%	

<sup>a</sup> Standard errors in brackets

<sup>b</sup> not considered in main multivariate analysis (only available for subsample)

<sup>c</sup> gg

<sup>d</sup> only available if the partnership was still intact at the time of the survey

## Results

### Descriptive results

Figure 1 shows the family trajectories of men following the dissolution of their first marriage, by their level of education. It can be seen that after seven years, around half of the men were living together with a new partner. Low educated men more often formed a partnership with a mother than their more educated counterparts, taking up the role of a residential stepfather. Also in the case they had biological children living with them, low educated men started more often a partnership with a mother than more educated men, forming thus a stepparents family. Medium and especially the highly educated men more often lived in stepmother families; that is, they brought their children from the divorced marriage into a new relation with a woman who had no residential children. Whether men had a common child with their new partner depended on the parental status of both partners. In partnerships that started with either partners being

childless or only the female partner having her children from a previous relation living with her, there was less often a common child. If only the repartnered men had biological children from the previous marriage living in the household, there was more often also a common child, especially among the highly educated.

Among the divorced men who remained single throughout the first seven years following first marriage dissolution, the more educated men lived more often with their children from first marriage, whereas the less educated where more often non-residential fathers.

Figure 1 however neglects individual variation, that is, persons can move in and out of states. Individual trajectories are shown in the Appendix in Figure 2a-2c.

