Second Unions Now More Stable than First? A Comparison of Separation Risks by Union Order in France

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Received: 15 June 2013 / Accepted: 17 February 2016 / Published online: 10 March 2016
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Abstract The frequency of union dissolutions increased sharply over the past 40 years in Western Europe and North America, resulting in a rapid growth in the number of persons living with a second partner. In studies of the 1980s, primarily conducted within the context of marriage, second partnerships were generally found to be less stable than first unions, but more recent studies provide more conflicting evidence. Taking the example of France, we study whether the relationship between first and second union stability indeed reversed between the 1970s and the 2000s, and how union and individual characteristics contributed to changes over time. The analysis presented here is based on the French *Generations and Gender Survey* (2005). The article first provides an overview of the differences in marriage, childbearing and breakup behaviours in first and second unions. Second, a piecewise linear model for repeated events is used to compare women's dissolution risks in first and second unions. The results show that over time, the higher instability of second compared to first unions disappeared. Further, women in second unions adopted unmarried cohabitation as a living arrangement more often across the whole period and were more likely to have stepchildren, which was associated with less stable unions. Taking into account this diversity of family situations, i.e. controlling for family form and children, second unions were more stable than first unions, even during the past. At both union orders, marriage breakup risks tended to stabilise despite a continuing increase in the prevalence of separation, which suggests that cohabitation increasingly acts as a filter for marriage.

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Keywords Separation · Divorce · Partnerships · Marriage · Stepchildren · Second unions

1 Introduction

In most industrialised countries, the past decades have witnessed a well-documented change in family behaviour, which is exemplified by a dramatic rise in separation and divorce rates. This development has prompted researchers to study union instability, the determinants of divorce and separation (see Lyngstad and Jalovaara 2010), but also separation risks at all union orders (Aguirre and Parr 1982; McCarthy 1978; Parisi 2009; Poortman and Lyngstad 2007). In a common concern for divorcees and their children, US researchers have made several attempts in the 1980s to find out whether divorcees fare better in their second marriage (Castro-Martín and Bumpass 1989; McCarthy 1978). They generally found that women's second marriages were less stable and attributed this finding to "incomplete institutionalization" (Cherlin 1978), selection effects (Spanier and Furstenberg 1982), and the complexity of stepfamily forms and arrangements (Cherlin and Furstenberg 1994; White and Booth 1985).

Most of these early studies comparing first and second marriage breakup were undertaken just after a considerable increase in the prevalence of divorce (Kennedy and Ruggles 2014). Life-path alternatives to the lifelong married nuclear family developed quickly as separation became more common, resulting notably in a sudden increase in lone-parenthood and stepfamily/second union formation. Between the 1980s–1990s and (at least) the mid-2000s, total divorce rates stabilised or even decreased in several European countries like France and in the USA, but remained at high levels (Kennedy and Ruggles 2014; Mazuy et al. 2014; Sardon 2006). Adjustments were made and for instance in France, divorce laws were subject to major revisions in 1975 and 2007, notably by introducing and then facilitating divorce by mutual consent (Blayo and Festy 1976; Sardon 2005). Going through a separation (of married or unmarried union) and entering a second partnership became gradually more common. In this context, the likelihood of breaking up in second unions and its determinants possibly changed, as later work suggests in some European countries (Poortman and Lyngstad 2007; Parisi 2009; Steele et al. 2006). It is thus important to reassess findings made at the early stage of the spread in separation: second unions are not rare anymore, and their form (marriage, cohabitation, childbearing...) and stability may now more closely resemble first unions.

France, like most Western and Nordic countries (Lesthaeghe 2010; Prioux 2006), reached quickly high levels of "modern" partnership and childbearing behaviours such as unmarried cohabitation, non-marital childbearing and separation (Mazuy et al. 2014; Rault and Régnier-Loilier 2015). Studying change in the form and stability of first and second unions across cohorts also sheds light on the change in union dynamics during the spread of modern partnership behaviours.

Our main research question is thus: What is the link between first and second union stability in France? Is this link influenced by structural and selection effects, and has it changed over cohorts of unions formed since the 1960s–1970s?

Using women's retrospective partnership and fertility histories of the French *Generation and Gender Survey* (2005), we examine whether the second relative to the first union stability has varied since the expansion of separation and divorce. Such a study provides additional knowledge on the diffusion of family behaviours in times of massive changes, taking France as a case study. Though men were subjected to the same type of changes, data quality concerns described in the methods section precluded a closer examination. We will discuss the male position in the light of our findings on women in the conclusion section.

2 Background

While repartnering can be considered a strategy of women to cope with financial difficulties following divorce (Dewilde and Uunk 2008), this benefit may be offset by a subsequent separation experienced within a short period of time (Cherlin 2009). The contrast between first and second marriage/partnership breakup and the underlying mechanisms of this difference have thus attracted considerable attention in the literature. Results are, however, inconclusive due to variation in context, methods and types of union studied. In line with the US-literature, a recent study concluded that second marriages are less stable than first marriages in Finland (Kulu 2014). However, second unions in Norway (including married and unmarried relationships) appeared, on the whole, more stable than first ones when formed by individuals of similar characteristics (Poortman and Lyngstad 2007). Recent work in Britain (Parisi 2009; Steele et al. 2006), on their turn, showed that British women whose first union did not work out do not run a higher risk of dissolution in their second union, while findings from the 1980s showed that second marriages were less stable than first marriages (Coleman 1989). In France, surveys carried out in 1986 and 1994 showed that second unions were generally less stable than first ones (de Guibert-Lantoine 2002; Villeneuve-Gokalp 1991). However, when controlling for the most common factors of separation, second unions seemed to be slightly more stable than first ones in the 1994 survey (Solaz 2001, chapter 6). This overview of research highlights the usefulness of a consistent study of the change over time in the compared stability of first and second unions. As our **main research question** we propose to test here whether there was an inversion of this link in France for unions formed in the last four decades: second unions formed in the 1970s could be rather less stable than first; but with separation becoming more common and first unions shorter, first and second unions could become more and more similar. Even, after controlling for structural factors, we expect them to be more stable than first unions in the last union cohorts.

Few studies have attempted to explain why second unions (or marriages) could be more stable than first, all other factors being equal. Partners may have acquired union-specific human capital in their first partnership and thus start their second union with better relationship skills than those who lack this experience (Becker

et al. 1977; Chiswick and Lehrer 1990). These skills will be an asset in the subsequent partnership and improve its stability. Moreover, unions formed at older ages tend to be more durable. Because second unions are formed later, the partners' greater experience in such important areas of life as employment, friendship and relationships could lead to more solid relationships (Lehrer and Chen 2013; Oppenheimer 1988). At the same time, people entering a second union have more often remained longer in situations such as "living apart together" partnerships (de Jong Gierveld 2004; Liefbroer et al. 2015; Régnier-Loilier et al. 2009), which can benefice to the relationship stability (Schnor 2015).

On the other hand, there are a variety of reasons why second unions may be less stable than first unions. As the number of potential partners is smaller at higher ages, disappointments may be more frequent and second partnerships less solid (Gelissen 2004). The negative experience of separation might also cause scepticism about the new union and enhance the risk of failure. In line with Furstenberg and Spanier's findings on marriage (1984), selectivity may play a role; people who want to continue their relationship or make efforts to maintain it are probably less likely to separate and thus more likely to remain in a first union. Hence, second unions may be formed by more separation-prone people and consequently frailer (Vaupel and Yashin 1985). Finally, the higher complexity of stepfamilies and their incomplete institutionalization have been clearly emphasised from the beginning in the USA as reasons for instability when children were born in the first union (Cherlin and Furstenberg 1994).

Family organisation in second unions, incomplete institutionalisation, structural differences and selectivity were thus conferred an important role in their (in)stability relative to first unions. First of all, union type appears very important to consider in the comparison of first and second union stability (Poortman and Lyngstad 2007), particularly because family situations differ within these unions and change over time. Previous European and American studies have shown that family events are directly linked to the order of the union: people in a second partnership not only marry less often and less frequently have children together (Beaujouan 2011; Thomson et al. 2012), they also more often bring stepchildren to the union (Vikat et al. 1999; Villeneuve-Gokalp 1991). But unmarried unions are in effect less stable than marriages (Liefbroer and Dourleijn 2006), and children born in a previous union increase women's risk of separation, while children born in the current union decrease it (Teachman 2008; Toulemon 1995).

Comparing the stability of first and second relationships thus requires insight into their differences (Coleman et al. 2000; Martin et al. 2011). Marriage, usually more stable than unmarried partnerships (Jalovaara 2013; Poortman and Lyngstad 2007; Toulemon 1997), is less frequent in a second partnership (Beaujouan 2011; Haskey 1995). Several reasons can be found for marrying less—or less quickly—in a second union. A delay in remarriage may be due to administrative reasons, e.g. a divorce that has not yet become effective may prevent the prospective divorcee from marrying their new partner in the short (or longer) term. Further, attitudes towards marriage may also change. According to Villeneuve-Gokalp (1991), people entering second unions are more prudent with respect to marriage and investing into the relationship. They only marry a second time—if they do marry—when they feel secure, resulting in a longer premarital period than with their first relationship.

