

Partnership Dissolution after Childbirth in Ireland: On the Importance of Pregnancy Intentions

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Abstract: Several approaches frame childbirth as an event that can reduce partnership quality, generate work-family conflicts, intensify financial pressures, and increase separation risk. The present study discusses theories of separation in relation to pregnancy intentions leading to a birth and analyses data from *Growing Up in Ireland*. Transition rate models of parental separation nine months to five years after childbirth show higher risks of separation after pregnancies described as “somewhat too early”, “much too early” and after “unwanted” pregnancies. These differences are due partly to socio-demographic factors that influence unplanned pregnancies and subsequent separation. Increases in work-family conflicts after birth do not increase separation risk.

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I INTRODUCTION

According to quantitative empirical research, couples with children separate less often than childless couples. Research on divorce or partnership dissolution therefore generally controls for the presence of children (de Graaf and Kalmijn, 2006; Wagner and Weiss, 2006), the age of the youngest child (Kalmijn and Poortman, 2006), the number of children (Diekmann and Schmidheiny, 2004), the number of children in different age groups (Hewitt, 2009), or for several indicators simultaneously, including the number, parity, and age structure of the children (Waite and Lillard, 1991; Andersson, 1997). A positive correlation between children and partnership stability seems plausible based on a number of theoretical arguments and empirical findings: children are conceptualised as non-market goods produced in private households, that take less value after separation (Becker, 1993); and reduced labour force participation (largely on the part of mothers) due to child-rearing increases the risk of poverty after separation (Andreß *et al.*, 2006). In addition, prevailing norms hinder separation if children are present (Liefbroer and Billari, 2010), and couples with better long-term partnership prospects have a higher propensity to become parents (Becker *et al.*, 1977; see also de Graaf and Kalmijn, 2006, p. 562; Manning, 2004, p. 675).

Yet even in industrialised countries, where modern birth control methods such as the oral contraceptive pill are available, not every pregnancy is planned and not every birth is the result of a planned pregnancy. With respect to abortion, which might be used as a method of birth control during pregnancy, Ireland had a very strict policy until recently, such that any kind of abortion was strictly forbidden. Interestingly, surveys yield comparable figures on the proportion of unplanned births reported by mothers in Anglophone countries: the proportion is 41 per cent in Ireland (estimates based on *Growing Up in Ireland*; McCrory and McNally, 2013, p. 4), 41 per cent in the UK (Millennium Cohort Study; de La Rochebrochard and Joshi, 2013, p. 910), and 37 per cent in the US (National Survey of Family Growth NSFG; Mosher *et al.*, 2012, p. 6).

According to commitment theory, the stability of relationships differs with respect to pregnancy intentions. Couples that deliberately planned their pregnancy have been found to be more dedicated to their relationship and face lower risks of separation, as they can better cope with the stresses and strains of parenthood than those who “slide in” to a pregnancy (Stanley *et al.*, 2006, p. 504).

Additionally, a not necessarily competing argument has been put forward by Guzzo and Hayford (2012; 2014) who have shown, based on US data, that the risk of separation is higher after unplanned compared to planned births in both non-marital and marital unions. The authors argue that the transition to parenthood causes stress for different reasons; partners have less time for each other, reducing the quality of their relationship, and mothers, in particular, have difficulties

balancing household and childcare duties with work and career. In the case of unplanned pregnancies, childbirth should have a much stronger impact on such processes, intensifying conflicts and leading to higher separation risks. This rationale coincides with the view of childbirth as a critical life-course event, and with the family stress model (Kluwer, 2010; Conger *et al.*, 1999).

The current paper examines if and why the planning status of a pregnancy is important for future partnership (in)stability in Ireland and contributes to existing research in several ways. First, we account for different degrees of unplanned pregnancies, namely “somewhat mistimed” or “severely mistimed” as well as “unwanted”. The term “unwanted” refers to cases in which mothers report that, prior to becoming pregnant, they had no intention of ever having children at any point in the future. This detailed differentiation of pregnancy intentions in our study is made possible through the use of an Irish dataset with high case numbers. Second, the data provide rich information allowing us to investigate whether differing degrees of union instability by pregnancy intention are due solely to factors that increase the risks of a mistimed or unwanted pregnancy as well as partnership dissolution or if unintended pregnancies leading to a birth have direct effects. Third, the data allow us to test theoretical arguments about why mistimed and unwanted pregnancies should have an independent effect on partnership dissolution. The mechanisms tested are changes in partnership quality and higher stress in balancing family responsibilities with education or career after the birth of a child from an unintended pregnancy.

In Ireland, the legal right to divorce came into effect late, in 1997, and the legal barriers are still relatively high. The minimum period of separation before filing for divorce is four years, and couples have to file in the Circuit Court, an expensive higher court. Divorce rates are still low. However, in the years before divorce was legalised, a system of de facto legal separation had already evolved in Ireland that made separation much more easily accessible, often cheaper, and much more common than actual divorce (Fahey, 2012). Consequently, this paper addresses separation only.

In the next section, we discuss theoretical mechanisms and present previous findings on separation with a focus on pregnancy intentions. There follows a short description of our dataset, the infant cohort of the panel study *Growing Up in Ireland* (GUI), and of the analytical strategy and operationalisation used in this paper. Here we note a limitation of the study, namely we only have detailed information on one specific child born within a family and less information on previous and future siblings. After presenting some descriptive statistics, we discuss the results of the discrete event history analysis. In the conclusion, we summarise the main findings and discuss the importance of including questions on pregnancy intention in surveys to test theories of the relationship between fertility and partnership processes.

II PREGNANCY INTENTION AND PARTNERSHIP STABILITY: MECHANISMS AND PREVIOUS FINDINGS

According to the economic theory of the family, children are a marriage-specific investment or a form of capital that takes on less value after separation. After childbirth, one parent – usually the mother – reduces her labour market participation to invest in raising the child, with long-term consequences for her future wages and income. A divorce thus implies financial costs for mothers in particular (Becker *et al.*, 1977). Couples who are not sure if the marriage will last are less likely to invest in marital-specific capital and therefore are less likely to have children (Becker *et al.*, 1977; for empirical evidence, see Lillard and Waite, 1993; Myers, 1997; Wiik *et al.*, 2009). This approach is limited in its ability to address our research question, as it mainly explains differences between couples with and without children and it assumes that children are planned. In reality, of course, not every pregnancy is planned.

According to commitment theory, which is prominent in research in the area of family psychology, unplanned pregnancies increase the constraints on partnerships but do not necessarily increase the partners' dedication to their relationship. Deliberately planned pregnancies, in contrast, indicate a high level of dedication to the relationship, a willingness to make sacrifices for it, an emphasis on “we-ness”, and a belief in a shared future (Stanley *et al.*, 2006). More generally, this theory distinguishes between constraint- and dedication-driven reasons or events. It explains how some couples “slide into” having a family after initial dating. They move in together without a high level of dedication, stick to the partnership due to the higher cost of separation resulting from the unplanned pregnancy, and may or may not marry. Relationship quality remains relatively low over time, according to this theory, or may even become worse. The risk of separation should be higher after unplanned births than after planned ones, whereas couples that made a mutual decision to marry and have children should be better able to cope with the stresses and strains of parenthood due to their dedication to the relationship and a strong sense of “we-ness”.