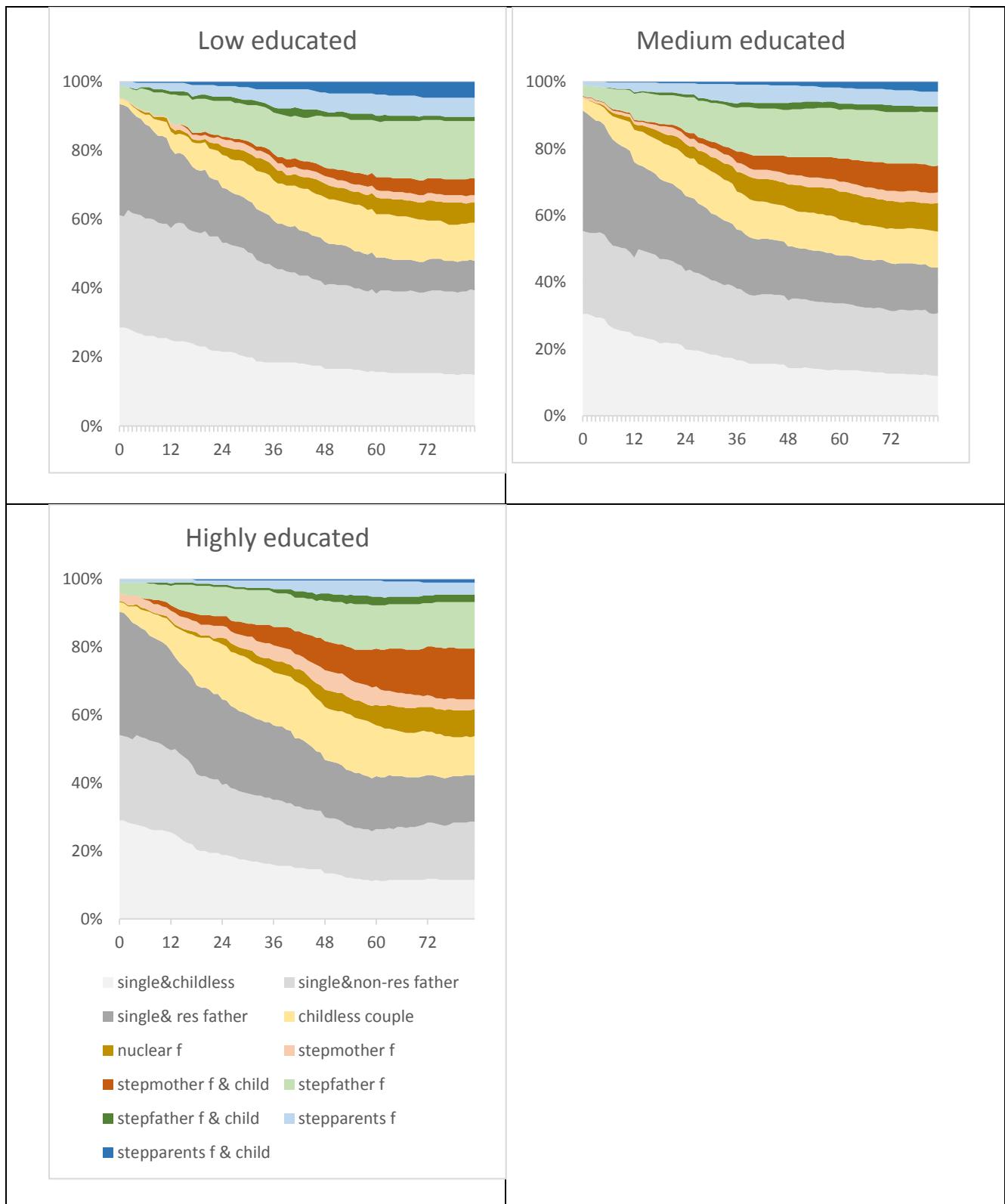


Figure 1: Chronogram - residential family arrangements and fatherhood after divorce

## Multivariate results

Table 4 presents estimates on education from the multinomial logistic regression for the likelihoods of (1) being childless, (2) being a non-residential biological father, (3) being a residential biological father, (4) being a stepfather, and (5) being a residential biological father and a stepfather. The results are displayed as predicted margins; the full model results (Model 1) are shown in the Appendix.

The results show a positive educational gradient in exclusive residential biological fatherhood after a man's divorce. Highly educated men have a higher predicted probability of being a residential father of biological children only than the less-educated. On the other hand, we observe a negative gradient in the likelihood of being a residential stepfather. The predicted probabilities of being a stepfather are lower for more educated, especially in combination with a residential biological parental role. Highly educated men have also lower predicted probabilities of being non-residential father and of being childless than the less educated.

**Table 4: Results of Model 1 (multinomial logistic regression on father roles), predictive margins**

	(1) Childless man	(2) Non-residential biological father	(3) Residential biological father	(4) Stepfather	(5) Residential biological father and stepfather
Low educated	.19 (.02)	.18 (.02)	.31 (.03)	.17 (.02)	.14 (.02)
Medium educated	.16 (.02)	.14 (.02)	.43 (.02)	.16 (.02)	.12 (.01)
High educated	.18 (.02)	.12 (.02)	.48 (.03)	.13 (.02)	.08 (.02)

Note: full model results in beta-coefficients shown in Appendix (Model 1)

To disentangle the role that residential children from previous relations and new children have on the men's father role in the family, we estimated the effect of education on union formation and on post-divorce fertility. Table 5 presents estimates on education from the multinomial logistic regression for the likelihoods of (1) remaining unpartnered, (2) repartnering with a childless woman, and (3) repartnering with a mother (complete model results in Appendix, Model 2).

The results show an educational gradient in men's repartnering behavior. Low educated men have higher predicted probabilities of repartnering a mother and of remaining unpartnered than the more-educated. Highly educated have a higher predicted probability of repartnering a residential childless woman.