Moreover, some people never remarry in their second union because they want to preserve their autonomy or do not have joint children (Caradec 1996; Davidson 2001; Le Gall and Martin 1993).

Along with the rise in separation, the prevalence in unmarried cohabitation (either free-standing or as a precursor to marriage) has increased (Haskey 1992; Heuveline and Timberlake 2004; Kiernan 2001; Prioux 2009), and the composition and nature of cohabitation and marriage have changed (Manting 1996). For instance, premarital cohabitation has long been associated with higher divorce rates, but this link has recently weakened (Hewitt and De Vaus 2009; Reinhold 2010). Also, cohabitating unions now entangle “less selected” persons (Hiekel et al. 2014; Reinhold 2010; Schoen 1992), while people in marriage become more and more specific (Kennedy and Ruggles 2014; Régnier-Loilier and Prioux 2009; Sardon 2005). The higher separation risk of unmarried couples seems to weaken with the spread of marriage-like cohabitation (Liefbroer and Dourleijn 2006), while at the same time widespread premarital cohabitation seems to filter the most stable people into marriage (Beaujouan and Ní Bhrolcháin 2011; Liefbroer and Dourleijn 2006). According to a Canadian study on stepfamilies, the difference in levels of separation between cohabiting and married unions remained for instance constant over time, at least up to the 1990s (Martin et al. 2011). In France, long-term unmarried cohabitation is widespread and it is now nearly as societally accepted as marriage, but the risk of breaking up remains high in newly formed cohabiting partnerships (Martin and Théry 2001; Prioux 2009; Sobotka and Toulemon 2008).

Hypothesis 1 We expect second unions to be more often unmarried than first and that

- 1.1. The relative stability of unmarried cohabitation to marriage will be better in the second than in the first union because a larger number of “stable” people there do not marry.
- 1.2. The difference between cohabitation and marriage could weaken as cohabitation becomes more common.

A second explanation for difference in stability between first and second unions derives from the idea of an incomplete institutionalisation of second marriage, evidenced by a more informal structure and high dissolution risk. In the USA, this was mostly attributed to the complexity of stepfamily forms and arrangements (Cherlin and Furstenberg 1994). Unions with previous children indeed tend to have a higher dissolution risk (Erlangsen and Andersson 2001; Lyngstad and Jalovaara 2010; Teachman 2008). The generally smaller number of children before a first union compared to a second union thus strongly affects the balance in favour of the first partnership stability. Further, unions in which children were born are found to be more stable than those without joint (i.e. current partners’ biological) children (Toulemon 1995), and births are less frequent in second partnerships (Beaujouan 2011). In second unions, however, a first shared birth is not always synonymous with lower separation risk (Erlangsen and Andersson 2001), which might be due to the counteracting effect of stepchildren (defined here as children born of another partner for either partner).

Hypothesis 2 We expect that, for both union orders, separation risks are higher when one or both partners already have children from a previous union. We expect children born before and during a union to interact in shaping partnership stability for both union orders, and notably the positive link between a new birth and stability to be limited by the stepchildren.

Third, structural components and selectivity appear to have strongly influenced the comparison in the past. From the two paragraphs above, situations that adversely affect stability are more common in second unions (mainly unmarried cohabitation and stepchildren). This certainly constitutes a strong component of the difference between the separation rates of first and second unions. However also other socio-economic factors such as parental separation, socio-economic status, country of birth, and age difference between the partners appear to be correlated to separation risks (see Lyngstad and Jalovaara 2010). These factors may affect first and second union stability differently and are therefore utilised as control variables in this study.

Additionally, Furstenberg and Spanier (1984) pointed out that the higher share of dissolution-prone partners in second marriages may have increased the divorce propensity of this group. This last approach was supported by findings that documented a convergence of divorce rates once the unions had survived their initial years (Clarke and Wilson 1994; McCarthy 1978). Advanced survival analysis methods that allow taking unobserved selectivity into account (Lillard et al. 1995) are therefore used to compare separation risks in first and second marriages (see e.g. Steele et al. 2006).

Hypothesis 3 We expect that the stability of second relative to first unions will be influenced by structural and selection effects. Second unions could be frailer because they are more often unmarried cohabitating unions or stepfamily. Additionally, second unions might be more prone to be formed by persons who are having less stable relationship histories overall, making them appear overall less stable than first unions. Controlling for these structural and selection effects, the difference in stability between first and second unions could disappear or even reverse.

3 Data and Methods

3.1 Data

3.1.1 *Generation and Gender Survey*

The analyses are based on the French version of surveys carried out within the *Generation and Gender Project* (Régnier-Loilier 2006; Vikat et al. 2007).¹ The sample is representative of the French population and covers 10,000 individuals

¹ The French *Generation and Gender Survey* (French GGS) has been carried out by the Institut national de la statistique et des études économiques (Insee) and the Institut national d'études démographiques (Ined) in 2005, under the name *Étude des relations familiales et intergénérationnelles (ERFI)*.

aged 18–79. It contains a range of characteristics on the respondents including their complete childbearing and union history (more information on the GGS can be found at <http://www.ggp-i.org/>).

The survey includes a retrospective section on the sequence of unmarried and/or married partnerships. In this context, a “union” is defined as having lived together with a partner for at least 3 months (either married or unmarried). The union starts at the date when the partners moved together and finishes at separation or death of the partner. In line with the recent literature (Hiekel et al. 2014), we define the union of respondents who are not married as “cohabitation”, irrespective of whether they will get married later or not. The marriage date was recorded in case the partners did get married: in a longitudinal perspective, the union status changed from unmarried cohabitation to marriage when the couple got married and the partnership was recorded as a “direct marriage” in case the dates of starting to live together and getting married would coincide. The children’s birth dates were reported independently of respondents’ partnership histories.

3.1.2 Sample

The sample retained comprises respondents aged 25–79 at the time of the interview. As respondents were asked to report their entire partnership histories, the unions reported can start as early as age 15. There are two reasons for choosing 25 as the lower threshold of age at survey. First, partnerships of younger respondents are frequently “censored” (i.e. ongoing at the time of the survey) as most unions just start around this age. Moreover, only very few second partnerships start before age 25. Hence, a sample of respondents aged at least 25 is more consistent and suitable for comparing dissolutions of first and second partnerships. This selection permits more precise estimates although the overall results are very similar regardless of whether or not the sample includes respondents under age 25.

The older age groups were included because second unions may dissolve at a rather advanced age. Further, studying union breakups over the maximum possible cohorts in a sample as large as possible is necessary to our study across cohorts.² In the most recent union cohorts, the sample contains inaccuracies in men’s reports. Indeed, recent separations of fathers are not all observed in the survey, certainly due to a sampling issue and/or to under-declaration (Breton and Prioux 2009). It is also very suspicious that shares of second separations are still at the same level between the 1975–1984 and 1985–1994 union formation cohorts for men, while the gap widened for women’s second unions and for first unions of both sexes (Beaujouan 2009). Therefore, after further checks, only women’s reports were used in the

² It should be noted that the input template of the ERFI survey was designed in such a way that all past partnerships that had started before 1950 were coded as having started in 1950, but this restriction did not apply to marriage dates: 59 unions with a union date = 1950 had a marriage date <1950 and 4 had no marriage date, hence, a total of 63 first unions (i.e. 1.3 % of all first unions) were apparently miscoded. As premarital cohabitation was rare at that time (i.e. 10 % of all marriages started in 1940–1950 (French Family Survey (Insee-Ined 1999), author’s own calculations), it seemed reasonable to assume that the starting date of the partnership was identical with the marriage date in these 59 unions. An alternative would have been to drop the 63 individuals, but in order to have as many second and higher order partnerships as possible, preference was given to replacing the union starting date by the marriage date.

analyses. A comparison with the *French Family Study* (1999, carried out by Insee and Ined) showed that women in the oldest cohorts seemed to slightly underestimate the number of their unions, and thus first unions' separation rate. This is confirmed by comparing the separation rates in the same cohorts with Toulemon's (1997) study of separation. For more information on the quality of family data, see Beaujouan (2012), Breton and Prioux (2009) and Neels et al. (2011).

In the final sample, 4464 women aged 25–79 entered a first union and 1417 of them experienced separation. Of these, 828 entered a second union and 135 were in three or more unions (see table of covariates for first and second unions in “Appendix 1”). The sample is large enough to permit an event history analysis of union dissolution for repeated events (i.e. including unions of all orders to account for unobserved heterogeneity), as specified in the next section.

3.2 Methods

3.2.1 Descriptive Analysis of Family Behaviours in Consecutive Unions

First of all, we compare the share of first and second unions formed in equivalent cohorts that result in a separation, within 5 and 10 years. We also describe how union type differs from the first to the second union for each individual, at equivalent duration. Unless indicated otherwise, the results described in the text were significant at 5 % using z tests. Additional descriptive numbers regarding births and union type are given directly in the text.

3.2.2 Event History Analysis of Union Breakup

Although descriptive analysis is an informative tool, it lacks the power to account for the diversity of consecutive unions in studies on separation. Event history analysis shows the speed and intensity of separation by taking into account the trajectories of all individuals (Courgeau and Lelièvre 2001). By including all unions of each respondent in a single repeated risk model (married and/or unmarried, all orders), it was possible to compare the risks of dissolution for first and second unions net of the presence in repeated unions of individuals with specific unobserved characteristics (Vermunt 1996): to control for this repeated presence in the model, we used an unobserved heterogeneity term. Union order (1, 2, 3+) was introduced as a covariate. The exponential of the estimate of the second relationship dissolution risk as opposed to the first is the key estimate of this article and is called the “relative risk of separation of second unions as compared to first ones”.