H1: According to commitment theory, the risk of separation should be higher after unplanned than after planned births.

It would be a mistake to overlook the role of (social) selectivity in unintended pregnancy when examining how the intendedness of pregnancy affects partnership dissolution. Living separately or in a non-marital union, having low socio-economic status or lower education, being unemployed, the number of previous children, and being of young age are strongly correlated with unplanned pregnancies (for Ireland

on marital status, social class, education, and income: McCrory and McNally,¹ 2013; for Germany: Helfferich *et al.*, 2014; Kuhnt and Trappe, 2016; for the US: Mosher *et al.*, 2012; Musick *et al.*, 2009) and with separation (Cooke and Gash, 2010; Kaplan and Stier, 2017; Härkönen and Dronkers, 2006; Hewitt, 2009). The consequences of living arrangements follow the same rationale as that of dedication in commitment theory. Couples who make a decision to marry before forming a joint household have better prospects of staying together than those that “only” cohabit. However, we expect that Hypothesis 1 applies even after controlling for these factors, including relationship status.

Another theoretical perspective on children and partnership that does not contradict commitment theory is that the transition to parenthood is a critical life-course event that can trigger major changes in several domains and has the potential to increase stress and instability. The literature discusses the following mechanisms (Dew and Wilcox, 2011; Kluwer, 2010; Lawrence *et al.*, 2009): after the birth of a child, partners have less time for each other, show less affection, and have reduced sexuality, which lowers the quality of the relationship, which is known to increase the risk of separation (Amato and Hohmann-Marriott, 2007). In addition, the two parents’ ideas and expectations about maternal and paternal roles in parenting and the division of housework might diverge from their actual behavior. Furthermore, the time constraints resulting from parenthood tend to reduce activities outside the household. On average, the observed changes in partnership quality and satisfaction, potential predictors for separation, are small to medium (Doss *et al.*, 2009; Keizer and Schenk, 2012).² Heterogeneity between couples might be high however, for instance in terms of pregnancy intentions.

H2: Partnership dissolution is higher after a birth from unintended pregnancy, as these couples face more partnership conflicts.

The family stress model claims that financial restrictions are a major cause of conflicts and strains that reduce marriage quality and increase the risk of separation (Conger *et al.*, 1999). Therefore, a reduction in maternal employment after birth could lead to limited financial resources and an increase in separation. In Ireland – as in other English-speaking countries but rarely in the rest of Europe – higher education increases the probability of being married or in a partnership in middle age (Kalmijn, 2013, p. 1509). As higher education goes hand in hand with higher

¹ Similar findings have been reported on the correlations between age and relationship status with crisis pregnancy in Ireland, which is defined as “a personal crisis or an emotional trauma” due to and during pregnancy (McBride *et al.*, 2012: 23, 92, 98).

² Doss *et al.* (2009) did not find that planning status of the first child matters for marital quality. Although their data source is rich given its longitudinal nature as well as the many scales used, including the Commitment Inventory (Stanley and Markman, 1992), the analyses are based on a specific sample: 132 couples in a US metropolitan area with a church wedding.

earning potential, one could also hypothesise that greater financial resources might reduce stress within the family and thereby also reduce the dissolution of partnerships. In line with the family stress model, marital dissolution and lone parenthood are more widespread in lower social classes in Ireland (Lunn *et al.*, 2009).

In addition, research points to a higher likelihood of family conflicts and limited financial resources following childbirth in Ireland. Almost 50 per cent of mothers living in a partnership have returned to work nine months after birth (McGinnity *et al.*, 2013, p. 33). The overall rate of return may appear high, as institution-based care for children under three years of age is limited in availability and expensive (McGinnity *et al.*, 2013, p. 24).³

In line with the family stress model, Guzzo and Hayford (2012) argue that the birth of a child has the potential to destabilise partnerships, especially if the pregnancy was unplanned. In such cases, parents are less prepared for the new situation and have greater difficulties coping with it. They might also be in a situation that is less compatible with child-rearing, for instance if they are still completing their education or are not yet well established in their career. They might endure higher stress balancing work or education and family demands, and might suffer more from economic hardships.

H3: Partnership dissolution is higher after a birth from unintended pregnancy, as (a) mothers face greater difficulty attempting to balance family and career; and (b) such households face higher financial stress.

Guzzo and Hayford (2012) use US data to analyse the risk of separation, grouping pregnancies that were less than two years too early into “planned” pregnancies, and all other pregnancies into “unplanned” pregnancies. Their results show that unplanned pregnancies increase the risk of separation. This elevated risk is observed even after controlling for socio-demographic and economic variables. They use graduation from high school and the educational attainment of the respondent’s mother (the children’s grandmother) as control variables for socio-economic conditions. The degree of unintendedness of a pregnancy appears to be relevant as well. Adaptation to the new situation of having an (additional) child is likely to be more difficult if the parents did not intend to have children until a much later point in time. This may lead to increased internal conflicts as well as work- and poverty-related issues. The resulting difficulties are likely to be even greater if they had no intention of becoming parents.

³ Because of this, care by relatives (paid or unpaid) and non-relatives (mostly paid) in private homes is widespread (McGinnity *et al.*, 2013, p. 58).

*H4: Adaptation to the new situation of having an (additional) child should be more difficult if couples wanted to have their child much later or not at all. The risk of partnership dissolution therefore increases in the following order of pregnancy intentions:
planned \leq somewhat too early $<$ much too early \leq unwanted.*

With respect to the Irish context, one might question the relevance of pregnancy intentions at all. As mentioned in the introduction, divorce patterns in Ireland differ from those in most other economically developed countries. The legal right to divorce came into effect late, the legal barriers are still high, and divorce rates low. However, in the years before divorce was legalised, a system of de facto and legal separation had already evolved in Ireland (Fahey, 2012). At the end of the twentieth century, Ireland experienced a rapid increase in out-of-wedlock births. Before the 1980s, less than one in every twenty births was out of wedlock. At the end of the 1990s, almost every third birth was extra-marital, which was slightly above the average of the European Union at the time (Fahey, 2001, p. 163). In the following years, this overall rate remained quite stable. The rate has been especially high for first births, at about 44 per cent (Lunn *et al.*, 2009, p. 64). It seems that the absence of divorce and, later on, the high costs of divorce, established a clear route to lone motherhood. In contrast to other countries, where separation and divorce are important reasons, in Ireland lone mothers are more often single right from the birth of their child (Bradshaw and Finch 2002, p. 26).

The high costs of separation, especially in the case of marriage, might lead to a situation where people only start living together if they have a strong sense that the relationship will last (see also Lunn and Fahey, 2011, p. 74). The consequences of unplanned births observed for the US (Guzzo and Hayford, 2012) might not be relevant then.

H5: In contrast to countries with a high prevalence of separation and divorce, such as the US, the planning status of pregnancy leading to a live birth has no influence on separation in Ireland.

III DATA AND METHODS

3.1 Data from an Irish Birth Cohort Study

To test the hypotheses, we used data from the infant cohort of the panel study *Growing Up in Ireland* (GUI). The sample consists of children born between December 2007 and June 2008. Mothers and fathers were interviewed for the first time nine months after the birth of a child in 2008 or 2009. In more than 11,000 cases, at least one parent took part (Thornton *et al.*, 2013). There have been two major follow-ups, one when the child reached the age of three and one at the age of five (for details, see www.growingup.ie).

