Routledge
Taylor & Francis Group

Population Studies
A Journal of Demography

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rpst20

So happy together … Examining the association between relationship happiness, socio-economic status, and family transitions in the UK

Brienna Perelli-Harris & Niels Blom

To cite this article: Brienna Perelli-Harris & Niels Blom (2021): So happy together…Examining the association between relationship happiness, socio-economic status, and family transitions in the UK, Population Studies, DOI: 10.1080/00324728.2021.1984549

To link to this article: https://doi.org/10.1080/00324728.2021.1984549

Population Studies, 2021
https://doi.org/10.1080/00324728.2021.1984549

So happy together … Examining the association between relationship happiness, socio-economic status, and family transitions in the UK

Brienna Perelli-Harris [1] **and Niels Blom** [2]
[1]University of Southampton, [2]University of Bath

The increases in cohabitation and in childbearing within cohabitation raise questions about who marries. Most studies have found that childbearing within cohabitation is associated with disadvantage; here, we examine the role of relationship happiness and whether it helps to explain this association. Using the UK Household Longitudinal Study (2009–17), our competing risk hazard models follow respondents as they transition: (1) from cohabitation into marriage or childbearing; and (2) from marriage or cohabitation into childbearing. We find that marriage risks are highest among individuals who are happiest with their relationship. On average, the association between relationship quality and childbearing operates through marriage: the happiest individuals marry, and those who marry have children. While higher socio-economic status is weakly associated with marriage, conception, and separation, the associations do not differ by relationship happiness. The findings indicate that overall, relationship happiness appears to be most salient for transitions into marriage.

Supplementary material for this article is available at https://doi.org/10.1080/00324728.2021.1984549

Keywords: cohabitation; marriage; childbearing; separation; relationship quality; happiness; United Kingdom; socio-economic status

[Submitted August 2020; Final version accepted July 2021]

Introduction

The process of family formation in developed countries has become more complex (Thomson 2014). Most co-residential partnerships now begin with cohabitation, but trajectories after partnership formation vary: some couples marry, others separate, and a significant proportion of couples now have children without marrying first (Perelli-Harris et al. 2012). The increase in childbearing within cohabitation indicates that cohabitation is taking on one of the functions of marriage, and marriage is no longer a prerequisite for starting a family (Cherlin 2004; Sassler and Lichter 2020). Cohabitors could be just as committed as married couples (Berrington et al. 2015), and cohabitation could be becoming an alternative to marriage (Heuveline and Timberlake 2004; Hiekel et al. 2014). These different pathways after cohabitation raise questions about why some couples transition into marriage or begin childbearing while others separate.

Recently, a large number of studies have found that partnership trajectories are increasingly stratified, reflecting inequalities in resources and opportunity (McLanahan 2004; Mikolai et al. 2018; Billari et al. 2019). Couples with stable economic conditions and higher levels of education are more likely to marry (Ishizuka 2018; Garriga and Perelli-Harris 2019; Schneider et al. 2019), while those with lower education and disadvantaged backgrounds are more likely to have a child within cohabitation (Perelli-Harris et al. 2010; Mikolai et al. 2018). Thus, evidence indicates that family trajectories are diverging by educational level and economic situation, with the advantaged more likely to marry and have children within marriage, and the disadvantaged more likely to have children within cohabitation and to experience union instability

(McLanahan 2004; Kalmijn 2013; Perelli-Harris and Lyons-Amos 2016; Musick and Michelmore 2018).

One of the key puzzles, however, is how relationship happiness plays into this picture. Relationship happiness is one dimension of the broader concept of relationship quality, important for the functioning and maintenance of close relationships (Karney and Bradbury 2020). Relationship happiness is vital to well-being, with numerous studies finding associations between close relationships and health (see Umberson and Montez 2010; Robles et al. 2014 for reviews) and life satisfaction (Perelli-Harris et al. 2019). Yet relationship happiness has rarely been considered as a factor associated with the transition from cohabitation into marriage or childbearing. Although a couple's economic situation may condition their decisions, how members of a couple interact and relate to each other may also be important for relationship progression and childbearing.