In the analysis, separation (i.e. the end of living together) was the “event”. If the union ended by the partner's death or was ongoing at the time of the survey, it was considered “censored”. We modelled the separation risk using a piecewise linear specification of the log-hazard. The baseline spline was the risk of union dissolution by union duration. Nodes were fixed at strategic bending points of the trajectory to maximise the model's explanatory power. The baseline hazard was estimated at each of these nodes. The hazard of union dissolution was given at the reference level; i.e. it depended on the reference categories chosen for the covariates

introduced (the shape and level of the duration spline changed when other covariates were introduced).

The model for repeated events contained all the partnerships j experienced by respondent i . The logarithm of the instant risk was calculated in the following way:

$$\ln h_{ij}(t) = \ln y_j(t) + \sum_k \beta_{ik} X_{ik} + \sum_r \rho_{ijr} C_{ijr} + \sum_s \gamma_{ijs} C_{ijs}(t) + \varepsilon_i$$

where $\ln y_j(t)$ is the logarithm of the baseline risk of separation at each duration (i.e. for the reference individual), ε_i is an individual-specific unobserved heterogeneity term and the sums are the terms of the regression.

The results of previous studies described in the pertinent literature guided the choice of covariates for the analysis. X_i regroups individual-specific covariates: country of birth, parents' separation and father's occupational status (see "[Appendix 1](#)" for details on the covariates in the analysis).³ The country of birth is an important element because it allows controlling for people who might not have lived in France at the beginning of their family life and/or whose attitudes towards marital life, and in particular divorce, might have been influenced by other cultures. We also controlled whether the respondents' parents had divorced—before the respondents had turned 17, to capture parental divorce experience when most children still live in the parental home. To indicate the social background, we constructed the variable "father's occupational status". If the father's occupational status was not indicated, the mother's status was used instead; this applied to 6.7 % of all respondents, and the other 7.1 % unknown were classified as "not available". We considered using level of education as a covariate but, similarly to religion, it indicated the situation at survey time and not at the time of observation, so we rather retained the covariate indicating father's occupational status.

Further, we specified the time-varying covariates $C_{ijs}(t)$ and the constant covariates C_{ijr} for each union. The main variables of interest were union status, the birth of a child within the union (both time-varying) and the existence of previous children (time-constant). We tried several specifications of the children's information and present here the models that include number of joint children together with stepchildren depending on who was the parent. We tested in a further model the relative risk of union dissolution interacting whether there were children born before and/or during the current union. Age of the last joint child was also tested, but we did not retain it in the final specification of the model. Being pregnant, as a significant determinant of separation (Steele et al. 2006), was included in the set of time-varying covariates. Age difference between the partners was categorised so as to recognise its non-symmetry, men being in general older than women in couples (see labels in "[Appendix 1](#)"). We also introduced union cohort (see detail in "[Appendix 1](#)", we could not decompose the 1990–2005 cohorts any further because unions started after 2000 had a much shorter duration than those started earlier, which could generate a bias) and relative age at the start of partnership.

³ The question on religious practice referred to the current situation, which might have differed from that prevailing during the union. Because divorce might have changed the divorcee's religious practice, we preferred not to take this variable into account.

As regards age, e.g. in the cohort 1990–1999, first unions started on average at age 23.5 and second unions at age 33.7. According to Clarke and Wilson (1994), it is pointless to compare women of the same age who enter a first or a second union, as this would refer to specific instead of “typical” cases of women and might thus introduce new selection effects. After an additional pre-analysis, we decided not to introduce age as such into the regression, but used the relative age at 1st, 2nd, etc., union formation in groups of percentiles instead. In order to optimally control for specific persons who form their unions very early or very late, we chose to specifically differentiate between women in the first and last fifth of the distribution.⁴ As a result, women who had their second partnership earliest were “compared” to women who had their first partnership earliest and so on. This approach is consistent with a life-course perspective; those who started a first union early were also more likely to be in the earlier group for second unions, hence more similar persons were compared. It should be noted that this choice affected the comparison of first and second unions’ stability, but that even when choosing age at partnership formation as a covariate, second unions were found to be more stable than first unions in equivalent models (Beaujouan 2009).

To test whether there was a significant link between a variable and the dissolution risk, significance was verified by a likelihood ratio test comparing the log-likelihood of the model before and after the introduction of the covariate, using a Chi-square distribution with the additional number of parameters as degrees of freedom. The results presented in this article are weighted as weighting corrects for possible survey biases. Tests carried out without using weights showed no change in the effects, even though the level of the estimates sometimes differed slightly.

The higher instability of second unions may, at least partly, be due to the presence of a very specific group across several unions, namely people who are more dissolution-prone than “average” individuals (Lichter and Qian 2008). This selection effect has a number of implications (Lillard et al. 1995): it can distort the baseline because people with a high separation risk are overrepresented in unions of short duration (Aaberge et al. 1989) and the risk of second separation for average persons might be overestimated. To control for this group, an unobserved heterogeneity term can be introduced in the repeated events model. This time-invariant, person-specific effect indicates the propensity of people to dissolve their unions for reasons not covered by the survey (Lillard et al. 1995). In the repeated events model, the element introduced was specific for each individual and distributed normally. Its calculation was based on the expected probability that the event would happen in each time interval (Aalen 1988).

⁴ After exploration of the data, the effect of age on separation risk was not linear, so using a continuous age variable was excluded. Choosing to cut at the first and last quintiles, and the median, rather than other deciles was most relevant here, theoretically and data-wise, as separation behaviours were the most different at extreme ages at union formation and very little differentiated at other ages (see also Lyngstad and Jalovaara 2010).

4 Results

4.1 Comparing the Characteristics and Outcomes of First and Second Unions

First, we want to answer the question whether second unions were less stable than the first ones in France, comparing unions formed in the period 1965–1979 and those formed in the period 1990–1999. The number of separations rose, albeit to a different extent in first and second unions (Table 1). The share of unions dissolved within 10 years after the start of the relationship rose from 11 to 32 % for first unions and from 23 to 34 % for second unions. While second unions were less stable than first unions in cohorts still experiencing relatively low levels of separation, first and second unions formed in cohorts subject to higher disruption levels (1980s and 1990s) are remarkably similar in terms of stability.

As compared to their peers in first unions, women in second unions have more often stepchildren but less often shared children, and they more often live in unmarried cohabitation. First unions formed in 1965–1979 had stepchildren in 4 % of the cases against 77 % in second union, and two decades later (1990–1999) the proportions had passed, respectively, to 5 and 68 % (not in table, but available on request from the author). In terms of fertility, births occur more often in first than in second unions; among the unions started in the period 1980–1994, 72 % of all first but only 43 % of all second unions were fertile within 10 years. In the past the unbalance was even stronger, as in unions formed 1965–1979, births took place within 10 years in 82 % of firsts and in 42 % of seconds (not in table).

Additionally, in the 1965–1979 union cohorts, 34 % of all women still cohabited in a second union after 10 years, compared to 5 % in a first union. This was the case for, respectively, 46 and 15 % in the 1980–1994 cohorts (not in table, but available on request from the author). Second unions appear as a precursor to first unions regarding unmarried cohabitation, in that even for earlier cohorts remaining unmarried was more frequent in second than in first unions (Villeneuve-Gokalp

Table 1 Percentage of unions broken up after 5 and 10 years per 100 unions formed (life table), by year the couple started living together

Union cohort	5 years				10 years			
	First union		Second union		First union		Second union	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
1965–1979	6.4	1356	11.4	99	11.1	1356	23.2	99
1980–1989	13.0	954	14.3	204	23.4	954	23.3	204
1990–1999	18.8	934	18.3	313	31.6	934	33.8	313

Women aged 25+ at survey

Source: French GGS (Ined-Insee 2005)

Fig. 1 Percentage of women **a** separated, **b** married at each duration after the start of the second union, provided they were married, cohabiting or separated at the same duration of their first union. Second unions started between 1980 and 1994 at age 25–50. *Source:* French GGS (Ined-Insee 2005). *Sample* 220 women, the duration-specific percentages are based on 20–130 women at each duration. *Reading note:* *Left-hand side* 16 % of all women who still cohabited after 3 years in their first union were separated in their second union at the same duration; the same for those still married after 3 years in their first union. 10 % of all women who had separated after 3 years in their first union were also separated after 3 years in their second union. *Right-hand side* 2 % of all women who still cohabited after 3 years in their first union were married in their second union at the same duration. This also applies to 23 % of those who were married after 3 years in their first union. 10 % of all women who were separated after 3 years in their first union were married in their second union at the same duration

1991). Since then, unmarried cohabitation has spread in first unions but remains predominant in second unions. Overall, first and second unions became more similar over time in this respect.

