

Title: The Impact of The First Reproductive Experience Timing on Partnership Stability

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Introduction

Trying for a child for the first time, a **first reproductive experience**, is generally considered a significant milestone in life. However, analyzing this reproductive period has been a challenging task, as most surveys capture only realized fertility and do not allow us to examine the potentially longer interval between first attempts to conceive and conception, or a possible abandonment of initial attempts (Beaujouan et al., 2025). When studying **conception difficulties** and their impact on partnership stability and well-being, research usually focuses on diagnosed infertility. There is scarce evidence regarding the negative effects of both successful and unsuccessful results of medically assisted reproduction techniques (MAR) on partnership dynamics and stability (Pelikh et al., 2024; Allan et al., 2021), as well as some relationship-strengthening effects of successfully undergoing MAR compared with spontaneous pregnancies (Kiesswetter et al., 2023), accompanied by the different effects of gender roles in the couple and society (Cheves et al., 2018; Smith et al., 2009; Inhorn & Patrizio, 2015). The conditions, background, and outcome of the first reproductive event, however, seem to play a major role in an individual's future fertility path, as negative experiences such as pregnancy loss or infertility tend to suppress fertility desires in vulnerable groups (Beringer & Milewski, 2024), influence couple intimacy and satisfaction (Luk & Loke, 2018), and lead to depressive symptoms or anxiety, while also threatening the subjective quality of life (Tavoli et al., 2018; Klemetti et al., 2010).

Data

For the analysis, I am using data from the second wave of the second round of the Czech Generations and Gender Survey (January–September 2025), as well as data from the pilot survey conducted in the same wave (October–December 2024). Data cleaning and publication have not been completed yet, so my preliminary results are based on the raw, unweighted data. The final dataset is going to be published by the end of 2025. The use of this specific dataset is justified by the fact that a **first reproductive experience module** was implemented in it (Beaujouan et al., 2025). Among other things, the questionnaire module tracks the timeline from when a person, regardless of gender or age, begins to seek pregnancy until the attempt ends with either a successful conception or abandonment for various reasons. This provides a unique opportunity to analyze not only actual fertility but also respondents' initial attempts to conceive, regardless of the outcomes, whether they conceived or not, and whether the pregnancy resulted in a live birth or not. The sample consists of 1,728 men and women aged 24–73 who realized their first reproductive experience within a co-residential relationship. Only respondents with documented dates for when they started trying to conceive, the date of conception (or when they stopped trying), the start of co-residence, and, if applicable, the date of breakup are included in the sample.

Methods

In this study, I conduct a **survival analysis** focusing on the **relationship dynamics during and after the attempts to conceive**. The research question investigates whether couples who successfully conceive a child in a shorter period of time (in less than a year) face a lower risk of dissolution than couples who conceive after a more extended period of time or who do not conceive and abandon their first attempt (stop trying). For this analysis, the event of interest is the breakup of a co-residential couple who have tried to conceive a child. The observation window spans from the time a respondent begins trying to conceive a child within a relationship to the time of a possible breakup, with a maximum duration of 300 months (25 years), as no attempt

lasted longer than this. The relationships that experienced dissolution after 300 months are treated as censored observations.

Preliminary findings

Preliminary findings suggest that the majority (75%) of respondents **successfully conceived within a year**. However, 22% of the individuals conceived after a year or even two years of attempting, implying having **fertility issues** or **an infertility diagnosis** (WHO, 2024). Approximately 3% of respondent did not fulfill their intention to conceive. Around 21% of couples experienced dissolution within a time span of 25 years after attempting to conceive. Only about 20% of the first attempts occurred after the age of 30 (see Table 1).

Table 1: Frequency and percentage distribution of the sample. Czech men and women (aged 24–73) who have attempted to conceive a child within a co-residential couple, sampled between 2024 and 2025. N = 1,728. Source: CZ GGS-II (wave 2).