Prior studies have compared relationship quality between cohabiting and married individuals (Brown 2003; Wiik et al. 2012; Brown et al. 2017), but few have examined subsequent family transitions or the role of socio-economic status (SES). Some studies have included relationship satisfaction as one of many factors in their study. For example, Moors and Bernhardt (2009) examined competing risks of marriage and separation among cohabitors and found that a positive evaluation of the relationship was associated with marriage. Studies in the United States (US) have also previously examined the association between relationship assessments and transition into marriage among cohabitors (Brown 2000; Waller and McLanahan 2005) and whether marriage improves relationship quality (Brown 2004). However, most prior studies took place when cohabitation was marginal, marriage was the norm, and childbearing in cohabitation less common (Kennedy and Bumpass 2008). None of these studies examined childbearing as a competing outcome, which could be an alternative indicator of couples' commitment to the relationship (Berrington et al. 2015). The rapid increase in cohabitation as a normative context for childbearing suggests that looking only at transition into marriage is insufficient for understanding family formation today. Given the prevalence of non-marital childbearing and the stratification of family processes, examining the interaction between relationship quality and economic status may help to explain how and why family trajectories are diverging.

For our study, we used the UK Household Longitudinal Study (UKHLS) (2009–17), a large household data set that prospectively follows couples as they experience family events. This paper examines two separate analyses which provide insights into family formation and examined the role of relationship happiness at different stages. First, we focus on cohabiting individuals and how relationship happiness prompts transitions into marriage, childbearing, or union dissolution (Analysis 1). By the early 2000s, 80 per cent of couples in the UK were beginning their unions with cohabitation; yet for most, cohabitation was not a long-term partnership type: within five years, 36 per cent had transitioned into marriage and 35 per cent had dissolved their unions (Chao et al. 2020). Meanwhile, childbearing within cohabitation increased: in 2015, 32 per cent of births in England and Wales were registered to cohabiting couples (Office of National Statistics 2018). Prior research has found that births within cohabitation disproportionately occur to less advantaged couples (Crawford et al. 2012; Mikolai et al. 2018), raising questions about why disadvantaged couples are less likely to marry before the birth. Whereas economically advantaged individuals who are happy with their relationship may marry before having children, happy but disadvantaged individuals may have children without marrying, potentially because marriage has become less obtainable due to norms about the couple's economic position, (McLanahan and Percheski 2008; Ishizuka 2018) or because childbearing was unplanned (Wellings et al. 2013). Examining the role of relationship quality in these transitions, while paying attention to SES, is important for understanding how economically disadvantaged individuals transition to marriage and parenthood.

Second, we aim to understand how relationship happiness is associated with transitions into parenthood while directly comparing relationship happiness between married and cohabiting individuals (Analysis 2). Previous studies have found that the quality of interactions between partners has an impact on the transition to parenthood (Rijken and Liefbroer 2009; Rijken and Thomson 2011), but these studies have not taken into account partnership type or economic conditions. If cohabitation has become an alternative to marriage, then relationship happiness should be the main predictor of childbearing, regardless of partnership type. This would apply especially to lower-SES individuals, who are less likely to marry because they have other economic priorities, such as housing or investments in their children (Berrington et al. 2015). Those with lower SES may also be more likely to 'slide' into childbearing, without making a concerted decision to have children (Stanley et al. 2006; Sassler and Miller 2017).

By taking the results from the two analyses together, we answer questions about the extent to which relationship happiness matters for progression to marriage and childbearing. Interactions between partnership status and relationship happiness shed light on whether relationship happiness plays a different role in having children among cohabitors than married couples. In addition, we examine the role of socio-economic inequality in these associations and how they interact with relationship happiness. While relationship happiness may matter for family transitions, the outcomes may differ by SES, providing insights into how family trajectories diverge.

Previous research

Relationship happiness (or relationship quality) has been a central topic in the study of close relationships (Finkel et al. 2017; Karney and Bradbury 2020). Like other umbrella concepts, such as life satisfaction, relationship quality is often defined as the individual's subjective, global evaluation of their relationship (e.g. Fincham and Rogge 2010) and is their overall assessment of the couple's interactions, joint behaviours, and communication. Meta-analyses from this field have identified specific relationship factors correlated with relationship stability, for example love, commitment, and interdependence (Le et al. 2010), but the construct of relationship happiness captures a complex set of individual evaluations of the couple's dynamics.