Is there descriptive evidence that some women reproduce their union dissolution behaviour from one union to the next, whereas others do not? We analyse the situation of women who have been in two partnerships, at equal duration from the start of their two unions. Figure 1a (left side of figure) shows the share of women who already discontinued their second union, broken down by the situation prevailing in their first union after the same duration (see “Reading note”). Those whose first partnership was very short tended to still be in their second union at equal duration: few people seemed to repeatedly enter unions of <2 or 3 years. The difference in separation of second union between those who were formerly married and formerly cohabiting (at the same duration in first union) was not significant. However, those who had cohabited in the first partnership tended to still be cohabiting also in the second at the same duration (Fig. 1b), while formerly married would be married again more often: some women thus seemed more ready to cohabit, while others to get married. Marriage was less likely or entered later in second unions, which suggests that the legal situation (e.g. still being married to the

previous partner) or other considerations might interfere with marital commitment in the second relationship.⁵

4.2 Comparing the Separation Risks of First and Second Unions

The descriptive analysis of separation does not adjust for the effects of individual characteristics and for compositional effects such as marital status and childbirths. Utilising all the partnerships of the persons in the study (the earliest were formed in the mid-1950s), we thus analysed the relative risks of separation in a multivariate context, in an event history analysis of repeated events. We afterwards compared the stability of first and second unions across union cohorts and broke down separation risks by family circumstances.

4.2.1 Comparing Separation Risks

We inserted the sets of covariates described in the method section one after the other in the basic model: this allowed an analysis of the importance of the structure effect for the comparison of first and second unions, not yet taking time into account. Figure 2 depicts the way their insertion changes the risk of second as compared to the first union dissolution (see “Appendix 2” for figures and significance levels). Additional models were estimated with the unobserved heterogeneity term at each stage.

Without any control variables, dissolution risks were 60 % higher for second than for first unions (Fig. 2). Thus over the whole period of union formation, second unions seemed to be less stable than first relationships. However, when controlling for partnership cohort and age expressed in a percentile range, the relative risk became insignificant and close to zero—this being mostly related to the cohort element as only controlling for age percentile did not induce any significant change. The other covariates for social background did not significantly alter the comparison of the separation risk in first and second unions.

Introducing partnership status and/or the number of births in current unions strengthened the decline of relative union dissolution risks. When all the controls so far were included, the likelihood for second-order relationships to break up was 25 % lower than for first unions. Finally, controlling for children born before the union reinforced the strength of second as compared to first unions. However, introducing variables that are so strongly linked with union order to assess the difference in separation rates is both conceptually and statistically questionable; they should rather be used in interaction with union order, which we do in the next section.

⁵ It should be noted that these observations are certainly subject to a period effect: This is the period where cohabitation was spreading, thus obviously the behaviour in the second union could be marked by the overall context. However, this should not affect the overall conclusions of this paragraph, because women in second unions were always much more likely to cohabit than women in first unions.

Fig. 2 Women's relative risk of union dissolution in second as compared to first unions, coefficient estimated in event history models for repeated events (piecewise linear baseline of duration since union formation). *Source:* French GGS (Ined-Insee 2005). *Note* Large shapes are significant at less than 1 %, smaller shapes at <10 %, empty shapes are insignificant (asymptotic standard errors). *Reading note* In the empty model (only duration baseline and control for union order 1, 2, 3+), the risk of separation in a second union is 1.6 times higher than in first unions (when controlling for unobserved heterogeneity, the risk is 1.1 times higher). Adding demographic and socio-economic variables, the risk of separation in second unions is equal to that in first unions, but not significant. When adding (first separately, then together) marriage and joint children covariates, the risk that second unions will break up drops to 0.8 times of that in first unions, and to half (0.5 times) if all controls are included

The unobserved heterogeneity term was significant. Once it was introduced, the relative risk of separation dropped further in all specifications of the analysis. Some individuals were thus more likely to separate and were overrepresented in second unions. However, the more “observed heterogeneity” was controlled for via covariates, the less the relative risk was affected by unobserved heterogeneity: the covariates encompassed most factors of individual instability, e.g. repeated unmarried cohabitation or absence of birth.

The higher risk of dissolution in second unions vanished as soon as we controlled for basic characteristics, particularly union cohort. When controlling for union status and fertility, second unions turned out to be even more stable than first unions. Hypothesis 3 was thus confirmed. The reasons underlying this effect are outlined in the subsequent sections.

Table 2 Relative risk of union dissolution by marital status and children in first and second unions based on the full model with unobserved heterogeneity

	First union		Second union	
	Estimate	SE	Estimate	SE
Pregnant				
No	1		1	
Yes	0.26***	0.20	0.3**	0.53
Current number of joint children				
Childless	1.51***	0.09	1.33	0.18
1 child	1		1	
2 or more children	0.82**	0.09	0.41***	0.33
Children born before the current union				
No previous children	0.48***	0.15	0.66**	0.21
Mother's children	1		1	
Father's children	0.95	0.18	1.42	0.25
Both partners already had children	1.61	0.30	1.44**	0.19
Current marital status				
Unmarried cohabitation	1		1	
Married without previous cohabitation	0.28***	0.11	0.63	0.30
Married after cohabitation	0.34***	0.10	0.25***	0.21

Source: French GGS (Ined-Insee 2005)

For the rest of this table see “[Appendix 3](#)”. See sample size in “[Appendix 1](#)”

Significance: * 0.1; ** 0.05; *** 0.01; SE asymptotic standard errors; 1 indicates the reference category

4.2.2 Family Variables

To compare the effect of children and marriage on separation risks in first and second unions, Table 2 shows how variables for family events interact with union order. These interactions are stable, i.e. the coefficients hardly change when the additional variables shown in “[Appendix 3](#)” are introduced. Except for a few differences described below, the patterns are similar for each union order.

4.2.2.1 Joint and Previous Children The risk of separation was about two-thirds lower for pregnant women than for other women with similar characteristics (Table 2). In first unions, stability increased with the number of children. A second joint child indicated a much higher stability of the second partnership, but the difference between no and one child was not significant. Note that the older the last child born in a first union, the higher the risk of separation, but there was no such effect in second partnerships (Beaujouan 2009).

Having already a child before entering the current union, for either the respondent or the partner, was linked to a large increase in the dissolution risk in both first and second unions. If both partners already had children, the separation

Table 3 Relative risk of union dissolution, joint effect of previous children (born before the start of the union) and children within the current partnership (time-varying covariate)

	First partnership		Second partnership	
	Rel. risk	SE	Rel. risk	SE
<i>No child before, no child in current union</i>	1		0.60**	0.20
Child before, no child in current union	1.58***	0.14	0.67***	0.15
No child before, child in current union	0.60***	0.10	0.09***	0.40
Child before, child in current union	1.56***	0.14	0.59***	0.18

Source: French GGS (Ined-Insee 2005)

We controlled for all other covariates of the main model

Significance: * 0.1; ** 0.05; *** 0.01; SE asymptotic standard errors; 1 indicates the reference category

risk increased even more, although the estimate was not significant in first unions (possibly because of the cell size, as this was rather rare among our sample).

The lower crude stability of a second union may partly be explained by a compositional effect: where 69 % of all second unions started with previous children, this only held true for 12 % of all first unions. Since previous children constitute a higher separation risk, the higher number of second unions with previous children rendered them generally more unstable than first unions. This complements the findings depicted in Fig. 2: when controlling for previous children, the risk of separation in second partnerships relative to first ones decreased sharply.

Finally, in identical situations with respect to previous children and shared births, second partnerships were always more stable than first unions (Table 3). Results related to Hypothesis 2 are refined: children born during a first as well as a second union decreased the separation risk if there were no stepchildren (comparison of the first and third lines for each union) but did not if the parents already had children (the second and fourth lines in Table 3). In any case, unions in which both partners had their first child were the most stable type of partnership.

4.2.2.2 Unmarried Cohabitation and Marriage At equal union duration, separation risks were lower for people who were married than for those who continued to cohabit, to the same extent at both union orders (Table 2). This contradicts Hypothesis 1.1 that cohabitation would be proportionally more stable in a second union, but has to be refined by union cohorts. Additionally, the descriptive study showed that it took people in second unions longer to get married, if they married at all. These two facts explain why the stability of second as compared to first unions seemed to improve when controlling for current partnership status (Fig. 2). It should be noted that marriages after cohabitation were not significantly less stable than direct marriages.⁶ The correlation between marital status and children does not explain the higher stability of marriages; tests not presented here show that marriage is linked with stronger unions irrespective of whether or not the couple has joint children.

⁶ In second union, the lack of significance of the risk of separation in direct marriage is certainly due to the small numbers.

Table 4 Women's relative risk of union dissolution by partnership cohorts and union order, reference category: first unions started in or after 1990

Partnership cohort	Only demo-socio controls		All controls	
	First union	Second union	First union	Second union
Before 1970	0.22***	—	0.46***	—
1970–1979/before 1980	0.34***	0.34***	0.59***	0.25***
1980–1989	0.61***	0.39***	0.77***	0.24***
1990 and after	1	0.68**	1	0.44***

Source: French GGS (Ined-Insee 2005)

Significance: * 0.1; ** 0.05; *** 0.01; 1 indicates the reference category

4.2.3 Rapid Change Over Partnership Cohorts

Is the change over time (as found in the descriptive findings Sect. 4.1) also found in a more advanced specification? Table 4 shows the interaction between union cohort and union order, first in the model with all controls except previous children, current union status and births, then controlling for all covariates.⁷ Taking age structure, social background and unobserved heterogeneity into account, but ignoring family events, the likelihood that both first and second partnerships formed in the 1970s break up was identical. However, the increase in separation risk was lower for women in second unions; hence, from 1990 onwards, the risk that their partnership would break up was about one-third lower than that of women in first partnerships. When additionally controlling for family events, the difference between the two union orders was reinforced and second unions were significantly (<0.01) more stable than first unions even in the past. The large increase in first union separation risks, however, moderated. This led to a more constant gap between first and second union stability, and suggests that its widening was in large part driven by the stronger decline of births and marriage in first unions. This confirms the structural effect emphasised in Hypothesis 3.