**Table 5: Results of Model 2 (multinomial logistic regression on repartnering), predictive margins**

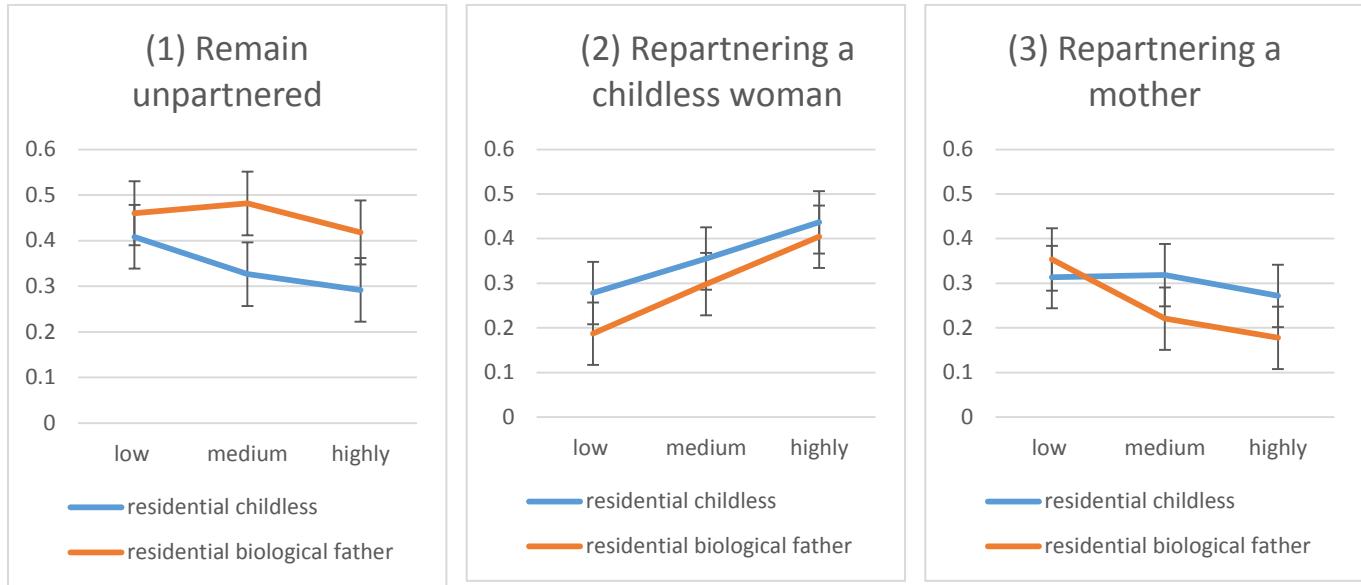
	(1) Remain unpartnered	(2) Repartner with childless woman	(3) Repartner with mother
Low educated	.44 (.03)	.24 (.03)	.31 (.02)
Medium educated	.40 (.02)	.33 (.02)	.27 (.02)
High educated	.36 (.03)	.42 (.03)	.22 (.02)

Note: full model results in beta-coefficients shown in Appendix (Model 2)

Still, there might be some heterogeneity in the repartnering behavior of men when it comes to their own parental status. The model includes control covariates on the number and age of the children from the man's divorced marriage as well as on the children's residence. The number of children and their age seems to have little influence on men's repartnering, whereas the their residence has significant effects (see Appendix, Model 2). Figure 1 shows the interaction results of men's educational level and their residential parental status. The results are again displayed as predicted margins (full model results in Appendix, Model 3).

Men who live with their biological children from a previous relationship remain more often unpartnered than men who live without children. Only among the latter group, education has a significant positive impact on repartnering, with medium and highly educated men staying less often single compared to their low educated counterparts. We found a significant educational gradient in men's probabilities to repartner a childless woman: confirming our descriptive findings, highly educated men have higher probabilities to enter a partnership that do not involve stepchildren. The educational gradient for repartnering a childless woman is even steeper for men that have their biological children living in their household. There are no significant differences in the probabilities to repartner a mother when the man

holds no residential father role. Men who are in the father role at home because they are living with their children have lower probabilities to repartner a mother – but only if the men are medium or highly educated.



**Figure 1: Interaction results of Model 3 (Multinomial logistic regression on repartnering), predictive margins with error bars (based on 95% confidence intervals)**

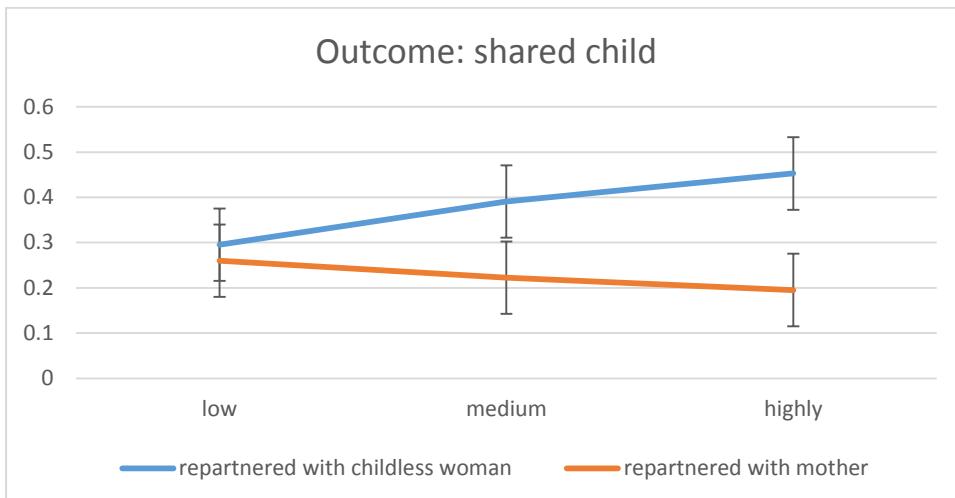
Note: full model results in beta-coefficients shown in Appendix (Model 2)

