

# **How alternatives affect the development of non-cohabiting partnerships in young adulthood: A multidisciplinary perspective**

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## **Introduction**

In recent decades, tremendous societal changes have led to shifts in the occurrence, trajectories, and dynamics of intimate relationships and living arrangements in European countries (Feldhaus and Preetz 2021). Especially union formation processes became increasingly diverse, fragmented, and complex (Sassler and Lichter 2020). Decreasing marriage rates, increasing divorce rates, and higher shares of extramarital births result in “the retreat of marriage” and “de-institutionalization of marriage” (Cherlin 2004; Sassler and Lichter 2020). A key characteristic of these ongoing demographic trends is the growth in couples who cohabit without marriage or live in separate households (Hiekel, Liefbroer, and Poortman 2014; Liefbroer, Poortman, and Seltzer 2015).

Cross-sectional data indicate prevalence rates for non-cohabiting or living apart together couples from around 6% to around 10% in Australia (Reimondos, Evans, and Gray 2011), Canada (Milan and Peters 2003), the U.S. (Strohm et al. 2009), the U.K. (Coulter and Hu 2017), France (Regnier-Loilier, Beaujouan, and Villeneuve-Gokalp 2009), Germany (Asendorpf 2008), and Eastern Europe (Liefbroer et al. 2015).

From a longitudinal perspective, most people live at least temporarily in a living apart together relationship (Peter et al. 2015). Notwithstanding an ongoing debate about whether living apart together is a permanent alternative to cohabitation or marriage, living in a non-cohabiting relationship has become a standard sequence in nearly every contemporary life course (Pasteels, Lyssens-Danneboom, and Mortelmans 2017). Despite the widespread prevalence of non-cohabiting relationships, only little research so far has explored why some couples remain non-cohabiting while others move in together or break up (Bastin 2019; Dorbritz and Naderi 2012;

Krapf 2018; Schnor 2015; Wagner et al. 2019). The majority of non-cohabiting couples experience transitions into cohabitation or separation, resulting in a highly transitory character of non-cohabiting partnerships. However, our understanding of factors for the relationship trajectories of non-cohabiting couples is still emergent. Previous studies mainly focus on intra-dyadic characteristics of couples or individual partners like distance, employment arrangement, satisfaction, or intentions. No study so far has addressed the potential role of extra-dyadic, contextual factors.

In general, a large body of literature suggests that the contextual environment of both partners within a couple can affect the trajectories of intimate relationships. A key factor for both partners' willingness to commit are the contextual conditions for meeting alternative partners (Lyngstad 2011). Previous findings suggest that infidelity or extradyadic affairs are one of the main reasons why intimate relationships break up (Allen and Atkins 2012; Bravo, Connolly, and McIsaac 2017; Hawkins, Willoughby, and Doherty 2012). Moreover, studies report associations between the availability of potential alternative partners with the probability to marry or cohabit and relationship dissolution (Obersneider, Janssen, and Wagner 2019; South and Lloyd 1992; South, Trent, and Shen 2001; Trent and South 2011; Warner et al. 2011). Yet, existing studies mostly focus on marriage or nonmarital cohabitation. Findings for couples who do not live in the same household are rare.

The aim of our study is to investigate how the availability of alternative partners affects the development of non-cohabiting partnerships. In particular, we are interested in how imbalanced numbers of alternatives for both are associated with the probability of moving in together or breaking up. In other words, we analyze what happens if both partners have many or few alternatives to their current relationship. Here, we focus on the life stage of young adulthood. Forming a stable intimate relationship is a key marker along the transition to adulthood (Tillman, Brewster, and Holway 2019). Intimate relationships in young adulthood are frequently characterized by relational instabilities with moving between committed relationships, sporadic romantic encounters, and episodes of being single (Shulman and Connolly 2013). However, previous findings for the reasons of further commitment or separation come from research on adults' partnerships (Noller and Feeney 2013). The causes of why some intimate relationships in young adulthood end while others become closer are largely understudied within a competing-risk setting (Bravo et al. 2017).

## Theory

The role of alternative partners for relationship trajectories has been discussed from several theoretical angles and disciplines. Our approach applies a multidisciplinary theoretical perspective by including assumptions from demographic, sociological, and evolutionary theories. While all theoretical perspectives acknowledge the importance of alternatives for partnerships, they differ in their assumptions for alternatives of men or women, resulting in different consequences for relationship development.

Demographic-opportunity theory emphasizes that the availability of potential partners is a function of the local population sex distribution. Hence, an individual's chance to meet a partner depends on the (relative) number of men and women on a contextual level (Blau 1977; South et al. 2001; Trent and South 2011). A large number of potential partners may raise expectations and increase perceptions that greater benefits could exist outside of the current intimate relationship (Trent and South 2003). This could result in lower overall levels or willingness of commitment and satisfaction. Thus, the demographic-opportunity framework predicts that the chance of cohabitation should be highest when both partners have only a few alternatives. Contrary, the risk of separation should be highest when both partners have many potential alternatives.