As selectivity and the meaning of marriage/cohabitation have been subject to strong changes over the period, we decomposed the separation risks of unmarried and married unions by partnership cohort for first and second unions (Table 5). Net of other factors, stability in married second unions did not decrease significantly over cohorts, while the stability of marriages in first unions dropped rapidly until the 1980s. This complements our previous results and indicates that marriage in first unions lost relative stability over marriage in second unions. Interestingly, unmarried second unions showed constantly much lower separation risks than unmarried first unions (significant <0.01), which confirms their specificity: when consensual unions were less usual, they could have been very unstable in both first

⁷ The 63 unions mentioned in footnote 1 constitute only 4.5 % of all first unions formed before 1970. Taking into account the prevalence of premarital cohabitation, only around 0.5 % of the starting dates of all first unions entered before 1970 could be erroneous, and by a few months rather than years. This should not affect the results on trends.

Table 5 Women's relative risk of union dissolution by partnership cohorts and union order, reference category: marriage in a partnership started in or after 1990

Partnership cohort	During first union...		During second union...	
	Unmarried cohabitation	Marriage	Unmarried cohabitation	Marriage
Before 1970	1.94*	0.46***	—	—
1970–1979/before 1980	1.89***	0.61***	0.85	0.29***
1980–1989	2.49***	0.84	0.76	0.3***
1990 and after	3.37***	1	1.57**	0.34***

Source: French GGS (Ined-Insee 2005)

We controlled for all other covariates of the main model. For these interactions, exposure is more limited, but remains sufficient: only before 1980, in the second union, the number ever living in an unmarried cohabitation (96 women)/in a marriage (86 women) is below one hundred

Significance: * 0.1; ** 0.05; *** 0.01; 1 indicates the reference category

and second union, but in fact cohabitations were already lasting longer in second unions.

Married people had lower separation risks in first and second unions over the whole period covered by the study. Up to the end of the 1980s, the relative stability between cohabitation and marriage was rather constant. In the 1990s, the difference increased and separation risks in married partnerships started to stabilise, which contradicts Hypothesis 1.2. Married unions were thus becoming proportionally more stable than cohabiting ones, and this holds particularly true for second unions. Results are thus rather in line with the hypothesis of an increasing selectivity into marriage, i.e. that the most stable persons are the most likely to marry (or that a subgroup of persons tends to marry and to be less likely to separate/divorce).

4.3 Other Factors of Separation

The coefficients of the other socio-demographic covariates of the study are presented in “[Appendix 3](#)” where they are estimated in the saturated model that includes the interaction between union order and all family events variables, as shown in [Tables 3](#) and [4](#). *Ceteris paribus*, third unions were less likely to break up than first, at about the same level as second unions, but the coefficient does not appear here as these results are based on the saturated model with interactions only.

Among the family background factors, parental divorce is generally positively associated with the risk of separation (see [Lyngstad and Jalovaara 2010](#)). Here as well, the likelihood of relationship dissolution increased for those who witnessed their parents' separation before they turned 17. The risk of separation is sensitive to the father's occupational status and clearly shows a positive gradient: daughters of executives have the highest separation rates, while those of workers or farmers have the lowest. This might have changed over time, as suggested by recent research on educational gradient in marital disruption ([De Graaf and Kalmijn 2006](#); [Matysiak et al. 2013](#)).

The variation in separation risk by country of birth may reflect people's cultural background: French immigrants mostly originate from southern Europe and northern Africa (Prioux and Barbieri 2012), where divorce rates have traditionally been very low (Sobotka and Toulemon 2008). Interethnic marriages are, however, more likely to break up (Kalmijn et al. 2005; Milewski and Kulu 2014). In the period covered by the study, only about one quarter of all immigrant women married a partner from their country of origin (Safi 2008). For people born abroad, the two risks may thus cancel each other out. In fact, the results show that women born abroad were less at risk of separation than those born in France, once other factors including socio-economic background taken into account, which could indicate that their behaviour in France replicated the lower separation rates in their countries of origin.

Finally, unconventional dissimilarity between the partners is often said to increase the risk of separation. The age difference between partners is a good example: Lehrer and Chen (2013) found that marriages in which the wife is at least 5 years older than the husband are less stable. The variable of age difference between the partners was constructed based on the observed distribution of age differences in couples (Beaujouan 2011). The results show that women with much older partners run lower risks of union dissolution, but this may mostly be due to the fact that a partner who starts a union at an older age has a lower separation risk.

5 Conclusion and Discussion

In this paper, we investigated the link between first and second union stability over time in a period of massive change in partnership and childbearing behaviour. We were expecting that second unions would become increasingly more stable than first unions, while first unions were becoming shorter, less often married and more often childless. We tested our hypotheses using the French Generation and Gender Survey and studied women only, due to concerns on separation data quality for men.

The analysis showed that the relative risk of separation in second versus first unions has changed between the 1970s and the 1990–2000s, and confirmed our main hypothesis. In a descriptive framework, the formerly sharp difference between separation rates of first and second unions (second unions were initially twice as likely to separate within 5 years) has almost disappeared over time. Controlling for socio-economic and individual characteristics, second unions moved from equally stable to more stable than first unions across cohorts (Hypothesis 3 is confirmed). One explanation could be the demographic shift in partnership that has taken place in France since the 1970s. First, as separations were becoming more prevalent, people in second unions were less selective and their situation became more common. Second, the family forms of second and first unions slowly became more similar, as first childbirth and first marriage started taking place more often in second unions. This structural explanation is in fact central, since second unions were always more stable than first ones once individual family arrangements were accounted for, with a constant gap over cohorts.

We suggested in Hypothesis 2 that partnerships with stepchildren were always less stable than others: this was indeed the case at both union orders and was possibly due to increased difficulties in the relationship linked to these children or to the poorer institutionalisation of these unions. Unions with joint children were overall more stable, which may be due to a positive effect of shared children, but also to the higher propensity to have children in unions regarded as stable. Explanations are, however, moderated by the fact that children born in stepfamilies did not decrease separation risks. Though second unions provide more stability than first ones, stepfamilies remain disadvantaged, and further actions could be taken to improve their condition. A new step has been taken in France in the direction of better institutionalisation of the stepfamily in the 2014s law on joint parental authority,⁸ which allows the new parent's partner (under agreement) to make small decisions in children's everyday life (usual acts: activities, friend visits, etc., but not medical interventions, etc.), releasing some logistic pressure from the parent. More attention could also be put on giving fathers an active role in child custody, to improve time availability and reduce stress of mothers. Shared custody has been shown for instance to increase the chances of repartnering (Vanassche et al. 2015; White and Booth 1985) and could also be beneficial to the new relationship.

Across all the union cohorts under study, married second unions had lower separation risks than married first unions (other things being equal), and likewise cohabitations (that were remaining overall less stable than marriage). Women in a second union can be perceived as frontrunners as they were among the first to adopt unmarried cohabitation as a long-term living arrangement (Prioux 2009; Vिलeneuve-Gokalp 1991), and married much less than in their own first union. Also up to the 1990s separation risk in unmarried second unions did not increase, while it was spreading quickly in first unions. However, separation risks of unmarried and married second unions were overall not closer than those of unmarried and married first unions, despite an expected better similarity of marriage and cohabitation in a second union (in Hypothesis 1.1). Some legal vacuums remain in France regarding legal rights of long-term cohabiting couples, notably in terms of inheritance. These would be important to fill if cohabitation is indeed a stable way of living together after a first and often more institutionalised union.

In the last period (1990–2005 union cohorts), the balance between separation risks in cohabitation and marriage shifted: while unmarried cohabitation grew less stable, the risk in married unions tended to stabilise. This is not very consistent with observations predicting that these two union types should become closer with the easing of marriage norms (Wagner and Weiss 2006) and new variety in forms of cohabitation (Hiekel et al. 2015), invalidating Hypothesis 1.2. However, married people appear to be a more selective group nowadays where in the past everyone entering a relationship was married. Notably, people with religious convictions or specific social features are at the same time more likely to marry and less likely to separate, and thus tend to be overrepresented in marriage (Régnier-Loilier and Prioux 2009). It may also be that, as suggested by research in Great Britain, cohabitation has become a filter for marriage and that those who make the transition

⁸ <http://www.assemblee-nationale.fr/14/ta/ta0371.asp>.

to marriage are the more stable unions, while the less stable unions continue as cohabitations (Beaujouan and Ní Bhrolcháin 2011). An item on the future agenda of official statistics could be to develop indicators for dissolution that are not restricted to marriage, to better monitor these patterns.