How do men's education-specific mating strategies reflect in their decisions to have a shared child with the new partner? For this purpose, we estimated for the subsample of the repartnered men a probit model with the outcomes of (1) having a shared child and (0) otherwise. The model results (Model 4, Appendix) show that the man's residential children<sup>2</sup> and his education have no significant effects on the couple's childbearing probabilities, whereas the parental status of the female partner lowers the probability of having a shared child. But, although the main effect of man's education is not significant, we found a significant interaction effect of education and woman's parental status, displayed in Figure 2 (as predictive margins, complete model results in Appendix, Model 5). It seems to matter little for a low-

<sup>2</sup> The number and age of the children were tested and found as well to have a non-significant effect on the probability of having a shared child. To increase degrees of freedom we decided to include only one measure on children from first marriage – the one that has shown significant effects in the repartnering model.

educated man's probability to have a shared child whether or not the female partner brings her children into the union. In contrast, the woman's parental status makes a big difference in a highly educated man's probability to have a post-divorce child. Predicted probabilities are in that case much higher if the woman has no residential biological children.

One might argue that the woman's level of education is not neglectable for a couple's fertility transition. We had information on the female partner's level of education for a subsample of unions that were still intact at the time the survey was conducted ( $N=666$ ). For this subsample, we first estimated the same model as shown in Figure 2 (Model 5.1, see Appendix). The results remained basically the same for the reduced sample. In a second step, we considered the education of the female partner as an additional factor influencing the couple's probability to have a shared child. Highly educated women who are partnered to a divorced man have significant higher childbirth probabilities than medium or low educated women. Accounting for this helps to explain why highly educated men have higher probabilities to have a child with a childless women.



**Figure 2: Interaction results of Model 5 (Multinomial logistic regression on childbearing), predictive margins with error bars (based on 95% confidence intervals)**

Note: full model results in beta-coefficients shown in Appendix (Model 5)

Looking on the other control covariates, the results supports the general findings that repartnering chances decreases with age and that the woman's biological age is an important factor as regards fertility in post-divorce unions but that the man's age is not (Buber and Prskawetz, 2000).

## ***Discussion***

Due to high rates of union dissolution, biological parenthood and parental roles in terms of daily child-rearing responsibilities are increasingly disconnected. The increasing divorce rates in recent decades in many Western countries implicate that marriage has become for many individuals a chapter of several in their partnership biographies and that often other partnerships follow the dissolution of first marriage. With a new partnership frequently a new family comes into being either because children from a previous relationship exist or because new children are born. The divorced then find themselves in a parenting role - as a stepparent or/and as a biological parent.

The economic consequences of divorce have been abundantly discussed in literature and the educational background has commonly been perceived as a key indicator of socio-economic resources. These resources do not only lead divorced individuals to better cope with economic difficulties created by the divorce but also to increase their likelihoods of repartnering because they tend to be more attractive on the mating market. The resulting selectivity in the characteristics of individuals entering post-divorce nuclear families and stepfamilies might have important consequences in terms of the (re)production of social inequality (Sweeney, 2010).

This article focuses on the question whether education-specific father roles exist among the divorced men and whether this is related to men's repartnering strategies. Our findings show that highly educated divorced men are more often in the role of a residential biological father, whereas the less educated find themselves more often in the role of a stepfather. A deeper look into men's repartnering behavior revealed

that highly educated men repartner more often a childless woman which is beneficial for their probability of experiencing a post-divorce birth. The man's residential parental status seems not to be relevant for post-divorce fertility. The woman's parental status has not a general effect on the probability to have a child in the new union, but depends on the educational level of the men. Only among the medium and highly educated, living with a residential childless female partner increases the probabilities of a shared child. Our tests showed that it is especially unions between a highly educated, divorced man and a highly educated, childless woman that have the highest childbirth probabilities. Together, these findings suggest a complex interplay of partner market mechanisms in terms of men's attractiveness as residential fathers and men's educational level for childless women and men's own preferences in terms of partner characteristics and the associated family composition.