This large body of literature has established the importance of relationship quality for healthy relationships (Robles et al. 2014). However, the majority of studies have focused on the determinants of *marital* satisfaction, with far fewer examining relationships before marriage or how relationship quality among cohabiting couples may lead to marriage (Karney and Bradbury 2020). Some studies have directly compared cohabiting and married individuals, finding that relationship quality is lower among cohabitors (e.g. Hardie and Lucas 2010; Wiik et al. 2012), but these studies have often used cross-sectional data and assumed that cohabitors are fundamentally different from married people, and the studies do not sufficiently recognize the variation in the commitment of cohabiting couples. Some couples may be heading towards marriage, but others may instead signify their commitment with childbearing (Hiekel et al. 2014; Perelli-Harris and Bernardi 2015). Next, we discuss how relationship happiness may matter for marriage and childbearing, and then we provide explanations for why these associations may differ by SES.

Relationship happiness, marriage, and cohabitation

Researchers have found that cohabitors with intentions or expectations to marry have higher relationship quality than cohabitors without these intentions. In Norway and Sweden, cohabiting individuals were less serious and satisfied with their relationships than married individuals, but cohabitors who intended to marry were more similar to married individuals (Wiik et al. 2009). Similarly, US research found that those who directly married had higher relationship quality than those who premaritally cohabited or had plans to marry, and cohabiting couples without plans to marry had the lowest relationship quality of all (Brown et al. 2017). Studies have also examined how intentions or expectations to marry result in subsequent marriage. Unsurprisingly, several studies have found that those with plans to marry were more likely to marry, while those without such plans were more likely to separate (Brown 2000; Moors and Bernhardt 2009). However, given the increase in long-term cohabitation, the intention to marry may not be the only sign of a happy couple. Similarly, attitudes towards marriage may not be congruent with or measuring the same concept as intentions to marry (Hiekel et al. 2015). Individuals may be very positive about their relationship but not intend to marry because they are ideologically opposed to marriage or have other pressing priorities.

Qualitative research in the UK has supported the idea that happier couples are more likely to marry and also that cohabiting couples may express their commitment through childbearing (Perelli-Harris et al. 2014; Berrington et al. 2015). Focus group participants generally considered cohabitation a testing ground for marriage and marriage a long-term commitment and marker of security. The main reason for marrying, according to focus group participants, was to demonstrate relationship commitment to family and friends (Perelli-Harris et al. 2014). The wedding, in particular, was a way to celebrate the couple's happiness and symbolized a deep emotional bond (Berrington et al. 2015). Many British participants saw marriage as the end goal of relationship progression, with only the happiest couples achieving this goal. Thus, marriage may remain an important symbol of the highest quality relationships in British society.

In contrast, marriage has become less normative in the UK, and the number of cohabiting couple families has continued to grow faster than the numbers of married and lone parent families (ONS 2018). These trends raise questions about whether higher relationship happiness is necessarily a predictor of marriage. British cohabitors report little social pressure to marry, and two-thirds of respondents in the 2008 British Social Attitudes survey thought that living with a partner showed the same commitment as marriage (Duncan and Phillips 2008). According to UK focus group research, a range of other considerations, such as housing or financial stability, may (indefinitely) postpone marriage, especially given the high cost of a wedding (Berrington et al. 2015). Some participants said they were not necessarily opposed to marriage; they simply had not got around to it (Berrington et al. 2015). Thus, it is not clear that those with the highest relationship happiness still feel the same need to marry as they would have previously.

Relationship happiness and childbearing

The association between an individual's relationship happiness and childbearing is also not straightforward. Prior research not explicitly examining differences between cohabitation and marriage has argued that because children represent a large investment in the relationship, only those who believe in the future stability of their relationship will have children (Rijken and Liefbroer 2009; Rijken and Thomson 2011). On the other hand, couples with poor quality relationships may try to 'revitalize' their relationship by having children (Rijken and Liefbroer 2009; Rijken and Thomson 2011); they may not even make an explicit decision to have children but instead 'slide' into childbearing (Stanley et al. 2006; Sassler and Miller 2017). These mixed results raise questions about whether relationship happiness is even associated with childbearing.

Prior studies have also indicated that marriage is often one of the strongest factors associated with childbearing, and couples are more likely to have children once married (Perelli-Harris et al. 2012, 2014). In the UK, marriage is often perceived as a more secure setting for raising children (Berrington et al. 2015). In England and Wales, marriage conveys greater legal protection and rights than cohabitation (Barlow and James 2004). In the case of union separation, having been married is advantageous both for mothers, who can benefit from alimony, and fathers, who may find it easier to resolve custody disputes (Barlow and James 2004; Perelli-Harris and Gassen 2012). As found in prior research, we expect that married individuals will be more likely to become parents than cohabiting individuals (Perelli-Harris et al. 2012; ONS 2015).