This study takes a step forward in comparing the disruption of first and second unions by identifying and taking into account the large differences in the family structures of the respective union orders. Limitations can, however, be noted, and we discuss them below together with directions for future research.

First of all, selection mechanisms into (or out of) various types of relationships are at play and cannot all be evaluated. Our model controlled for “observed” characteristics and for unobserved heterogeneity, whose significance highlights a selection of people less stable in a second union. Some limitations remain: First, our specification of the unobserved heterogeneity term does not allow for accounting of its change over time (Lillard et al. 1995). Second, other selection effects are at play in the study of separation. For instance, fertility and separation decisions interact (Coppola and Di Cesare 2008), and second union repartnering also depends on the woman’s characteristics, notably whether or not she has children (Beaujouan 2012; Ivanova et al. 2013). In addition, a longer time spent “living apart together” can benefit to the stability of the relationship that follows (Schnor 2015), and this period is in general longer before a second than a first relationship (de Jong Gierveld 2004; Liefbroer et al. 2015; Régnier-Loilier et al. 2009). Also, transition to living with one’s partner could be rarer after a breakup, so that more second “partnerships” would not be captured by our study. Further studies including living apart together relationships could help in addressing these selection issues.

Moreover, some factors of separation were ignored in this study because they were not available in the survey. Although there is some indication that women tend to choose a partner with the same socio-economic characteristics as their first husband when they repartner (Theunis et al. 2015), further investigations of the link between partner’s socio-economic status (including endogamy/heterogamy in the couple) and separation in each union would be valuable. Also, if family experience and skills transfer indeed participate in second partnership stability, it would be important to know the partner’s union history (Aguirre and Parr 1982). For example, remarriages, in which both partners were previously married, were found to be less likely to be disrupted after 15 years than any other kind of marriages in the USA (Clarke and Wilson 1994).

Economic factors could not be accounted for. Decisions regarding separation are certainly less easy to make in difficult personal economic circumstances than in cases of economic independence (Lyngstad and Jalovaara 2010). Women in second unions may well be in work situations that differ from those in first unions, e.g. being more advanced in their career or having acquired independence while leaving the first partner. So it is possible that individual economic circumstances further affect the comparison of first and second union separation risks. Macro-circumstances also changed over time, and the shift in the economic situation and gender balance in many European countries is clearly affecting partnership behaviours (Esping-Andersen and Billari 2015). For instance, the improvement in the couple work balance could lead towards more freedom to separate, while the

economic recession reduces this option (Schaller 2013). It is not said that this would necessarily change the link between first and second union separation risks, but contextual changes are important to keep in mind when studying union dynamics.

Finally, despite the good quality of the survey data, it appears that separation rates of first unions are likely to be underestimated. Indeed, broken unions seem to be less accurately reported, and for that reason some second (unbroken) unions might be considered as first. As a consequence, second unions might be even less likely to separate than first. Overall, the results of our study should at most not be affected, or even reinforced, should such a bias exist. Additionally, the sample size remained limited in specific instances, so earlier trends could be somewhat shaky and would need to be confirmed by further studies.

Doubts about the quality of separation data for men prevented us from studying their separation behaviour (Beaujouan 2009), but careful observation might prove necessary in the future, as men's overall number of children is largely influenced by their family paths (Beaujouan and Solaz 2013; Van Bavel et al. 2012). Very little research exists on men's separation, but we know for instance that they are more likely than women to repartner when they already have children, and to have children in the new union (Beaujouan 2012; Ivanova et al. 2013; Vanassche et al. 2015). Less prone to having children at home, a strong factor of separation (White and Booth 1985), men could also show relatively more stable second unions. Overall, we are not expecting to find the same results for men as for women, as their union and childbearing dynamics differ widely, and because of the gendered nature of partnerships (Aguirre and Parr 1982; Jamieson et al. 2009; Reneflot 2006; Van Bavel 2012).

Further research could underline the relevance for other countries of the arguments exposed here for France. This study is embedded in the French context and in an eventful period in terms of family development. Although it covers a period in which divorce rates have stabilised or even decreased in several European countries, family behaviours in France differ from other industrialised countries in several ways (Prioux 2006). Consequently, comparisons with past findings for validation purposes are delicate and the results may not be generalizable. However, recent findings on this topic in two countries that are quite similar to France in terms of separation and divorce, namely the UK and Norway, seem to confirm that the results presented here provide a good overview of the link between separations and family dynamics (Parisi 2009; Poortman and Lyngstad 2007). An update of the findings in the USA would be very interesting and could further fuel the discourse over the incomplete institutionalisation of remarriage.

Acknowledgments The author wishes to thank the French “Institut national d’études démographiques”/Ined that provided support for this research through a 3-year Ph.D. scholarship. This research was also supported by the European Research Council under the European Union’s Seventh Framework Programme (FP7/2007-2013)/ERC Grant Agreement No. 284238 (EURREP). The author is especially grateful to France Prioux and Laurent Toulemon for their supervision and advice, and to Zuzanna Brzozowska for her careful reading and comments of the text.

Appendix 1

See Table 6.

Table 6 Frequency and distribution of the variables related to the study, women aged 25+, first and second partnerships

	First union		Second union	
	Frequency	Distribution (%)	Frequency	Distribution (%)
Cause of union's end in the model				
Separation	1417	31.7	284	34.3
Death of spouse	533	11.9	65	7.9
Survey (i.e. ongoing union)	2514	56.3	479	57.9
Partnership cohort				
1969 and earlier	1394	31.2	42	5.1
1970–1979	928	20.8	80	9.7
1980–1989	951	21.3	204	24.6
1990 and after	1191	26.7	502	60.6
Age at start of union				
<21	1806	40.5	25	3.0
21–26	2153	48.2	210	25.4
27 and more	505	11.3	593	71.6
Age difference between partners				
Woman 1 or more years older	580	13.0	279	33.7
Woman –1 to 2 years younger	1563	35.0	195	23.6
Woman 2–9 years younger	2097	47.0	285	34.4
Woman 10 and more years younger	224	5.0	69	8.3
Previous children				
No previous children	3951	88.5	227	27.4
Mother's children	178	4.0	258	31.2
Father's children	285	6.4	93	11.2
Both partners already had children	50	1.1	250	30.2
Union marital status (by separation or at survey time)				
Cohabiting	1042	23.3	469	56.6
Direct marriage	2098	47.0	54	6.5
Marriage after cohabitation	1324	29.7	305	36.8
Pregnant/births during union (at separation or survey time)				
No	922	20.7	497	60.0
Yes	3542	79.3	331	40.0
Separation of parents before age 17				
Separation	481	10.8	149	18.0
No separation	3983	89.2	679	82.0

Table 6 continued

	First union		Second union	
	Frequency	Distribution (%)	Frequency	Distribution (%)
Father's occupational status				
Executive	383	8.6	77	9.3
Mid-level	526	11.8	111	13.4
White collar	566	12.7	117	14.1
Blue collar	1022	22.9	145	17.5
Farmer or self-employed	1636	36.6	299	36.1
Not available	331	7.4	79	9.5
Country of birth				
France	4046	90.6	770	93.0
Other country	418	9.4	58	7.0
Total	4464		828	

Appendix 2

Table 7 shows the coefficients presented in Fig. 2 and the associated standard errors.

Table 7 Women's union dissolution: risk in second as compared to first unions, with and without unobserved heterogeneity, by type of controls

Which controls?	Without controlling for unobserved heterogeneity				Controlling for unobserved heterogeneity			
	Relative risk U2/U1	SE	<i>n</i>	Log-likelihood	Relative risk U2/U1	SE	Sigma	Log-likelihood
No control	1.60***	0.073	9	−12,936	1.12***	0.135	0.75	−12,930
Union cohort and age percentiles	1.06	0.073	14	−12,677	0.77*	0.159	0.72	−12,671
+Socio-demographic cov.	1.01	0.074	24	−12,629	0.72**	0.152	0.73	−12,623
+Marriage only	0.85**	0.074	26	−12,410	0.62***	0.134	0.63	−12,405
+Joint children only	0.86**	0.075	27	−12,521	0.57***	0.136	0.84	−12,567
+Marriage and joint children	0.80***	0.076	30	−12,317	0.61***	0.137	0.57	−12,313
+Previous children (all cov.)	0.52***	0.094	33	−12,298	0.40***	0.153	0.57	−12,294

Source: Ined-Insee, Erfi-GGS1, 2005

“Relative risk U2/U1” shows the relative risk of separation in second union when the reference category is first union

Significance: * 0.1; ** 0.05; *** 0.01; SE asymptotic standard errors

Appendix 3: General Factors of Separation

Table 8 shows the remaining variables of the model presented in Table 3.