We restricted the sample to observations in which the child, the biological mother, and the biological father lived together for nine months after the child's birth, and in which the mother took part in at least two waves.⁴

3.2 Definition of Dependent Process and Statistical Method

In the GUI, parents are asked in every wave whether the biological father (mother) lives in the same household or if they are temporarily living somewhere else. We counted both as living together. If the partner is living somewhere else (permanently) but the parents lived together previously, they are asked to state the age of the child at the point of separation. Using information from three waves, we defined the dependent process as time until separation. The time periods are 9-12 months, 1-2 years, 2-3 years, 3-4 years, and four years after birth. The latter includes a few cases in which the child had just turned five, but data protection regulations prevented us from creating a separate category for five-year-olds as the number of separations was below 30. We split episodes into the above mentioned time periods. By the time at which separation occurred, the episode ends with an event. All couples still living together at the third wave were censored. Dropping out of the panel after the second wave led to censoring at the end of the period 2-3 years. In the case of inconsistent information from several waves, the first value reported was always used, as it is closer to the actual time of the event and memory is likely to be more accurate. For example, if a mother reports separation when the child was two years old in Wave 2, but reports in Wave 3 that the separation took place at age one, we used the information given in Wave 2. In addition, we treated widowhood as right-censoring.

As interval lengths differ, we estimated an event history model with discrete time intervals (Allison, 2014). Separate baselines were estimated for every single interval.

3.3 Main Independent Variables

The main independent variables consist of answers to a question addressed to the biological mothers. They were asked: "Did you intend to become pregnant before <baby> was conceived? Yes, at that time [1]; Yes, but much later [2]; Yes, but somewhat later [3]; Yes, but earlier [4]; No intention of ever becoming pregnant [5]; Other (specify) [6]; Unsure/Didn't mind [7]" (Thornton *et al.*, 2013: Appendix (A) 48, Question (Q) S29)). The answers "other (specify)" and "unsure/didn't mind" are combined into "miscellaneous." Due to the low case numbers, the category "yes, earlier" was grouped together with "yes, at that time."

This question is retrospective, asked nine months after birth. There have been general concerns with recall error, especially with rationalisation, but the evidence

⁴ We excluded recent immigrants who had moved to Ireland after becoming pregnant or who had moved to Ireland in the last five years but gave birth to their child abroad.

is relatively weak (Williams *et al.*, 1999; Joyce *et al.*, 2002). The answers to this question correlate strongly with behavior prior to and during pregnancy in GUI. For example, mothers reporting “Yes, at that time” or “Yes, but earlier” more frequently used folate before becoming pregnant than all other mothers. In addition, there is a reverse correlation between the percentage of smokers during pregnancy and reported pregnancy intentions, and between the percentage of women who found out they were pregnant after the eighth week and the strength of pregnancy intentions (detailed figures available on request; for similar results with GUI data, see McCrory and McNally, 2013).

The main indicators of changes in partnership quality (H3) are answers to the question: “Do you feel that having <baby> has (1) Brought you and your spouse/partner closer together; (2) Made you less close than before; (3) Made no difference to your relationship?” (Thornton *et al.*, 2013: A47f., Q S24). We transformed these categories into binary variables. Additional indicators of partnership quality are how often partners (1) argue, and (2) shout or yell at each other, measured in the first and second wave, which we therefore used as time-varying (tv) covariates. A further indicator, available for the first wave, is the seven-item short form of the Dyadic Adjustment Scale (DAS), comprising dyadic consensus, cohesion, and global marital satisfaction (Thornton *et al.*, 2013, pp. 84 f.; Sharpley and Rogers, 1984).

For work and career conflicts in response to childbirth (H4), we constructed three binary variables. As an indicator of “severe” work conflicts, we used the mother’s answer that childcare difficulties since the birth of the last child had “prevented [her from] looking for a job” or “made [her] turn down or leave a job.” This might mean a conflict in pursuing a career as well as reduced income. “Severe training conflicts” captures the mother’s response that “difficulty in arranging childcare” since the birth of the last child had “stopped [her] from taking on some study or training” or “made [her] leave a study or training course”. A third indicator captures that a mother had “restricted the hours [she] could work or study” (Thornton *et al.*, 2013: A26, Q: E13). These indicators are only measured in the first wave. Three time-varying indicators provide the opportunity for a closer investigation of financial stress (H5): (1) mothers’ ratings of how well they are able to make ends meet; (2) whether family members have a Medical Card, a means-tested support for low-income families in Ireland; (3) and whether a family has private medical insurance, which indicates higher earnings and affluence.

As usual in cohort studies, there is extensive information on the focal child and less information on older and potentially younger siblings. Regarding the children born between December 2007 and June 2008, we know if they are the result of a planned or unplanned pregnancy, however we do not have any comparable information on previous and future children within the same family. To address this issue we provide additional analysis on first-borns only (see section on sensitivity analyses). In this case, there is no history of previous children within the family. In

addition, our main indicators on why unplanned pregnancies might increase partnership instability (“change in partnership quality since birth of the child” and “work and career conflicts due to child”) are measured with respect to the focal child. Nevertheless, the effect of these changes might be underestimated if parents have three births from unplanned pregnancies in a row and changes in partnership quality and work-family conflicts had intensified already after the first unplanned pregnancy and not necessarily after the birth of the focal child. To reduce the threat of biased estimates we take many indicators of the past such as birth order and labour market status before pregnancy into account (see the following section on Control Variables).⁵

3.4 Control Variables

As control variables, we account for socio-economic and demographic factors that might be associated with (un)planned pregnancies (P) and separation (S). As an indicator of relationship quality and commitment, we used variables constructed for (a) living together before pregnancy and being married before 2007 (the year pregnancy starts), (b) living together before pregnancy (but married in 2007, later or never), or (c) living without the father before pregnancy (for P: McCrory and McNally, 2013; Kuhnt and Trappe, 2016; Mosher *et al.*, 2012; for cohabitation and pre-marital birth on divorce: Härkönen and Dronkers, 2006; for differences in S by cohabitation and marriage: Kaplan and Stier, 2017, Osborne *et al.*, 2007). Further variables are the father’s earning potential, using his value on the International Socio-Economic Index (ISEI)⁶ (for P: McCrory and McNally, 2013; Helfferich *et al.*, 2014; for S: Kaplan and Stier, 2017), mother’s education (no or lower secondary; upper secondary; tertiary education without degree; lower tertiary degree; higher tertiary degree) (for P: Musick *et al.*, 2009; for S: Härkönen and Dronkers, 2006), mother’s labour force status before pregnancy (never worked before; inactive; part-time; full-time work) (for P: Kuhnt and Trappe, 2016; for S: Cooke and Gash, 2010), number of mother’s previous children living in the same household with four binary variables (0; 1; 2; or at least three children) (for P: Helfferich *et al.*, 2014; Mosher *et al.*, 2012; for S: Hewitt, 2009; Thornton, 1977), presence of children outside the household (which might also be previous children of the partner) (yes = 1, no = 0), age minus 32 (about the mean age) at conception in linear and squared form (for P: Mosher *et al.*, 2012), and living in an urban area (yes = 1, otherwise = 0). We assume that all these indicators are valid for the time

⁵ Another issue is further children within a family. There is no question on fertility intentions after giving birth to the cohort child. Couples who intend to stay together are much more likely to have a further child. Including these children as a time-varying covariate in the models might pose a threat of overspecification. This threat is especially strong here, as the observation window is only about four years.