Relationship happiness, however, may play an important role in the transition to childbearing within cohabitation. First birth risks may be higher among cohabitors who are happier with their relationships than among cohabitors with poor quality relationships. Cohabitors who feel less social pressure or personal necessity to formalize their relationship through marriage may use parenthood as a way to signal commitment (Berrington et al. 2015). Having a child within cohabitation represents a shared responsibility and cements a partnership so that the official status of the union may no longer matter (Perelli-Harris et al. 2014). Thus, we expect that among cohabitors, higher relationship happiness will be associated with higher first birth rates. In addition, we expect first birth rates for cohabitors with higher relationship happiness to be similar to those of married individuals.

Economic conditions, relationship happiness, and family transitions

Prior research has indicated that higher-SES individuals are more likely to marry before childbearing, while those with lower SES are more likely to have a child within cohabitation (Berrington and Diamond 2000; Mikolai et al. 2018). Relationship quality may help to explain the divergence in marriage patterns by SES, as on average, relationship quality is lower among couples in worse socio-economic positions (see Conger et al. 2010 and Blom 2019 for reviews). Low-SES individuals often face economic stressors that strain relationships, negatively impacting the quality of communication and couples' functioning (Conger et al. 2010). Low income is associated with higher conflict among partners (Hardie and Lucas 2010), one of the components of relationship quality (Le et al. 2010). Men's unemployment is particularly detrimental for relationship quality, especially over the long term (Blom and Perelli-Harris 2021). Thus, on average, low-SES couples may be less likely to marry, because the hardship they face strains their relationship (Gibson-Davis et al. 2018).

Investigating whether the associations between relationship happiness and marriage/childbearing differ by SES may help us to disentangle them. Given our interest in disadvantage and in explaining

why low-SES individuals are more likely to have a birth in cohabitation, we focus on three possible expectations for low-SES individuals with happy or unhappy relationships. First, low-SES cohabitors with happy relationships may be just as likely to marry before having children as those with high SES. Even though they face financial constraints, happy cohabitors may decide to have a wedding, even if small and low cost.

Second, low-SES cohabitors with happy relationships may decide to have a child rather than marry, or they may experience an unplanned pregnancy. They may not be able to achieve the economic 'bar' to marriage (Ishizuka 2018) or may lack the financial resources to hold a wedding and instead prioritize raising children and paying for housing (Berrington et al. 2015). Indeed, in focus group research, low-SES couples reported that the high cost of a wedding was a reason not to marry (Berrington et al. 2015). For these couples, marriage is perpetually postponed, with cohabitation becoming a long-term alternative, even when having children. Thus, relationship happiness may play a smaller role in the decision to marry among lower-SES groups.

Finally, low-SES individuals with unhappy relationships are more likely to have a child within cohabitation, possibly with the hope of revitalizing their relationship (Rijken and Liefbroer 2009). The decision to have a child may not be completely deliberate or planned, especially among lower-SES couples (Wellings et al. 2013). Research in the US has found that economically disadvantaged couples often 'slide' into cohabitation, motivated by finances, convenience, and housing, with childbearing taking place subsequently (Smock et al. 2005; Stanley et al. 2006; Sassler and Miller 2017). According to this research, low-SES women have children outside marriage even in unstable partnerships, because children bring meaning to women's lives (Edin and Kefalas 2005; Sassler and Miller 2017). Hence, for lower-SES cohabiting couples, the quality of their relationship may be irrelevant if the woman becomes pregnant and wants to have a baby.

Research questions

Previous research leads to the following research questions (RQs), which are organized around the two analyses outlined in the 'Introduction' and further described in the 'Analytical approach' section:

1. Among cohabitors, is relationship happiness associated with the transition to marriage and/or childbearing?

2(a). Among cohabitors, is SES associated with the transition to marriage and/or childbearing?

2(b). How does the association between relationship happiness and these transitions differ by SES?

3(a). Among both cohabiting and married individuals, is relationship happiness associated with childbearing?

3(b). Are happy cohabiting individuals just as likely to have a child as happily married individuals?