Table 8 Women's separation risk, all partnerships, remaining variables of the model presented in Table 3 (interaction with first- and second-order unions of all family events variables)

	Coefficient	SE
Intercept (baseline)	-5.15***	0.51
Duration (baseline log-hazard)		
0–0.5 years (slopes)	3.86***	1.05
0.5–2 years (slopes)	0.16	0.12
2–3.5 years (slopes)	0.08	0.09
3.5–8 years (slopes)	0.03	0.03
8–20 years (slopes)	0.01	0.01
20 and more years (slopes)	-0.08***	0.01
Partnership cohort		
1969 and earlier	0.59***	0.10
1970–1979	0.81**	0.09
1980–1989	1	
1990 and after	1.41***	0.08
Normalised age at start of union		
0–20th percentile	1.41***	0.08
20–50th percentile	1	
50–80th percentile	0.67***	0.08
80–100th percentile	0.62***	0.10
Age difference between partners		
Woman 1 or more years older	1.14	0.09
Woman -1 to 2 years younger	1.22***	0.07
Woman 2–9 years younger	1	
Woman 10 and more years younger	0.48***	0.15
Separation of parents before age 17		
No separation	1	
Separation	1.67***	0.09
Father's occupational status		
Executive	1.42***	0.11
Mid-level	1.34***	0.09
White collar	1.3***	0.09
Blue collar	1	
Farmer or self-employed	0.93	0.09
Not available	1.23*	0.12
Birth country		
France	1	
Other country	0.79**	0.11
Unobserved heterogeneity		
Sigma	0.66***	0.12
Log-likelihood	-1	
n	37	
χ^2 Test statistic (compared to model without unobserved heterogeneity)	<0.0001	

Source: Ined-Insee, Erfi-GGS1, 2005

Significance: * 0.1; ** 0.05; *** 0.01; SE asymptotic standard errors; 1 indicates the reference category

References

- Aaberge, R., Kravdal, Ø., & Wennemo, T. (1989). *Unobserved heterogeneity in models of marriage dissolution*. Discussion paper 42. Oslo: Central Bureau of Statistics.
- Aalen, O. O. (1988). Heterogeneity in survival analysis. *Statistics in Medicine*, 7, 1121–1137.
- Aguirre, B., & Parr, W. (1982). Husbands' marriage order and the stability of first and second marriages of white and black women. *Journal of Marriage and the Family*, 44(3), 605–620.
- Beaujouan, É. (2009). Les séparations au fil des unions. Répétition, apprentissage? In A. Régnier-Loilier (Ed.), *Portraits de familles, l'enquête Étude des relations familiales et intergénérationnelles* (pp. 113–141). Paris: Ined.
- Beaujouan, É. (2011). Second-union fertility in France: Partners' age and other factors. *Population (English Edition)*, 66(2), 239–274.
- Beaujouan, É. (2012). Repartnering in France: The role of gender, age and past fertility. *Advances in Life Course Research*, 17, 69–80.
- Beaujouan, É., & Ní Bhrolcháin, M. (2011). Cohabitation and marriage in Britain since the 1970s. *Population Trends*, 145, 35–59.
- Beaujouan, É., & Solaz, A. (2013). Racing against the biological clock? Childbearing and sterility among men and women in second unions in France. *European Journal of Population—Revue Européenne de Démographie*, 29(1), 39–67.
- Becker, G. S., Landes, E. M., & Michael, R. T. (1977). An economic analysis of marital instability. *The Journal of Political Economy*, 85(6), 1141–1187.
- Blayo, C., & Festy, P. (1976). Les divorces en France: Evolution récente et perspectives. *Population (French Edition)*, 31(3), 617–648.
- Breton, D., & Prioux, F. (2009). Observer la situation et l'histoire familiale des enfants. In A. Régnier-Loilier (Ed.), *Portraits de familles, l'enquête Étude des relations familiales et intergénérationnelles* (pp. 143–162). Paris: Ined.
- Caradec, V. (1996). Les formes de la vie conjugale des “jeunes” couples “âgés”. *Population (French Edition)*, 51(4–5), 897–928.
- Castro-Martín, T., & Bumpass, L. L. (1989). Recent trends in marital disruption. *Demography*, 26(1), 37–51.
- Cherlin, A. J. (1978). Remarriage as an incomplete institution. *American Journal of Sociology*, 84(3), 634–650.
- Cherlin, A. J. (2009). *The marriage-go-round: The state of marriage and the family in America today*. New York: Knopf Doubleday Publishing Group.
- Cherlin, A. J., & Furstenberg, F. F. (1994). Stepfamilies in the United States: A reconsideration. *Annual Review of Sociology*, 20, 359–381.
- Chiswick, C. U., & Lehrer, E. L. (1990). On marriage specific human capital: Its role as a determinant of remarriage. *Journal of Population Economics*, 3(3), 193–213.
- Clarke, S. C., & Wilson, B. F. (1994). The relative stability of remarriages. A cohort approach using vital statistics. *Family Relations*, 43(5), 305–310.
- Coleman, D. A. (1989). The contemporary pattern of remarriage in England and Wales. In E. Grebenik, C. Hohn, & R. Mackensen (Eds.), *Later phases of the family cycle: Demographic aspects* (pp. 83–119). New York: Oxford University Press.
- Coleman, M., Ganong, L. H., & Fine, M. A. (2000). Reinvestigating remarriage: Another decade of progress. *Journal of Marriage and Family*, 62(November), 1288–1307.
- Coppola, L., & Di Cesare, M. (2008). How fertility and union stability interact in shaping new family patterns in Italy and Spain. *Demographic Research*, 18, 117–144.
- Courgeau, D., & Lelièvre, É. (2001). L'analyse démographique des biographies. In *Démographie: analyse et synthèse* (pp. 503–517). Paris: Ined.
- Davidson, K. (2001). Late life widowhood, selfishness and new partnership choices: A gendered perspective. *Ageing and Society*, 21, 297–317.
- De Graaf, P. M., & Kalmijn, M. (2006). Change and stability in the social determinants of divorce: A comparison of marriage cohorts in the Netherlands. *European Sociological Review*, 22(5), 561–572. doi:10.1093/esr/jcl010.
- De Guibert-Lantoine, C. (2002). Remise en couple après rupture de la première union. In *Vivre plus longtemps, avoir moins d'enfants, quelles implications? Actes du 10e colloque international de l'AIDELF* (pp. 217–229). Paris: Presses universitaires de France.

- De Jong Gierveld, J. (2004). Remarriage, unmarried cohabitation, living apart together: Partner relationships following bereavement or divorce. *Journal of Marriage and Family*, 66(February), 236–243.
- Dewilde, C., & Uunk, W. (2008). Remarriage as a way to overcome the financial consequences of divorce—A test of the economic need hypothesis for European women. *European Sociological Review*, 24(3), 393–407.
- Erlangsen, A., & Andersson, G. (2001). *The impact of children on divorce risks in first and later marriages*. MPIDR working paper. Rostock: Max-Planck-Institut für demografische Forschung.
- Esping-Andersen, G., & Billari, F. C. (2015). Re-theorizing family demographics. *Population and Development Review*, 41(1), 1–31.
- Furstenberg, F. F., & Spanier, G. B. (1984). The risk of dissolution in remarriage: An examination of Cherlin's hypothesis of incomplete institutionalization. *Family Relations*, 33(3), 433–441.
- Gelissen, J. (2004). Assortative mating after divorce: A test of two competing hypotheses using marginal models. *Social Science Research*, 33(3), 361–384.
- Haskey, J. (1992). Patterns of marriage divorce and cohabitation in the different countries of Europe. *Population Trends*, 69, 27–36.
- Haskey, J. (1995). Trends in marriage and cohabitation: The decline in marriage and the changing pattern of living in partnerships. *Population Trends*, 80, 5–15.
- Heuveline, P., & Timberlake, J. M. (2004). The role of cohabitation in family formation: The United States in comparative perspective. *Journal of Marriage and Family*, 66(5), 1214–1230.
- Hewitt, B., & De Vaus, D. (2009). Change in the association between premarital cohabitation and separation, Australia 1945–2000. *Journal of Marriage and Family*, 71(2), 353–361.
- Hiekel, N., Liefbroer, A. C., & Poortman, A.-R. (2014). Understanding diversity in the meaning of cohabitation across Europe. *European Journal of Population—Revue Européenne de Démographie*, 30(4), 391–410.
- Hiekel, N., Liefbroer, A. C., & Poortman, A.-R. (2015). Marriage and separation risks among German cohabiters: Differences between types of cohabiters. *Population Studies*, 69(2), 237–251. doi:10.1080/00324728.2015.1037334.
- Ivanova, K., Kalmijn, M., & Uunk, W. (2013). The effect of children on men's and women's chances of re-partnering in a European context. *European Journal of Population—Revue Européenne de Démographie*, 29(4), 417–444.
- Jalovaara, M. (2013). Socioeconomic resources and the dissolution of cohabitations and marriages. *European Journal of Population—Revue européenne de Démographie*, 29(2), 167–193.
- Jamieson, L., Wasoff, F., & Simpson, R. (2009). Solo-living, demographic and family change: The need to know more about men. *Sociological Research Online*, 14(2–3). <http://socresonline.org.uk/14/2/5.html>.
- Kalmijn, M., De Graaf, P. M., & Janssen, J. P. G. (2005). Inter-marriage and the risk of divorce in the Netherlands: The effects of differences in religion and nationality, 1974–94. *Population Studies*, 59(1), 71–85.
- Kennedy, S., & Ruggles, S. (2014). Breaking up is hard to count: The rise of divorce in the United States, 1980–2010. *Demography*, 51, 587–598.
- Kiernan, K. E. (2001). The rise of cohabitation and childbearing outside marriage in Europe. *International Journal of Law, Policy and the Family*, 15(1), 1–21.
- Kulu, H. (2014). Marriage duration and divorce: The seven-year itch or a lifelong itch? *Demography*, 51(3), 881–893.
- Le Gall, D., & Martin, C. (1993). Transitions familiales, logiques de reconstitution et modes de régulation conjugale. In *Les recompositions familiales aujourd'hui* (pp. 137–158). Paris: Nathan.
- Lehrer, E. L., & Chen, Y. (2013). Delayed entry into first marriage and marital stability. *Demographic Research*, 29, 521–542.
- Lesthaeghe, R. J. (2010). The unfolding story of the second demographic transition. *Population and Development Review*, 36(2), 211–251.
- Lichter, D. T., & Qian, Z. (2008). Serial cohabitation and the marital life course. *Journal of Marriage and the Family*, 70(4), 861–878.
- Liefbroer, A. C., & Dourleijn, E. (2006). Unmarried cohabitation and union stability: Testing the role of diffusion using data from 16 European countries. *Demography*, 43(2), 203–221.
- Liefbroer, A. C., Poortman, A.-R., & Seltzer, J. A. (2015). Why do intimate partners live apart? Evidence on LAT relationships across Europe. *Demographic Research*, 32(8), 251–286.