⁶ All mothers are asked to provide information on their partner’s occupation. Therefore, even if the father did not take part in the survey or did not provide first-hand information on his occupation, reliable information is available. We refrain from using the mother’s ISEI for various reasons, including the higher share of non-valid information for mothers.

before becoming pregnant, although some characteristics are not retrospectively measured, such as the mother's education, the father's ISEI or the parents' place of residence. In some cases, changes may have occurred over the last 18 months.

3.5 Multiple Imputation

The sample is restricted to couples living together nine months after birth, in which at least one parent took part in a later interview and the mother filled out the so-called sensitive questionnaire in Wave 1, which includes all of the main relevant information.⁷ To avoid further sample reduction and biased estimates due to item non-response, ten fully imputed datasets were generated by chained equation regression with Stata 14.2. Imputation was done before episode splitting, i.e., there was still one row per person in the dataset. All missing information was imputed except the dependent process, as Stata cannot deal with imputed failure times. Three mothers reported separation in Wave 2 or Wave 3, respectively, but did not include the age of the child at the time of separation. Here, the modes were used (one and three years). For the imputation, all variables of the final model were used, as well as additional information on social origin (household's difficulties in making ends meet as mother was 16 years old), age at pregnancy, chronic health problems of mother before pregnancy, mother's treatment for depression before pregnancy, mother's use of folate before pregnancy, maternal smoking during pregnancy, marriage shortly before or after birth, father's ISEI in Wave 2, and mother's values on the Parental Stressor subscale from the Parental Stress Scale (Berry and Jones, 1995) in Wave 1 and Wave 2. Item non-response was between 0 and 2 per cent for all variables except for arguing with and shouting at partner in Wave 2 (3.5 per cent if couples who separated prior to Wave 2 are not counted), making ends meet in Wave 2 (2.5 per cent), Medical Card in Wave 2 (9.6 per cent), father's ISEI in both waves (4.9 and 6.0 per cent, last figure excludes couples with prior separation), marriage around birth (3.1 per cent), folate use before pregnancy (2.0 per cent), and Parental Stressor Scale at Wave 2 (3.6 per cent).⁸

Regression coefficients presented are the mean of those estimated separately for every fully imputed dataset. The calculation of the standard errors follows Rubin's rule, which does not simply use the mean but also takes the variation in the estimated regression coefficients into account (Rubin, 1987).

IV SAMPLE DESCRIPTION AND BIVARIATE STATISTICS

Table 1 reports the case numbers for the beginning of the observation period (nine months after childbirth), for the sub-episodes, and the dissolution risk. Table 1 also contains information on the binary variables, including the bivariate dissolution

⁷ 39 persons are lost, as they did not provide responses to the sensitive questionnaire.

⁸ Previous models without imputed values lead to very similar estimates. Multiple imputation does not have any material impact on the results here.

risk. The sample consists of 8,722 persons with partners. In the framework of the event history analysis, there are 40,910 “person-years” also known as sub-episodes; 405 sub-episodes end with a separation. The risk of undergoing a separation during a sub-episode, which is identical to a conditional probability, is 0.99 per cent. Consequently, the probability of undergoing a separation between nine months and five years after birth is 4.9 per cent.⁹ Research in other countries has shown that parental separation is especially low in cases where the youngest child is below the age of six years (Hewitt, 2009; Kalmijn and Poortman, 2006). However, observation periods and sample designs differ, thus no direct comparison on the overall risk of separation is possible. The incidence of children below the age of 14 being raised by a single parent is slightly above average in Ireland compared to several OECD countries in 2006/2007 (Lunn and Fahey 2011, p. 66). However, this is not proof of a comparatively higher separation risk in Ireland, as there is an indication that starting as a lone mother is more common, and re-partnering is less common, in Ireland (Bradshaw and Finch 2002, p. 26; Lunn and Fahey, 2011; Fahey 2012; see also Hannan 2018, p. 307, on different pathways to live with one or two parents at the age of nine in Ireland and arguments provided ahead of Hypothesis 5 at the end of Section II).

Of the mothers in our sample, 72 per cent stated that their pregnancy was planned, including cases in which the mothers wanted to get pregnant even earlier. Ten per cent of the mothers reported they intended to become pregnant somewhat later, 5 per cent much later, and 6 per cent did not intend to have children at all, which we label as unwanted pregnancies in line with the literature. Eight per cent belong to the “miscellaneous” group. In the following, we do not comment on this category, however, to avoid sample reduction, we keep these cases in the sample and control for this category.

It is clear that the risk of union dissolution varies by pregnancy intention. Those with a pregnancy that occurred when it was intended have the lowest risk (0.70 per cent). The risk is higher if the pregnancy was somewhat or much too early (1.80 and 1.77 per cent) and highest for those who had no intention of ever having children (2.16 per cent). The (unconditional) probabilities of separation between nine months and five years after birth are 3.5 per cent, 8.7 per cent, 8.5 per cent and 10.3 per cent, respectively (see also footnote 9).

As expected, negative changes in partnership quality following childbirth go hand in hand with a higher separation risk at a later point in time, whereas positive changes go hand in hand with lower risks. Mothers who have difficulties balancing childcare with career or training also have a higher risk of union dissolution in the

⁹ The (unconditional) probability of having a separation in a time span covering several periods is 1 minus the product of all previous conditional probabilities of surviving, i.e. of still being in partnership. As the average conditional probability of separation is 0.99 per cent and the time span is divided into five sub-episodes (periods), the result is $1-(1-0.0099)^5 \approx 0.049$ here.

bivariate case. Those with a Medical Card – our indicator of low income – have a higher risk of separation and those with private health insurance have a lower risk. Couples that were already married the year before the pregnancy occurred have the lowest dissolution risk (0.55 per cent), followed by all other couples that lived together before the pregnancy (and may or may not have married in 2007) (1.56 per cent), and those who did not live together when the pregnancy occurred but moved in together later (3.72 per cent).

In line with previous research, the risk of dissolution is especially high if the mother has low educational attainment or is young (Lunn *et al.*, 2009). The risk is also high if other children live outside the household.

Table 1: Descriptive Statistics on Categorical Variables

	<i>At 9 months (obs.)</i>	<i>At 9 months %</i> (column)	<i>All sub- episodes %</i> (column)	<i>Sub- episodes with event* %</i> (column)	<i>Sub- episodes with event of all sub- episodes %</i> (row)
Total (all)	8,722	8,722	40,910	405	
Total (%)		100%	100%	100%	0.99%
Mother's pregnancy intentions					
At this time (incl. even earlier)	6,236	72%	72%	51%	0.70%
Somewhat later	846	10%	10%	17%	1.80%
Much later	455	5%	5%	9%	1.77%
No intention at all	521	6%	6%	13%	2.16%
Miscellaneous	664	8%	8%	10%	1.34%
Partnership quality since birth					
Better	6,458	74%	74%	60%	0.80%
Worse	466	5%	5%	12%	2.23%
No change	1,798	21%	20%	28%	1.37%
Due to childcare problems for recent child...					
Quit/Prevented from taking job					
No	7,875	90%	90%	84%	0.92%
Yes	847	10%	10%	16%	1.65%
Cancelled/Prevented from training					
No	8,052	92%	92%	88%	0.94%
Yes	670	8%	8%	12%	1.55%
Reduction in job or training hours					
No	6,939	80%	80%	73%	0.91%
Yes	1,783	20%	20%	27%	1.30%

Table 1: Descriptive Statistics on Categorical Variables (Contd.)