4. How does the association between relationship happiness and transition to parenthood vary by SES, and to what extent does this association differ by partnership type?

Analytical approach

Data

We used the UKHLS, also known as *Understanding Society*, a nationally representative, household-based longitudinal survey (University of Essex 2019, 2020). The UKHLS began in 2009 with approximately 40,000 households (51,000 individuals) and has been conducted annually for eight waves. We used the constructed retrospective and prospective partnership histories, which capture changes in partnership between waves (University of Essex 2020). Respondents reported month of separation when their partner moved out between waves, and if missing, we randomly imputed dates within the approximately 12-month period. Unfortunately, the UKHLS did not ask about relationship happiness in every wave, which limited our ability to examine changes in relationship happiness over time. Instead, we could only observe relationship happiness in the first wave of observation or the first wave in which a couple begins cohabiting. Our sample came from the waves which collected information on relationship happiness (Waves 1, 3, and 5). To boost sample size, we included individuals who had not been included in prior waves but had formed new unions between waves, including repartnered people. In analyses presented in this paper, we followed these samples for a maximum of three years, although robustness checks following respondents for two years or until last observation in the survey (Wave 8 in 2016/17) did not usually result in substantial differences.

Our sample included heterosexual men and women who answered the relationship happiness questions, which were collected in a self-completion questionnaire (on paper in Wave 1 and via computer from Wave 3 onwards). The household full-interview response rate was 57.3 per cent in Wave 1, and the corresponding individual full-interview response rate was 81.8 per cent. The individual reinterview rate ranged from 72.4 per cent in Wave 2 to 82.0 per cent in Wave 7. Because the survey collected information from all household members, we were able to use information about partners, for example whether the female partner was pregnant and partner's employment status. Unfortunately, however, missing information on both partners' answers to the relationship happiness question resulted in a small sample size, meaning we were unable to compare partners' responses or conduct dyadic analyses. However, we did take into account clustering based on household ID in our analyses, using the cluster command in Stata.

Methods

As discussed earlier, we are interested in examining the intersection between relationship happiness, economic indicators, and transitions to marriage and childbearing. To answer our research questions, we conducted two separate analyses. Although we could have taken an approach that examined the entire family formation trajectory, for example sequence analysis, we were particularly interested in the role of relationship happiness at different stages of the process. In each analysis, we used competing risk hazard models with different outcomes; although we could argue that the outcomes are not completely independent, in that an individual could marry and then have a child, or have a child and then marry, these outcomes do not occur simultaneously, thus the order of transitions is independent.

For Analysis 1, we restricted our sample to unmarried individuals who had been in a co-residential partnership for up to three years, but did not yet have a joint child, resulting in a sample size of $n =$ 1,197. Prior studies in the UK have suggested that most cohabiting couples marry or separate within three years (Perelli-Harris et al. 2012). We then used competing risk hazard models to estimate the hazards of (1) marriage; (2) first conception within the partnership; and (3) union dissolution. The three event rates are equivalent to three competing risks, which we modelled in a discrete-time framework by estimating multinomial logistic regressions using the sample of all person-months in which respondents were at risk of experiencing the event. The basic form of the model is:

$$h_{it}(m) = \frac{\exp\left(\sum_j x_{ijt}\beta_{jm}\right)}{\sum_{k=1}^{M} \exp\left(\sum_j x_{ijt}\beta_{jk}\right)} \qquad (1)$$

where $h_{it}(m)$ denotes the hazard that respondent i will experience event m in month t. There are four outcomes: marriage, conception, separation, and no event in month t. The coefficients x_{ijt} represent respondent i's values on a set of j potentially time-varying covariates at time t. The β_{jm} are parameters estimated from the data using maximum likelihood. The m subscript on β_{jm} shows that a separate parameter vector is estimated for each possible type of event. The model is identified by constraining all the elements in one such vector (the reference category) to equal zero (e.g. $\beta_{j1} = 0$).

When the 'no event' category is the reference category, the exponentiated parameters can be interpreted as the change in the relative risk of an event due to a change in the associated control variable. This is because the reference category is an extremely likely outcome. As a consequence, the denominators in the top and bottom terms that comprise the relative risk ratio approach values of one, and the relative risk ratio approaches a relative risk.