The results suggests that a tendency exists among highly educated men to avoid a stepfather role when repartnering. Highly educated men seem to have a clear preference for residential childless women as their partners, especially if they have own biological children living in their household. Possible explanations may be that they do not want to take over (financial) responsibility for non-biological children or that they have the need for a coparenting partner. Another explanation might be sought in the avoidance of complex kinship relationships within the family. Additional support for this last interpretation stems from the fact that higher educated men are also less likely to have a shared child in case their female partner has residential children. On the other hand, the finding that their own parental status is not related to their likelihood of a shared birth within a new union is in line with the theory on men as the economic breadwinner for biological children.

In reconstituted families the man often acts as the main earner. Men's absolute and relative contributions to total household labor do not differ significantly between nuclear families, stepfamilies and blended families (Ishii-Kuntz and Coltrane, 1992; Sullivan, 1997). A traditional distribution of roles is however more difficult if the woman's role as a mother is not biologically defined. Studies report that

stepmothers are not willing to be the person primarily responsible for household duties (Orchard and Solberg, 1999) and that they experience more difficulty than stepfathers adapting to their roles as stepparents (MacDonald and DeMaris, 1996; Visher and Visher, 1979). The stepmother role is more ambiguous than that of the stepfather or biological parent and as a result, may negatively impact the quality of life for stepmothers and their families (Crosbie-Burnett, 1989; Weaver and Coleman, 2005; Whiting et al., 2007). In consequence, families that involve a residential biological father, his children and a new partner might opt for having another child in order to define the woman's role in the family more clearly.

On the other hand, we found that less-educated divorced men more often have the role of a stepparent because they repartnered with a mother. Single mothers are at very high risk of being poor and they repartnering could be a key to increase living conditions because the mothers might rely on an additional income (Sweeney, 2010). But, repartnering may implicate little changes in the family's economic situation, if the man has few socio-economic resources or if he remains in the – less committed – role of a stepfather (Adler-Baeder, Robertson, and Schramm, 2010). Our results are in line with the assumption of Hofferth and Anderson (2003) that stepfathers are in some way negatively selected. E.g., stepfathers may be less attractive partners because they have lower earnings. In consequence, they have more difficulties to partner with a childless woman and may instead settle down with a woman who has residential children.

There are different possible explanations for the low probabilities of having a new child with the current partner who has children from previous relations. First, there may be gender-specific costs of having another child. Most children of separated parents live the majority of the time with their mothers, and thus they face greater cost of raising an additional child next to their children compared to the pre-union children of men. Second, men who did not father children in their first marriage or who are not involved with their first-marriage children may not have an interest to become a biological father. Third,

women might not see the stepfather as a suitable candidate for being a biological parent. On the other hand, opposite reasons may enhance stepmother's transition to a biological mother role while being in a union with a high-educated father.

Our study has shown that education works as a clear divider of life course patterns – also among divorced men. These educational differences in post-divorce family life are however different for men that do not live with their biological children and men with residential children. Among the residential biological fathers, educational level is mainly associated with partner choice (childless woman or woman with children). Among men without residential children of their own, educational level mainly predicts the probability of staying single following first marriage dissolution.

Men are commonly assigned the role of economic providers in the family and men's educational background informs about their capacity to fulfill this provider role. On the one hand, the finding that low educated men are more often in a stepfather role can suggest that they are more willing to support children that are not of their own compared to more educated men. On the other hand, having biological ties to residential children can determine the man's willingness to step in the provider role. The family situation of less-educated divorced men can then lead to the concern that both capacity and willingness are low to financially support the family they are living with. The life course of highly educated divorced men in contrast suggests that they are both capable and willing to provide the financial means for their post-divorce family. A consequence of the latter argument would be that the education-specific life courses of divorced men are likely to enhance inequality within society.