	<i>At 9 months %</i>	<i>At 9 months %</i>	<i>All sub- episodes %</i>	<i>Sub- episodes with event* %</i>	<i>Sub- episodes with event of all sub- episodes %</i>
	<i>(obs.)</i>	<i>(column)</i>	<i>(column)</i>	<i>(column)</i>	<i>% (row)</i>
Household: Medical Card (tv)					
No	6,886	79%	75%	47%	0.63%
Yes	1,836	21%	25%	53%	2.06%
Household: private health insurance (tv)					
No	3,078	35%	33%	64%	1.91%
Yes	5,644	65%	67%	36%	0.53%
Control variables					
Partner status before pregnancy					
Married already before 2007	5,728	66%	66%	37%	0.55%
Consensual union (incl. marriage in 2007)	2,558	29%	29%	45%	1.56%
Living without partner	436	5%	5%	18%	3.72%
Mother's previous children					
0	3,449	40%	39%	47%	1.18%
1	3,001	34%	35%	30%	0.85%
2	1,536	18%	18%	14%	0.77%
3 or more	736	8%	8%	10%	1.17%
Child(ren) outside household					
No	8,191	94%	94%	85%	0.90%
Yes	531	6%	6%	15%	2.50%
Mother's education					
No or lower secondary education	723	8%	8%	14%	1.78%
Upper secondary education	2,633	30%	30%	38%	1.28%
Tertiary, but no degree	1,816	21%	21%	22%	1.04%
Lower tertiary degree	2,222	25%	26%	17%	0.63%
Higher tertiary degree	1,328	15%	15%	9%	0.55%
Mother's work before pregnancy					
Full-time	5,098	58%	59%	55%	0.92%
Part-time	1,903	22%	22%	21%	0.95%
Not working (incl. never – grouped for descriptive statistics only)	1,721	20%	19%	24%	1.25%
Age at pregnancy (grouped for descriptive statistics only)					
under 25	725	8%	8%	27%	3.52%
25 to 30	2,051	24%	23%	25%	1.08%
30 to 35	3,419	39%	40%	25%	0.63%
35 and older	2,527	29%	29%	22%	0.73%

Table 1: Descriptive Statistics on Categorical Variables (Contd.)

	<i>At 9 months (obs.)</i>	<i>At 9 months % (column)</i>	<i>All sub- episodes % (column)</i>	<i>Sub- episodes with event* % (column)</i>	<i>Sub- episodes with event of all sub- episodes % (row)</i>
Living in urban area					
No	5,066	58%	58%	50%	0.85%
Yes	3,656	42%	42%	50%	1.19%
Sub-episode (time after birth)					
9 months to 1 year	8,722		21%	8%	0.38%
1-2 years	8,689		21%	30%	1.38%
2-3 years	8,569		21%	29%	1.37%
3-4 years	7,490		18%	12%	0.67%
4-5 years (incl. 5 years)	7,440		18%	21%	1.14%

Sources: GUI, infant cohort, Waves 1-3, own calculations.

Notes: No responsibility for data preparation and estimation by DCYA, CSO or DSP; for details, see funding.

tv: time-varying covariate.

* An individual can have the event “separation” only once.

Table 2 presents the average values of those variables that are treated as metric for all sub-episodes without an event (no dissolution) and for those with an event. Before a dissolution, mothers report more arguing with their partner on average (0.47 vs. 0.59) and more shouting and yelling (0.26 vs. 0.38). They also have less dyadic adjustment (0.31 vs. 0.40) and more problems making ends meet (0.47 vs. 0.59). Finally, sub-episodes end with dissolution more often among fathers with a lower socio-economic position than among those with a higher socio-economic position (average ISEI: 47 vs. 40).

Table 2: Information on Metric Variables

	<i>Value range (label)</i>		<i>Sub-episodes</i>			
	<i>min</i>	<i>max</i>	<i>without event</i>		<i>with event</i>	
			<i>mean</i>	<i>std</i>	<i>mean</i>	<i>std</i>
Mother reports						
Arguing with partner (tv)	0 (never)	1 (most days)	0.47	0.23	0.59	0.26
Shouting at partner (tv)	0 (never)	1 (almost always/ always)	0.26	0.23	0.38	0.25
Dyadic adjustment	0 (perfect)	1 (poor)	0.31	0.14	0.40	0.16
Making ends meet (tv)	0 (very easy)	1 (with great difficulty)	0.47	0.22	0.59	0.22
Age at pregnancy (centered at age 32)	-17 (years)	17 (years)	-0.27	4.81	-3.02	6.18
Father's ISEI	16	88	47	18	40	15

Sources: GUI, infant cohort, Waves 1-3, own calculations.

Notes: No responsibility for data preparation and estimation by DCYA, CSO or DSP; for details, see funding. tv: time-varying covariate.

V FINDINGS FROM THE MULTIVARIATE MODELS ON SEPARATION

The first transition rate model contains only the binary variables on pregnancy intention and the flexible baseline rate (see Model 1, Table 3). Relative risk ratios and significance levels are presented, here. In line with Hypothesis 1, but in contrast to Hypothesis 5, compared to couples with correctly timed pregnancies, all other couples have a statistically significantly greater risk of partnership dissolution. In contrast to Hypothesis 4, the effect for the “much later” group is not larger than the effect for mothers stating “somewhat later”.

In order to control for whether these differences are due to factors influencing both processes – (un)intended pregnancy and separation – we control for partnership status before pregnancy, number of previous children, child(ren) outside the household, father's ISEI, mother's education, mother's labour force status before pregnancy, age at pregnancy (in linear and quadratic form), and rural-urban area, which are all assumed to be valid for the time before pregnancy.

After taking the control variables into account, all relative risks for mistimed and unwanted pregnancies decrease sharply (Model 2). In the case of mothers who reported having intended to become pregnant much later, the effect is no longer significant. For those with the intention to become pregnant somewhat later or with no intention of ever becoming pregnant, the relative risks are very similar, which is in clear contradiction to Hypothesis 4.

Regarding the control variables, we only make reference to partnership status before pregnancy. Women who did not live with the father prior to pregnancy and later formed a joint household have a high risk of separation; those who have been married and living together longer have a much lower risk than those cohabiting in 2007. This finding is in line with commitment theory and other studies showing that consensual unions are based on a lower level of commitment and are less stable.