- Lillard, L. A., Brien, M. J., & Waite, L. J. (1995). Premarital cohabitation and subsequent marital dissolution: A matter of self-selection? *Demography*, 32(3), 437–457.
- Lyngstad, T. H., & Jalovaara, M. (2010). A review of the antecedents of union dissolution. *Demographic Research*, 23, 257–291.
- Manting, D. (1996). The changing meaning of cohabitation and marriage. *European Sociological Review*, 12(1), 53–65.
- Martin, V., Le Bourdais, C., & Lapierre-Adamcyk, E. (2011). Stepfamily instability in Canada—The impact of family composition and union type. *Zeitschrift für Familienforschung*, 23(2), 196–218.
- Martin, C., & Théry, I. (2001). The PACS and marriage and cohabitation in France. *International Journal of Law, Policy and the Family*, 14(3), 135–158.
- Matysiak, A., Styr, M., & Vignoli, D. (2013). The educational gradient in marital disruption: A meta-analysis of European research findings. *Population Studies*, 68(2), 197–215.
- Mazuy, M., Barbieri, M., & D’Albis, H. (2014). Recent demographic trends in France: The number of marriages continues to decrease. *Population (English Edition)*, 69(3), 313–363.
- McCarthy, J. (1978). A comparison of the probability of the dissolution of first and second marriages. *Demography*, 15(3), 345–359.
- Milewski, N., & Kulu, H. (2014). Mixed marriages in Germany: A high risk of divorce for immigrant-native couples. *European Journal of Population—Revue européenne de Démographie*, 30(1), 89–113.
- Neels, K., Vermant, G., & De Winter, T. (2011). Quality of demographic data in GGS Wave 1. In *GGP user conference*. Budapest.
- Oppenheimer, V. K. (1988). A theory of marriage timing. *American Journal of Sociology*, 94(3), 563–591.
- Parisi, L. (2009). *The hazards of partnership dissolution in Britain: A comparison of second and first marriages*. Spring Meeting of young economists, Istanbul.
- Poortman, A.-R., & Lyngstad, T. H. (2007). Dissolution risks in first and higher order marital and cohabiting unions. *Social Science Research*, 36(4), 1431–1446.
- Prioux, F. (2006). Cohabitation, marriage and separation: contrasts in Europe. *Population and Societies*, 422.
- Prioux, F. (2009). Les couples non mariés en 2005: Quelles différences avec les couples mariés ? *Politiques Sociales et Familiales*, 96, 87–95.
- Prioux, F., & Barbieri, M. (2012). Recent demographic developments in France: Relatively low mortality at advanced ages. *Population*, 67(4), 493–550.
- Rault, W., & Régnier-Loilier, A. (2015). First cohabiting relationships: Recent trends in France. *Population & Societies*, 521.
- Régnier-Loilier, A. (2006). Présentation, questionnaire et documentation de l’ “Etude des relations familiales et intergénérationnelles” (ERFI): Version française de l’enquête “Generations and gender survey” (GGS). *Documents de travail de l’Ined*, 133.
- Régnier-Loilier, A., Beaujouan, É., & Villeneuve-Gokalp, C. (2009). Neither single, nor in a couple. A study of living apart together in France. *Demographic Research*, 21, 75–108.
- Régnier-Loilier, A., & Prioux, F. (2009). Comportements familiaux et pratique religieuse en France. In A. Régnier-Loilier (Ed.), *Portraits de familles, l’enquête Étude des relations familiales et intergénérationnelles* (pp. 397–421). Paris: Ined.
- Reinhold, S. (2010). Reassessing the link between premarital cohabitation and marital instability. *Demography*, 47(3), 719–733.
- Reneflot, A. (2006). A gender perspective on preferences for marriage among cohabitating couples. *Demographic Research*, 15, 311–327.
- Safi, M. (2008). Inter-marriage and assimilation: Disparities in levels of exogamy among immigrants in France. *Population (English Edition)*, 63(2), 239–268.
- Sardon, J.-P. (2005). L’évolution du divorce en France. In *La population de la France: évolutions démographiques depuis 1946* (Vol. 2, pp. 217–252). Pessac: CUDEP.
- Sardon, J.-P. (2006). Évolution Démographique Récente Des Pays Développés. *Population*, 61(3), 227–300.
- Schaller, J. (2013). For richer, if not for poorer? Marriage and divorce over the business cycle. *Journal of Population Economics*, 26(3), 1007–1033.
- Schnor, C. (2015). Does waiting pay off for couples? *Demographic Research*, 33(September), 611–652.
- Schoen, R. (1992). First unions and the stability of first marriages. *Journal of Marriage and the Family*, 54(2), 281–284.

- Sobotka, T., & Toulemon, L. (2008). Changing family and partnership behaviour: Common trends and persistent diversity across Europe. *Demographic Research*, 19(Special Collection 7), 85–138.
- Solaz, A. (2001). *Formation, devenir et organisation des couples confrontés au chômage*. Doctoral dissertation. University Paris 10.
- Spanier, G. B., & Furstenberg, F. F. (1982). Remarriage after divorce: A longitudinal analysis of well-being. *Journal of Marriage and Family*, 44(3), 709–720.
- Steele, F., Kallis, C., & Joshi, H. (2006). The formation and outcomes of cohabiting and marital partnerships in early adulthood: The role of previous partnership experience. *Journal of Royal Statistical Society*, 169(4), 757–779.
- Teachman, J. D. (2008). Complex life course patterns and the risk of divorce in second marriages. *Journal of Marriage and the Family*, 70(2), 294–305.
- Theunis, L., Pasteels, I., & Bavel, J. Van. (2015). Educational assortative mating after divorce. Persistence or divergence from patterns in first marriages? *Zeitschrift für Familienforschung*, 27, 183–202.
- Thomson, E., Winkler-Dworak, M., Spielauer, M., & Prskawetz, A. (2012). Union instability as an engine of fertility? A microsimulation model for France. *Demography*, 49(1), 175–195.
- Toulemon, L. (1995). The place of children in the history of couples. *Population an English Selection*, 7, 163–186.
- Toulemon, L. (1997). Cohabitation is here to stay. *Population an English Selection*, 9, 11–46.
- Van Bavel, J. (2012). The reversal of gender inequality in education, union formation and fertility in Europe. *Vienna Yearbook of Population Research*, 10, 127–154.
- Van Bavel, J., Jansen, M., & Wijckmans, B. (2012). Has divorce become a pro-natal force in Europe at the turn of the 21st century? *Population Research and Policy Review*, 31(5), 751–775.
- Vanassche, S., Corijn, M., & Matthijs, K. (2015). Post-divorce family trajectories of men and women in Flanders. *Demographic Research*, 32(May), 859–872.
- Vaupel, J. W., & Yashin, A. I. (1985). Heterogeneity's ruses: Some surprising effects of selection on population dynamics. *The American Statistician*, 39(3), 176–185.
- Vermunt, J. K. (1996). *Log-linear event history analysis: A general approach with missing data, latent variables, and unobserved heterogeneity*. Tilburg: Tilburg University Press.
- Vikat, A., Spéder, Z., Beets, G., Billari, F. C., Bühler, C., Désesquelles, A., et al. (2007). Generations and Gender Survey (GGS): Towards a better understanding of relationships and processes in the life course. *Demographic Research*, 17, 389–440.
- Vikat, A., Thomson, E., & Hoem, J. M. (1999). Stepfamily fertility in contemporary Sweden: The impact of childbearing before the current union. *Population Studies*, 53(2), 211–225.
- Villeneuve-Gokalp, C. (1991). Du premier au deuxième couple: les différences de comportement conjugal entre hommes et femmes. In *La nuptialité: évolution récente en France et dans les pays développés. Actes du IXe Colloque National de Démographie* (pp. 181–192). Paris.
- Wagner, M., & Weiss, B. (2006). On the variation of divorce risks in Europe: Findings from a meta-analysis of European Longitudinal Studies. *European Sociological Review*, 22(5), 483–500.
- White, L., & Booth, A. (1985). The quality and stability of remarriages: The role of stepchildren. *American Sociological Review*, 50(5), 689–698.