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## Appendix

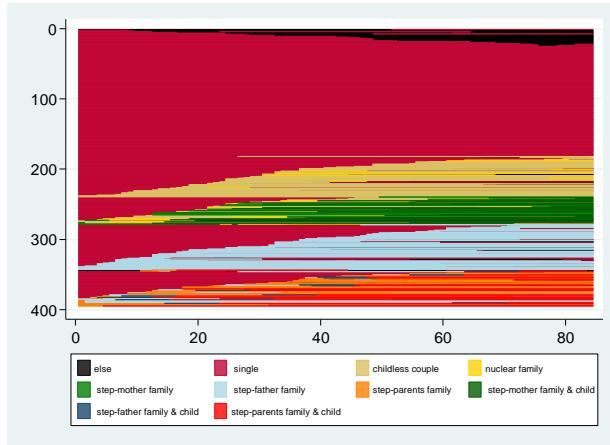


Figure 2a: Partnership and residential fatherhood patterns of low educated men

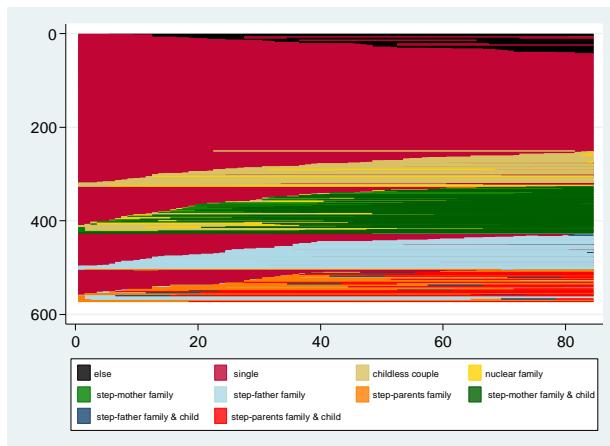


Figure 2b: Partnership and residential fatherhood patterns of medium educated men

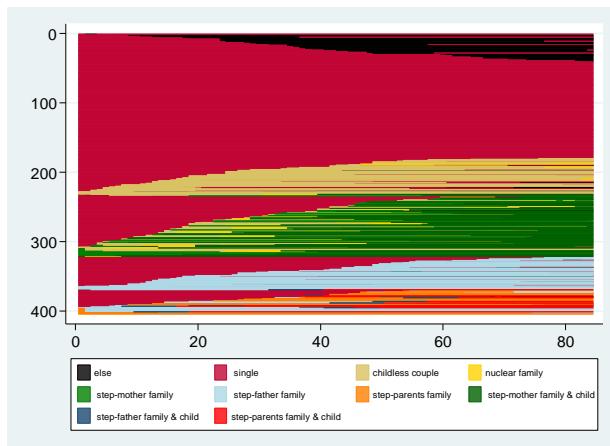


Figure 2c: Partnership and residential fatherhood patterns of highly educated men

**Table 6: Model results of Model 1 (multinomial logistic regression on father roles)**

	(2) Childless man	(2) Non-residential biological father	(4) Stepfather	Model 1 (5) Residential biological father and stepfather
Man's educational level (ref = medium)				
Low educated	0.51** (0.21)	0.57** (0.22)	0.44** (0.22)	0.53** (0.24)
Highly educated	0.04 (0.22)	-0.25 (0.23)	-0.25 (0.22)	-0.44* (0.26)
Age at marital dissolution	-0.09*** (0.02)	0.07*** (0.02)	0.06** (0.02)	0.02 (0.02)
Year of divorce	-0.06*** (0.02)	-0.03* (0.02)	-0.01 (0.02)	0.04* (0.02)
Constant	112.75*** (32.04)	63.83* (37.37)	9.11 (37.21)	-72.74* (42.47)
Observations	1,111	1,111	1,111	1,111