	N	%
Total	1,728	100
Attempt outcome		
Conceived in less than a year	1,302	75
Conceived between 1 and 2 years	188	11
Conceived after more than 2 years	195	11
Did not conceive	43	3
Relationship dissolution within 25 years of the attempt start		
Separated	358	21
Did not separate	1,370	79
Age at the first attempt to conceive		
17–24	540	31
25–30	848	49
31+	340	20

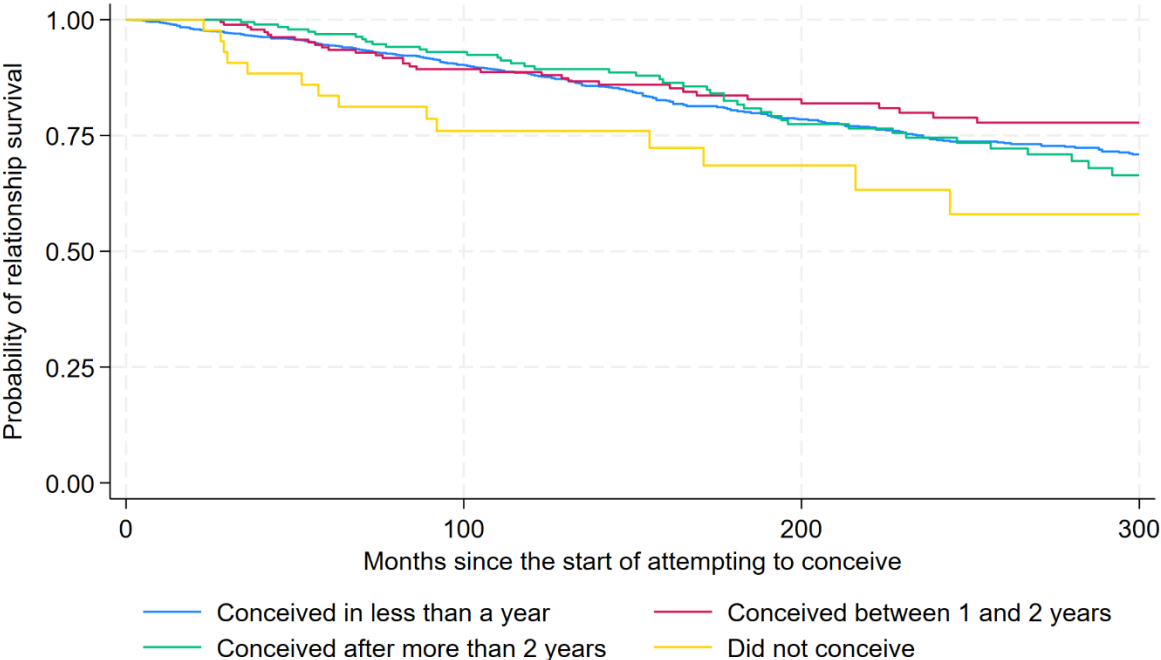
We can observe that the highest rate of couple breakups occurs among respondents whose first attempt to conceive did not result in pregnancy – about 33% of these couples separated. However, it remains unclear whether the breakup was a consequence of an unsuccessful attempt to have a child or if abandoning the attempt led to the couple’s separation, since the processes are likely related to each other. The proportion of separated couples with different timings of conception ranges from 18% to 22%, with the smallest rate of breakups among respondents whose attempts lasted between 1 and 2 years (see Table 2).

Table 2: Proportion of couples who separated within 25 years of the attempt start by the outcome of the first attempt to conceive (total number of observations within each category in parentheses). Czech men and women (aged 24–73) who have attempted to conceive a child within a co-residential couple, sampled between 2024 and 2025. N = 1,728. Source: CZ GGS-II (wave 2).