Social exchange and evolutionary perspectives postulate complementary, gender-specific hypotheses. The key assumption is that an unbalanced number of alternatives influences the dyadic power balance between men and women (Guttentag and Secord 1983). The partner with more alternatives has more dyadic power, while the dependency of the partner with fewer alternatives increases. Therefore, the partner with more alternatives and power can accomplish his/her preferences. Different outcomes for relationship development are a result of different relationship preferences of men and women. Previous results show that women favor committed and stable unions more often while men prefer more sexually permissive uncommitted relationships (Pedersen 1991; Trivers 1972). In constellations where one partner has many and the other has fewer alternatives, the partner with fewer alternatives adapts his/her preferences to find and keep a partner who has plenty of alternatives. Given that women are predicted to favor committed relationships, chances of cohabitation should increase if women have many and men have few alternative partners because men have to adapt to women's desire for commitment. Contrary, the risk of separation increases if men have many and women have few potential alternative partners.

## Data and Methods

To test these predictions on the effect of alternatives for relationship development of non-cohabiting couples, we use waves 1-11 (2008/09-2018/19) from the German Family Panel *pairfam* (Brüderl et al. 2021; Huinink et al. 2011). This representative, interdisciplinary and longitudinal survey is conducted annually among randomly selected men and women in Germany. Beginning in 2008 with 12,402 participants from three birth cohorts (1971–93; 1981–83 and 1991–93), *pairfam* is well suited to identifying the development of non-cohabiting relationships over many years. Respondents in non-cohabiting relationships were identified by answering the survey questions “Do you have a steady relationship at the moment?” and “Do you live together with this partner in the same dwelling?”. We include all periods of being in a non-cohabiting relationship in our analysis. The data allows us to follow couples along their trajectories until the last interview or when they entered cohabitation or separated. A person may have multiple episodes of different non-cohabiting relationships with different partners during the observation period. New ID variables were obtained for each individual to recognize each new relationship separately in the statistical models. We combine the *pairfam* data with official population register data from the German Federal Statistical Office to measure the local partner market for both partners.

Our final sample includes 1941 non-cohabiting couples with 3553 relationship-years. Around half of all couples experienced a separation during the observation period. Another 30% cohabit, confirming the highly transitory nature of non-cohabiting partnerships. The respondents in our analyses were aged 18-27.

We calculate age-specific, age-shifted sex ratios to capture the availability of alternative partners. We calculate local sex ratios on the county level to consider individuals’ regional partner markets. Individuals tend to seek and find partners who are geographically close to themselves, a pattern often described as spatial homogamy (Bossard 1932; Haandrikman 2018; Haandrikman et al. 2008; Haandrikman, van Wissen, and Harmsen 2011; Haandrikman and Hutter 2012; Ouyang et al. 2009; Pullum and Peri 1999). Although the rise of internet dating has restructured the way individuals meet their partners, recent evidence reveals that individuals continue to prefer finding a partner in spatial proximity (Bruch and Newman 2019; Wei 2019). Besides preferences for geographically closeness, demographic studies consistently reveal that women are on average around 2–3 years younger than their husbands (Casterline, Williams, and McDonald 1986; Esteve, Cortina, and Cabré 2009; Kolk 2015; Laslett 1977; Mu and Xie 2014; Ní Bhrolcháin 2005; Qian 1998; Qian and Preston 1993; Qu 1998; Van Poppel et al. 2001). Adult

sex ratios with wide age ranges do not reflect these patterns since they are calculated based on the same age cohorts for men and women, such as ages 16-39 or 16-49. Instead, we calculate age-shifted sex ratios to incorporate the common pattern of men being two years older than their female partners. These sex ratios reflect the proportion of men in a particular age group, including those that are two years younger or older than the individual. For example, for a person aged 20, an age-shifted sex ratio with a 2-year age width reflects the sex ratio of the 18- to 22-year-old population. A recent analysis reveals that age-specific and particularly age-shifted sex ratios better approximate individual partner market experiences than adult sex ratios for large age brackets, such as 18-30 (Filser and Preetz 2021). Finally, we combine both partners' sex ratios within the couple via an interaction term to analyze the effect of different constellations of alternatives. We further control for couples' relationship duration, and employment and education arrangement. Table 1 shows the descriptives for our sample.