Table 3: Relative Risks of Partnership Dissolution by Pregnancy Intention – Results of Discrete-Time Hazard Rate Models

<i>Model</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Pregnancy intention (ref. at this time (incl. even earlier))				
Somewhat later	2.618*** (0.364)	1.670*** (0.248)	1.634*** (0.244)	1.545** (0.232)
Much later	2.578*** (0.476)	1.356 (0.270)	1.317 (0.262)	1.126 (0.227)
No intention to become pregnant	3.147*** (0.509)	1.580** (0.280)	1.434 (0.265)	1.143 (0.217)
Miscellaneous	1.941*** (0.336)	1.262 (0.226)	1.165 (0.211)	0.977 (0.180)
Partnership quality since childbirth (ref. no change)				
Better			0.587*** (0.074)	0.717* (0.093)
Worse			1.570* (0.308)	1.042 (0.214)
Arguing with partner (tv)				2.996*** (0.745)
Shouting at partner (tv)				1.885* (0.471)
Dyadic adjustment				10.528*** (4.064)
Due to childcare problems for recent child...				
Quit/prevented from taking job			1.276 (0.198)	1.054 (0.167)
Cancelled/prevented from training			1.055 (0.187)	0.963 (0.173)
Reduction in job or training hours			1.168 (0.150)	1.142 (0.146)
Difficulties in making ends meet (tv)				2.350** (0.631)
Covered by Medical Card (tv)				1.717*** (0.233)

Table 3: Relative Risks of Partnership Dissolution by Pregnancy Intention – Results of Discrete-Time Hazard Rate Models (Contd.)

<i>Model</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Having private health insurance (tv)				0.647** (0.092)
Control variables				
Partner status (ref. consensual union)				
Married before 2007		0.548*** (0.073)	0.551*** (0.073)	0.647** (0.086)
Living without partner before pregnancy started		1.628** (0.263)	1.662** (0.275)	1.707** (0.286)
Previous children (ref. 0)				
1		1.067 (0.148)	1.021 (0.145)	0.903 (0.128)
2		1.001 (0.172)	0.995 (0.172)	1.009 (0.174)
3 and more		1.397 (0.307)	1.336 (0.297)	1.271 (0.283)
Child(ren) outside household (ref. no)		2.238*** (0.337)	2.126*** (0.330)	1.825*** (0.287)
Mother's education (ref. no or lower secondary education)				
Upper secondary education		0.924 (0.154)	0.891 (0.149)	1.068 (0.179)
Tertiary, but no degree		1.043 (0.200)	1.024 (0.197)	1.313 (0.253)
Lower tertiary degree		0.734 (0.151)	0.716 (0.147)	1.002 (0.209)
Higher tertiary degree		0.777 (0.193)	0.751 (0.185)	1.137 (0.282)
Mother's work before pregnancy (ref. full-time)				
Part-time		1.004 (0.146)	0.980 (0.143)	0.829 (0.121)
Not working		1.091 (0.173)	1.074 (0.173)	0.869 (0.139)
Never worked before		0.763 (0.224)	0.788 (0.232)	0.616 (0.184)
ISEI of child's father		0.990** (0.004)	0.990** (0.004)	0.998 (0.004)
Living in urban area		1.420*** (0.151)	1.355** (0.145)	1.327** (0.143)
Age at pregnancy (linear)		0.970* (0.012)	0.970* (0.013)	0.985 (0.013)
Age at pregnancy (squared)		1.006*** (0.001)	1.006*** (0.001)	1.006*** (0.001)

Table 3: Relative Risks of Partnership Dissolution by Pregnancy Intention – Results of Discrete-Time Hazard Rate Models (Contd.)

<i>Model</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Sub-episode (time after birth)				
9 months to 1 year	0.003*** (0.000)	0.004*** (0.001)	0.006*** (0.002)	0.000*** (0.000)
1-2 years	0.010*** (0.001)	0.015*** (0.004)	0.022*** (0.006)	0.002*** (0.001)
2-3 years	0.010*** (0.001)	0.015*** (0.004)	0.022*** (0.006)	0.002*** (0.001)
3-4 years	0.005*** (0.001)	0.008*** (0.002)	0.011*** (0.003)	0.001*** (0.000)
4-5 years (incl. 5 years)	0.008*** (0.001)	0.013*** (0.004)	0.019*** (0.006)	0.001*** (0.001)
Observations (person-years)	40,910	40,910	40,910	40,910
Persons	8,722	8,722	8,722	8,722
Events	405	405	405	405
Log-likelihood: minimum	-2190.9	-2069.1	-2045.0	-1950.3
maximum	-2187.3	-2065.6	-2040.2	-1942.9
mean	-2189.2	-2067.4	-2042.0	-1946.8

Sources: GUI, infant cohort, Waves 1-3, own calculations.

Notes: No responsibility for data preparation and estimation by DCYA, CSO or DSP; for details, see funding.

Standard errors in parentheses; standard errors corrected due to repeated observations per couple.

Significance level: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Abbr.: ref.: reference category; tv: time-varying covariate.

Differences in dissolution risk by pregnancy intentions are partly due to other factors. However, there are at least elevated risks for somewhat too early and unwanted pregnancies. Model 3 therefore contains indicators on changes in partnership quality due to the child (see H2) and conflicts balancing family and career (H3). Mothers who state that the child has brought the couple closer have a lower risk than those with no change. Those who report a change for the worse have an increased risk, although the effect is only significant at the 5 per cent level. Regarding the indicators on career conflicts, all coefficients point in the expected direction, but they are not statistically significant.

The final model contains detailed information on current relationship quality and financial situation. Although we already control for a great deal of information, we cannot be entirely sure that the additional indicators in the final model are really a consequence of the pregnancy or the birth of the child. Therefore, the results of Model 4 should be interpreted with some caution as potential mechanisms driving the higher risk of separation after mistimed or unwanted pregnancies. Model 4 at

least makes it clear that low partnership quality (frequent arguments and low dyadic adjustment) and financial problems (“making ends meet” and low income as indicated by possession of Medical Card) increase the risk of dissolution, whereas financial security, measured by private health insurance, yields a higher level of partnership stability. Low partnership quality and financial hardship are strong drivers of separation in Ireland. Even in the final model, with some very strong predictors, couples with pregnancies that are somewhat too early still have a statistically significantly higher risk of separation.

5.1 Sensitivity Analyses on First Births and Partnership Formation After Pregnancy Start

The consequences of unintended pregnancy on separation might depend on parity. On the one hand, an unplanned second, third, or fourth child might not imply as many new challenges or major changes in the partnership that a first child might bring. On the other hand, labour market re-entry is much faster for mothers after the birth of a first child than for those with several children, especially three or more (McGinnity, 2013, p. 35). Combining work and family might also be easier with only one child. The descriptive statistics in Table 1 show a U-shaped pattern of separation by parity.¹⁰ Therefore, some consequences might be even stronger at higher parity. Due to case numbers, we estimated models for first births only (assuming that children outside the household belong to the male partner). For the same reason, we only differentiated among perfectly timed pregnancies (reference category), somewhat mistimed pregnancies, and pregnancies that occurred in the context of all other intentions. The estimates for the four models on first birth, which have exactly the same structure as those in Table 3, are shown in Appendix Table A.1. The estimates are very similar to the results in Table 3.