	Proportion of couples who separated within 25 years of the attempt start
Attempt outcome	
Conceived in less than a year	21% (1,302)
Conceived between 1 and 2 years	18% (188)
Conceived after more than 2 years	22% (195)
Did not conceive	33% (43)

For a better explanatory visualization of the timing of the couple’s possible dissolution, I used Kaplan-Meier survival estimates. While the couples who conceived, regardless of the timespan, separated more gradually, among the respondents whose attempts were abundant, there are some more **pronounced drops**, especially **during the first 100 months (approximately 8 years)**, which suggest that this period is more critical for partnership well-being and stability. The overall stability of couples whose efforts did not end in conception appears to be lower. For example, among couples who successfully conceived after 1 to 2 years, the Kaplan–Meier estimate of staying in the relationship after 25 years is almost 78%. In contrast, among couples who did not conceive, the probability is 20% lower. Surprisingly, the estimate of staying together is not the highest among respondents who conceived within a year (see Figure 1). This preliminary result suggests that although dealing with conception difficulties may be a stressor in a partnership, it also has the potential to strengthen the relationship and bring the couple closer together if the attempt is ultimately successful.

Figure 1: Kaplan-Meier survival estimates: Relationship survival after attempting to conceive by the attempt outcome. Czech men and women (aged 24–73) who have attempted to conceive a child within a co-residential couple, sampled between 2024 and 2025. N = 1,728. Source: CZ GGS-II (wave 2).



I also conducted a multivariable Cox proportional hazards model analysis to examine the effect of other predictors on couple dissolutions in the context of attempting to conceive. Unfortunately, since attempts were reported retrospectively, the number of predictors recorded from the time of the attempt is limited. The preliminary results imply that when controlled for the age at the attempt, duration of the relationship at the attempt, duration of the attempt itself (until the respondent conceived or stopped trying), cohort, and education, the **risk of couple dissolution** is almost **3.6times higher** when the respondents **did not conceive** compared to respondents who conceived within a year. Additionally, respondents who attempted for **more than 2 years faced a 77 % higher risk of breakup**, even though their attempt to conceive was successful at the end. Respondents who started trying at older ages faced a slightly lower risk of breakup. The association between the risk of breakup and relationship duration and attempt duration reveals a surprising pattern – while couples with a longer relationship history at the attempt are slightly more likely to breakup, couples who attempt for a more extended period of time before

conception, or giving up, likely represent more stable and higher-quality relationships with a lower risk of breakup (see Table 3).

Table 3: Cox proportional hazards model predicting the hazard of couple dissolution during the first attempt to conceive. Czech men and women (aged 24–73) who have attempted to conceive a child within a co-residential couple, sampled between 2024 and 2025. N = 1,728. Source: CZ GGS-II (wave 2).

	Hazard ratio	95% CI
Attempt outcome		
Conceived in less than a year	1.00	
Conceived between 1 and 2 years	0.94	0.64–1.37
Conceived after more than 2 years	1.77*	1.13–2.80
Did not conceive	3.57**	1.85–6.91
Age at the first attempt to conceive (years)		
	0.96**	0.93–0.99
Relationship duration at the first attempt to conceive (years)		
	1.07**	1.02–1.12
Attempt duration (years)		
	0.85**	0.75–0.95
Cohort (years)		
	1.02**	1.00–1.11
Education		
Lower secondary	1.0	
Complete secondary	0.91	0.67–1.23
Tertiary	0.59**	0.43–0.82

* $p < 0.05$, ** $p < 0.01$

Conclusion

The preliminary results of the study suggest that analyzing the first reproductive experiences can deepen our understanding of fertility pathways and partnership dynamics by extending the research beyond realized births or medically diagnosed infertility. Respondents whose first attempts to conceive were unsuccessful experienced a much higher risk of partnership dissolution, as well as respondents whose conception happened after more than 2 years. However, the results also indicate that the effect of the outcome of the first reproductive experience might be influenced by additional predictors, such as the age at the time of the attempt or the length of the relationship before the first attempt.