Table 1: Descriptives

Variables	
Sex Ratio male partner	51.47
Sex Ratio female partner	51.42
<i>Relationship duration</i>	
<1 year	42.44%
1-2 years	22.80%
2-3 years	15.54%
3-4 years	9.15%
4-5 years	5.15%
>5 years	4.93%
<i>Employment arrangement</i>	
Both employed	16.63%
Man employed, women not	26.48%
Woman employed, man not	12.95%
Both unemployed	43.93%
<i>Education arrangement</i>	
Both high education	39.18%
Man high education, woman not	13.00%
Woman high education, woman not	14.86%
Neither man nor woman high education	32.96%
Number of partnerships	1941
Number of partnership years	3353
Number of cohabitation	568
Number of separation	991

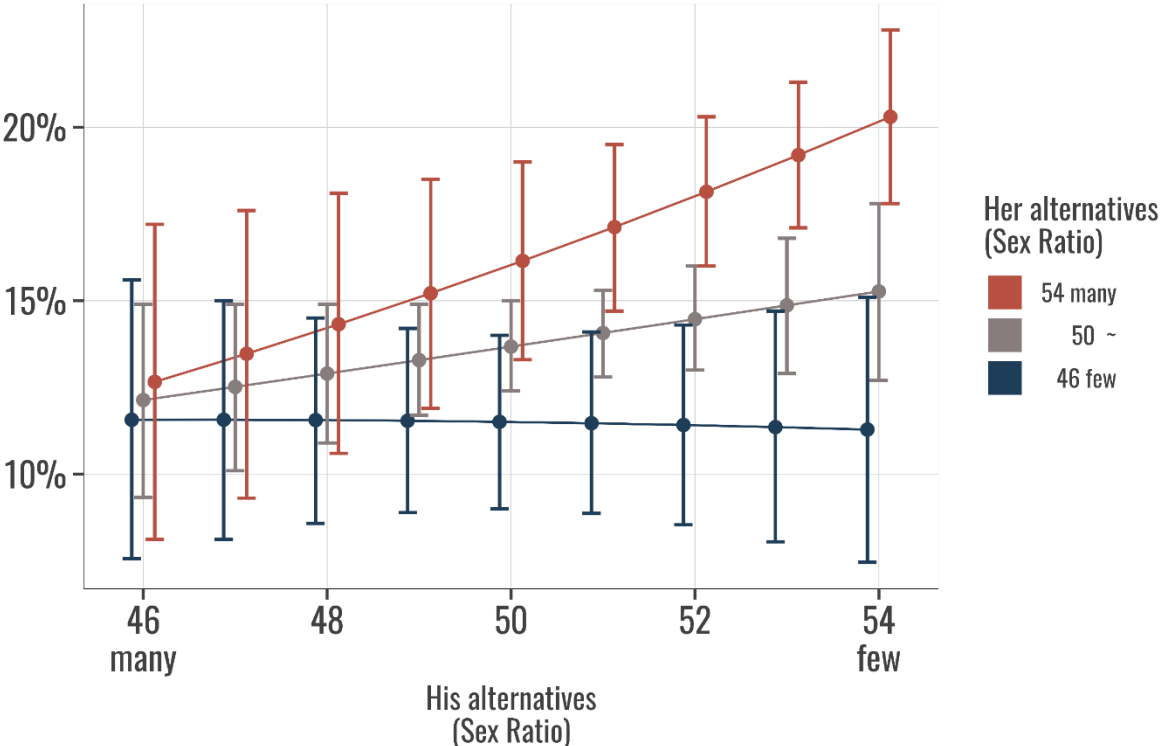
Our analysis applies a competing-risk framework where couples either remain living apart together, cohabit, or break up, and run multinomial time-discrete event history models. All variables are used in a time-lagged manner at time  $t$  to predict the occurrence of a continued non-cohabiting relationship, cohabitation, or separation at time  $t+1$ . This procedure avoids a reverse

causality because events can occur between panel waves, but information for all other variables is only available at the time of the interview. Following recent recommendations, we evaluate the results of our interaction models based on adjusted predictions rather than significance of the coefficient of the product term (Mize 2019).

### Results

Figure 1 displays the adjusted predicted probabilities for cohabitation. In sum, we find a significant interaction between men’s and women’s sex ratio. The sex ratio is displayed as the share of the male population. Hence, a sex ratio of 50% indicated a balanced number of men and women. Sex ratios higher than 50% reflect a surplus of men and values below 50% a surplus of women. The x-axis shows the alternatives for men. The graphs show women's alternatives with higher values mean many alternatives and a surplus of men. The y-axis shows the probability of a couple moving in together. Results reveal that cohabitation is most likely if women have many and men have few potential alternative partners. The probability of cohabiting increases up to 20% for this constellation and is significantly higher than other constellations.