Reference outcome: (3) residential biological father

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Divorce in Flanders study

	Model 2 Repartnering a childless woman	Repartnering a mother	Model 3 Repartnering a childless woman	Repartnering a mother
Low educated	-0.45** (0.18)	0.04 (0.18)		
Highly educated	0.37** (0.18)	-0.10 (0.19)		
Age at marital dissolution	-0.10*** (0.02)	0.00 (0.02)	-0.10*** (0.02)	0.00 (0.02)
Residential biological father	-0.48*** (0.18)	-0.42** (0.17)		
Number and age of children from first marriage at time of marital dissolution (ref= childless)				
Youngest child 0-5 years	0.08 (0.19)	0.08 (0.21)	0.11 (0.19)	0.19 (0.20)
One child, ygst 6-11 years	0.03 (0.32)	0.45 (0.30)	0.15 (0.31)	0.57* (0.29)
Two or more children, ygst 6-11 years	-0.12 (0.29)	0.13 (0.27)	-0.10 (0.28)	0.12 (0.26)
One child, ygst 12-17 years	0.24 (0.42)	0.17 (0.38)	0.21 (0.42)	0.14 (0.37)
Two or more children, ygst 12-17 years	-0.06 (0.38)	-0.18 (0.33)	0.02 (0.37)	-0.08 (0.32)
Youngest child aged 18+	0.10 (0.62)	0.24 (0.43)	0.13 (0.62)	0.26 (0.42)
Year of divorce	0.02 (0.01)	0.04*** (0.02)	0.01 (0.01)	0.05*** (0.02)
Interaction of education and residential biological fatherhood (ref=medium educated and childless)				
Low educated, res. childless			-0.50** (0.22)	-0.24 (0.22)
Low educated, res. biol. father			-1.04*** (0.32)	-0.23 (0.26)
Medium educated, no res. biol. father			-0.58** (0.24)	-0.76*** (0.24)
Highly educated, res. childless			0.35 (0.22)	-0.05 (0.24)
Highly educated, no res. biol. father			-0.10 (0.26)	-0.84*** (0.29)
Constant	-30.85 (27.78)	-86.08*** (31.15)	-23.68 (27.12)	-90.75*** (30.22)
Observations	1,111	1,111	1,111	1,111

Reference outcome (1): Remaining without a partner

Standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Divorce in Flanders study

	Model 4 Shared child	Model 5 Shared child
Man's age at union formation	-0.05*** (0.01)	-0.05*** (0.01)
Female partner's age at union formation	-0.06*** (0.01)	-0.06*** (0.01)
Residential father	0.14 (0.12)	0.12 (0.12)
Year of divorce	0.03*** (0.01)	0.03*** (0.01)
Low educated	-0.09 (0.14)	
High educated	0.22 (0.13)	
Partner is residential mother	-0.47*** (0.13)	
Interaction of education and parental status of female partner (ref=medium educated and childless)		
Low educated & childless partner		-0.29 (0.18)
Low educated & partner is mother		-0.33 (0.20)
Medium educated & partner is mother		-0.50*** (0.18)
Highly educated & childless partner		0.32** (0.16)
Highly educated & partner is mother		-0.56** (0.24)
Constant	-62.79*** (20.43)	-64.36*** (20.57)
Observations	660	660

Reference outcome 0: No shared child

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Divorce in Flanders

	Model 5 (for comparison)	Model 5.1 (for sample of stable unions)	Model 5.2 (for sample of stable unions, including female education)
Man's age at union formation	-0.05*** (0.01)	-0.05*** (0.01)	-0.05*** (0.01)
Female partner's age at union formation	-0.06*** (0.01)	-0.06*** (0.01)	-0.06*** (0.01)
Residential father	0.12 (0.12)	0.10 (0.13)	0.09 (0.13)
Year of divorce	0.03*** (0.01)	0.03*** (0.01)	0.03** (0.01)
Female partner low educated			-0.06 (0.18)
Female partner high educated			0.29** (0.14)
Female p's education: missing			0.28 (0.54)
Interaction of education and parental status of female partner (ref=medium educated and childless)			
Low educated & childless partner	-0.29 (0.18)	-0.34* (0.19)	-0.30 (0.19)
Low educated & partner is mother	-0.33 (0.20)	-0.35* (0.21)	-0.23 (0.22)
Medium educated & partner is mother	-0.50*** (0.18)	-0.59*** (0.19)	-0.54*** (0.20)
Highly educated & childless partner	0.32** (0.16)	0.34** (0.17)	0.27 (0.17)
Highly educated & partner is mother	-0.56** (0.24)	-0.60** (0.24)	-0.64*** (0.25)
Constant	-64.36*** (20.57)	-54.98** (21.61)	-52.12** (21.75)
Observations	666	603	603

Reference outcome 0: No shared child

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: Divorce in Flanders study