Several studies have investigated how the timing of conception or childbirth in relation to marriage affects divorce and separation. Some of these have examined the hypothesis that in contexts where out-of-wedlock births are stigmatised, a marriage soon after a pregnancy indicates that the pregnancy was unplanned and therefore face higher risks of separation (evidence on higher failure risk in such cases for Australia: Hewitt, 2009, for Germany, Italy, and Sweden: Blossfeld *et al.*, 1995; no effect for the Netherlands: Kalmijn and Poortman, 2006). In times of high rates of non-marital fertility in Ireland, where almost every third birth was extra-marital by the end of the 1990s (Fahey, 2001, p. 163), a focus on marriage would be too restrictive. To test whether partnership formation following mistimed or unwanted pregnancies leads to an increased separation risk, we estimated two further models that build on and extend Model 3 (see Table 3). Here, we used the

¹⁰ This fits with older research findings for the US (Thornton, 1977). Thornton (1977, p. 539) hypothesised “that a large number of children increases the stresses and strains of marriage”. In contrast to Ireland, many European countries have low or even “lowest-low” fertility. Consequently, such a U-shaped pattern of separation or divorce is hardly observable in data from these countries.

same categorisation of intentions as in Appendix Table A.1. We took the interaction terms between the two dummies on unintended pregnancies and on partnership status into account (see Appendix Table A.2, Model 2). None of the interaction effects are significant, and we conducted a log likelihood ratio test for every fully imputed dataset. None of these test statistics are close to statistical significance (the chi-squared test between Model 1 and 2 in Appendix Table A.2 leads to values from 0.3 to 1.4; a critical threshold for a chi-squared test with four degrees of freedom and a significance level of 5 per cent is about 9.5). Therefore, the reduced model is preferable. Women living without a partner before becoming pregnant have a higher risk of separation. But there is no specific risk for them if the pregnancy was somewhat too early or imperfect for other reasons. The same holds true for differences between married and cohabiting couples. Couples already married before conception have a lower risk of separation than those cohabiting. But in a case of unplanned pregnancy, married couples do not show additionally higher stability compared to cohabiting couples.

The planning status of the first child in the life course (Appendix Table A.1) and of the first child in the current partnership (Appendix Table A.2) seem to have similar relationships to separation as in the overall population of our study (Table 3).

VI DISCUSSION AND CONCLUSIONS

The empirical findings clearly demonstrate that, after a birth, couples with a mistimed pregnancy separate more often, especially those with an unwanted pregnancy in Ireland (see end of Section IV as well as Model 1, Table 3). These raw gaps are partly due to socio-demographic and economic factors which, rather than being a consequence of the pregnancy, existed before it. Even after accounting for the situation before the pregnancy, some variations in the dissolution risk by pregnancy intention still exist. Mothers reporting that the birth was a result of a somewhat too early or an unwanted pregnancy still face higher and statistically significant risks of separation (see Model 2, Table 3).

Although this control variable approach bears the risk of under-specification, the findings clearly refute the simplistic notion that children act as “stabilisers” of marriages or co-residential relationships. They also contradict assumptions that pregnancy intentions are irrelevant for partnership stability in Ireland, as separation and divorce are less common and only those with good relationship prospects choose to enter into partnerships. Whether or not the child was planned plays a role in the risk of separation. In line with commitment theory, individuals with a planned pregnancy have greater partnership stability. There is a higher risk, particularly after birth, for couples with a somewhat too early pregnancy and with no intention of pregnancy at all, but not for couples who stated that they intended to have a

pregnancy much later. The difference between mothers reporting somewhat and much later intended pregnancy is in line with commitment theory. Those with somewhat too early pregnancies might be those couples who are described as “sliding into” the transition to parenthood. The group with the intention to become parents much later show no effects, as they are more distinct (in their characteristics) from the fully planned group as well as from the somewhat too early group. With regard to the economic theory of the family, the assumption that pregnancies are generally the result of a planned decision is not always correct, for example, it applies to fewer than three quarters of all parents living together nine months after birth (see Section IV), and to about 60 per cent of all births observed in Ireland in the year 2007 (McCrory and McNally, 2013, p. 211).

Work on childbirth as a critical life-course event has argued that negative changes in relationship quality should increase relationship instability. The empirical evidence shows that couples who report having become closer, and thus having increased the quality of their relationships, are those with the highest relationship stability. The group that experiences declines in partner closeness, while small, demonstrates increased risk of separation. These low case numbers are also an indicator that, on the whole, most of the couples in the sample did not experience a decline in partnership quality after the birth of a child (see also Doss *et al.*, 2009).

There was no support for the hypothesis that problems faced by the mother in pursuing her career increased the risk of separation, as assumed, but not tested in the work of Guzzo and Hayford (2012) in the US. We expected this issue to be particularly important in Ireland due to the shortage of early childcare places and its high costs, but it did not turn out to have relevance. In line with the family stress model, there is strong support for the idea that separation in Ireland is strongly related to financial pressures (see also Lunn *et al.*, 2009). The findings presented here are limited due to the lack of comparable measures, especially for difficulties making ends meet before pregnancy. Although the results show strong effects of financial pressures on separation, we cannot fully rule out that the increased household size may have exacerbated these pressures. Other reasons for increased pressure – maternal job loss or reduced working hours – were not significant. More work on this issue is needed, as low-income families are the most vulnerable and are likely to become even more so after separation.

In conclusion, one and the same event may have different consequences depending on its intendedness. Our analysis demonstrates that grouping different kinds of unintended pregnancies together is not justifiable, at least not in the Irish case. Such an approach was taken previously by Guzzo and Hayford (2012), who grouped together pregnancies that were less than two years too early and perfectly timed pregnancies in the US context. In our study, the comparable group (“somewhat”) has an elevated risk of separation in all models, even in the final one which included multiple controls. US surveys often have clear categories for how many years too early a pregnancy occurred (Mosher *et al.*, 2012). Providing a clear

timescale might leave less room for interpretation compared to the categories “somewhat” or “much too early.”

The GUI data are rich in information and have high case numbers. However, a control group of couples that did not experience the birth of a child is missing by definition. As in all studies starting after childbirth, information on the situation before pregnancy is limited, especially concerning subjective answers about financial pressures or partnership quality, prospective intentions for partnership formation, as well as professional aspirations. More general household panel studies should therefore include pregnancy intentions to obtain more insights into selection effects by varying pregnancy intentions. In addition, GUI gave the question only to biological mothers. Fathers might have different parenthood intentions than mothers, with different impacts on partnership stability. Collecting information from all survey respondents on pregnancy intentions would therefore be useful, not only for studying processes of partnership formation and dissolution, but also for investigating labour force participation, educational investments, and poverty dynamics.

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APPENDIX

Table A.1: Relative Risks of Partnership Dissolution After First Birth by Pregnancy Intention – Results of Discrete-Time Hazard Rate Models

<i>Model</i>	<i>A1</i>	<i>A2</i>	<i>A3</i>	<i>A4</i>
Pregnancy intention (ref. at this time (incl. even earlier))				
Somewhat later	3.291*** (0.609)	1.876** (0.408)	1.845** (0.404)	1.734* (0.386)
Other intentions (much later, no intention miscellaneous)	2.893*** (0.507)	1.269 (0.265)	1.190 (0.254)	1.039 (0.228)
Partnership quality since childbirth (ref. no change)				
Better			0.568** (0.121)	0.646* (0.139)
Worse			1.573 (0.461)	1.004 (0.309)
Arguing with partner (tv)				3.633** (1.442)
Shouting at partner (tv)				1.440 (0.538)
Dyadic adjustment				8.724*** (5.040)
Due to childcare problems for recent child...				
Quit/prevented from taking job			1.351 (0.316)	1.127 (0.260)
Cancelled/prevented from training			1.068 (0.286)	0.945 (0.250)
Reduction in job or training hours			1.239 (0.230)	1.170 (0.218)
Difficulties in making ends meet (tv)				2.324* (0.893)
Covered by Medical Card (tv)				1.476* (0.279)
Having private health insurance (tv)				0.645* (0.140)
Control variables				
Partner status (ref. consensual union)				
Married before 2007		0.679 (0.147)	0.690 (0.149)	0.791 (0.173)
Living without partner before pregnancy started		1.624* (0.340)	1.645* (0.356)	1.804** (0.388)

Table A.1: Relative Risks of Partnership Dissolution After First Birth by Pregnancy Intention – Results of Discrete-Time Hazard Rate Models (Contd.)