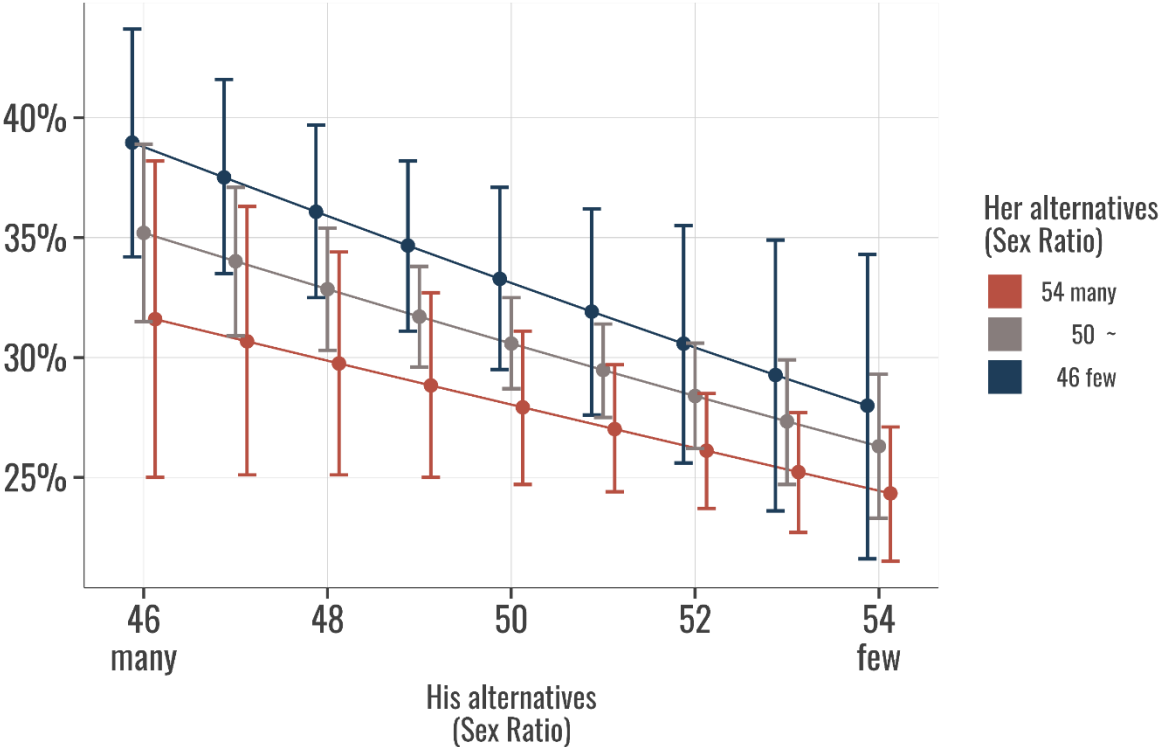
Figure 1: Adjusted predictions for moving in together by either partner’s sex ratio.



For separation, we find an overall negative trend as the male partners increasingly face a more

male-skewed sex ratio (Figure 2). The probability of separation is highest when men have many alternatives and decreases as men’s alternatives become fewer. However, we do not find any significant differences for any constellation of both partners' alternatives, meaning that the risk of separation is not affected by both partners' sex ratios.

Figure 2: Adjusted predictions for separation by either partner’s sex ratio.



### Discussion

The aim of this paper was to investigate how alternative partners are associated with the relationship trajectory of non-cohabiting or living apart together couples in young adulthood. Based on a multidisciplinary theoretical perspective, we argue that contextual opportunities to meet potential alternative partners are a key factor whether couples stay together or separate. Specifically, both partners' availability of alternative partners shapes the probability of cohabiting and separating. Using large-scale panel data from the German Family Panel pairfam, we combined the survey with administrative data to capture both partners’ partner availability based on age-specific and age-shifted sex ratios.

Our results revealed significant association between the transition to cohabitation and either partners’ relative availability of alternatives. The probability was highest for the within couple constellation if women have many and men have few alternatives. This result confirms gender-

specific assumptions from evolutionary models. Commitment is more likely when women are scarce because men may adapt to women's preferences for commitment to maintain the relationship. However, we do not find significant associations between partner availability and non-cohabiting couple's risk of separation.

Our study contributes to the existing literature in three ways. First, this is the first study that analyses the role of alternatives for relationship transitions of non-cohabiting couples. Previous studies on the role of alternatives for relationship trajectories focus their analyses on married couples or co-residential partnerships. Second, on a theoretical level, our work integrates social exchange theory as well as ideas from demographic opportunity theory and evolutionary theory. This approach allows for a multidisciplinary perspective on the consequences of alternatives and the investigation of gender-neutral and gender-specific hypotheses. Third, previous studies focus on co-residential couples. Therefore, these analyses by necessity are limited to couples in which both partners are part of the same local partner market, because both partners live in the same area. However, analyzing couples living in separate households, which are often in different districts, allows for examining the effects of alternatives from a dyadic perspective. Particularly, we are able to investigate the influence of favorable and unfavorable partner market prospects for either partner and sex-specific effects of unbalanced availability of alternatives.

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