<i>Model</i>	<i>A1</i>	<i>A2</i>	<i>A3</i>	<i>A4</i>
Child(ren) outside household (ref. no)		1.797*	1.717*	1.557
		(0.469)	(0.466)	(0.433)
Mother's education (ref. no or lower secondary education)				
Upper secondary education		0.970	0.937	1.103
		(0.282)	(0.269)	(0.320)
Tertiary, but no degree		1.004	0.994	1.247
		(0.324)	(0.318)	(0.397)
Lower tertiary degree		0.918	0.933	1.258
		(0.301)	(0.306)	(0.418)
Higher tertiary degree		0.764	0.761	1.102
		(0.299)	(0.294)	(0.429)
Mother's work before pregnancy (ref. full-time)				
Part-time		1.351	1.322	1.093
		(0.304)	(0.294)	(0.245)
Not working		1.254	1.273	1.025
		(0.383)	(0.396)	(0.314)
Never worked before		0.298*	0.318	0.307
		(0.179)	(0.196)	(0.193)
ISEI of child's father		0.987*	0.987*	0.994
		(0.006)	(0.006)	(0.006)
Living in urban area		1.377*	1.288	1.291
		(0.216)	(0.204)	(0.204)
Age at pregnancy (linear)		1.004	1.003	1.013
		(0.018)	(0.018)	(0.018)
Age at pregnancy (squared)		1.010***	1.010***	1.009***
		(0.002)	(0.002)	(0.002)
Sub-episode (time after birth)				
9 months to 1 year	0.003***	0.004***	0.005***	0.000***
	(0.001)	(0.002)	(0.002)	(0.000)
1-2 years	0.012***	0.016***	0.022***	0.002***
	(0.002)	(0.006)	(0.010)	(0.001)
2-3 years	0.011***	0.016***	0.022***	0.002***
	(0.002)	(0.006)	(0.010)	(0.001)
3-4 years	0.004***	0.006***	0.008***	0.001***
	(0.001)	(0.003)	(0.004)	(0.000)
4-5 years (incl. 5 years)	0.009***	0.013***	0.018***	0.002***
	(0.002)	(0.006)	(0.009)	(0.001)

Table A.1: Relative Risks of Partnership Dissolution After First Birth by Pregnancy Intention – Results of Discrete-Time Hazard Rate Models (Contd.)

<i>Model</i>	<i>A1</i>	<i>A2</i>	<i>A3</i>	<i>A4</i>
Observations (person-years)	16,064	16,064	16,064	16,064
Persons	3,449	3,449	3,449	3,449
Events	189	189	189	189
Log-likelihood: minimum	-975.8	-914.8	-900.9	-864.2
maximum	-973.4	-912.9	-897.1	-858.3
mean	-974.4	-913.9	-899.4	-861.4

Sources: GUI, infant cohort, Waves 1-3, own calculations.

Notes: No responsibility on data preparation and estimation by DCYA, CSO or DSP; for details, see funding.

Standard errors in parentheses; standard errors corrected due to repeated observations per couple.

Significance level: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Abbr.: ref.: reference category; tv: time-varying covariate.

Table A.2: Relative Risks of Partnership Dissolution by Pregnancy Intention and Partnership Formation - Results of Discrete-Time Hazard Rate Models

<i>Model</i>	<i>B1</i>	<i>B2</i>
Pregnancy intention (ref. at this time (incl. even earlier))		
Somewhat later	1.668*** (0.247)	1.808** (0.376)
Other intentions (much later, no intention, miscellaneous)	1.395** (0.176)	1.513* (0.268)
Partner status (ref. consensual union)		
Married before 2007	0.547*** (0.073)	0.589*** (0.094)
Living without partner before pregnancy started	1.625** (0.262)	1.681 (0.534)
Interaction terms		
Somewhat later * married before 2007		0.835 (0.299)
Somewhat later * living without partner before pregnancy		0.916 (0.400)
Other intentions * married before 2007		0.806 (0.229)
Other intentions * living without partner before pregnancy		0.949 (0.369)
Control variables		
Previous children (ref. 0)		
1	1.065 (0.147)	1.063 (0.148)
2	1.011 (0.173)	1.018 (0.175)
3 and more	1.403 (0.307)	1.417 (0.310)
Child(ren) outside household (ref. no)	2.253*** (0.338)	2.255*** (0.339)
Mother's education (ref. no or lower secondary education)		
Upper secondary education	0.925 (0.154)	0.929 (0.156)
Tertiary, but no degree	1.043 (0.200)	1.044 (0.202)
Lower tertiary degree	0.733 (0.150)	0.735 (0.151)
Higher tertiary degree	0.776 (0.193)	0.776 (0.193)
Mother's work before pregnancy (ref. full-time)		
Part-time	1.002 (0.146)	1.003 (0.147)

Table A.2: Relative Risks of Partnership Dissolution by Pregnancy Intention and Partnership Formation - Results of Discrete-Time Hazard Rate Models Contd.

<i>Model</i>	<i>B1</i>	<i>B2</i>
Not working	1.092 (0.173)	1.092 (0.174)
Never worked before	0.772 (0.226)	0.782 (0.231)
ISEI of child's father	0.990** (0.004)	0.990** (0.004)
Living in urban area	1.423*** (0.151)	1.422*** (0.151)
Age at pregnancy (linear)	0.970* (0.012)	0.970* (0.013)
Age at pregnancy (squared)	1.006*** (0.001)	1.006*** (0.001)
Sub-episode (time after birth)		
9 months to 1 year	0.004*** (0.001)	0.004*** (0.001)
1-2 years	0.015*** (0.004)	0.015*** (0.004)
2-3 years	0.015*** (0.004)	0.015*** (0.004)
3-4 years	0.008*** (0.002)	0.007*** (0.002)
4-5 years (incl. 5 years)	0.013*** (0.004)	0.013*** (0.004)
Observations (person-years)	40,910	40,910
Persons	8,722	8,722
Events	405	405
Log-likelihood: minimum	-2069.6	-2069.1
maximum	-2066.3	-2065.9
mean	-2068.0	-2067.5

Sources: GUI, infant cohort, Waves 1-3, own calculations.

Notes: No responsibility on data preparation and estimation by DCYA, CSO or DSP; for details, see funding.

Standard errors in parentheses; standard errors corrected due to repeated observations per couple.

Significance level: + p<0.10; * p<0.05; ** p<0.01; *** p<0.001.

Abbr.: ref.: reference category; tv: time-varying covariate.