Respondents entered the risk set in the month following the interview when relationship happiness was recorded. Respondents were censored when they were no longer captured in the panel survey, after three years of observation, or when they turned 46 (the assumed end of a woman's reproductive lifespan). People were censored after three years because the majority of events happened in the first few years and the event should be as close as possible to the measurement of relationship happiness (alternative specifications of censoring after two years and no time limit (i.e. no censoring) are shown in the supplementary material, section 1). We backdated births nine months to time of conception to reduce the confounding effect of pregnancy on relationship happiness.

For Analysis 2, we examined the transition to first conception (or union dissolution) for both married and cohabiting couples who had not yet had a child together and who had been in the co-residential relationship for up to three years ($n = 1{,}670$). Again, we used a discrete-time competing risk hazard model, but with only two outcomes: (1) birth and (2) separation. As for Analysis 1, censoring

occurred at the end of observation, after three years of observation, or at age 46, and we backdated births by nine months to time of conception. Because we defined 'no event' as the reference category, the model was able to estimate the net hazards of either first conception or dissolution.

Variables

Relationship happiness. The main aim of this paper is to investigate how relationship happiness is associated with individuals' family transitions. People were asked in the self-completion questionnaire: *The responses below represent different degrees of happiness in your relationship. The middle point, 'happy', represents the degree of happiness of most relationships. Please select the number which best describes the degree of happiness, all things considered, of your relationship*. The scale ranged from '1' (extremely unhappy) to '7' (perfect). This question came from the widely used and scientifically validated Dyadic Adjustment Scale (DAS) (Spanier 1976; Graham et al. 2006). Most people in our samples reported being very happy or extremely happy (about 24 and 38 per cent, respectively) with their relationship, and around 15 per cent each were in the happy and the perfect categories. Only 9.5 per cent of people reported their relationship as extremely unhappy, fairly unhappy, or a little unhappy; due to small numbers, we collapsed these categories into a single category (unhappy).

Household income. The first indicator of socio-economic well-being was the couple's level of income. People were asked about their monthly income, and when this information was unavailable it was estimated by the UKHLS team. The information was net of income tax and national insurance contributions. We used household income, which was the sum from all household members. Household income was subsequently equivalized using the Organisation for Economic Co-operation and Development (OECD) equivalence scale and converted to 2015 prices. We then categorized the respective samples into tertiles, based on the distribution at the first wave of observation. Household income was time varying and updated at subsequent interviews.

Employment status. The second factor of socio-economic well-being was employment status, which was also time varying. Respondents were asked about their main economic activity. We categorized this as employed (paid employment or self-employed), unemployed, and non-employed (e.g. full-time student, homemaker or caregiver, and long-term sick or disabled). The same categories were applied to *Partner's employment status*, but with an additional category (no information available) when the partner was not interviewed.

Education. The individual's level of education was the third indicator of socio-economic well-being. Highest education was measured as the highest level obtained up to the first interview, and updated subsequently if it changed between waves. It was categorized as higher (degree, other higher degree), middle (A-level or similar), and lower (GCSE or similar, other qualification, no qualification). As found in prior studies (Conger et al. 2010), individuals with higher SES tended to be happier with their relationship.

Sex. Sex was included as an important control variable for explaining family transitions. We tested whether the association between relationship happiness, economic conditions, and family transitions differed by sex (see supplementary material, section 2); any differences significant below the 0.10 level are discussed in the text.

Partnership status. For Analysis 2, in which we investigate transitions for both married and cohabiting individuals, we controlled for whether the couple was married or cohabiting. The partnership variable was time varying and was updated if the respondent married between waves.

Relationship duration. We included relationship duration before the current wave, as relationship happiness can decline over time. At the same time, however, relationship duration is usually associated with partnership stability. Relationship duration was measured as number of years before current interview. As mentioned earlier, we selected individuals who were in a co-residential relationship of up to three years.

Relationship history and Number of children before relationship. We also controlled for previous family formation, namely whether the respondent

had ever experienced a co-residential relationship and their number of children before the start of the current union.

Other controls. Besides the factors already mentioned, we controlled for age, country, ethnicity, and panel wave. *Age* was measured at the time of the interview. *Country* referred to living in England vs living in Scotland, Wales, or Northern Ireland, and *Ethnicity* was dichotomized as White British vs other. Lastly, *Panel wave* was categorical for Waves 1, 3, and 5.

Results

Descriptives

Table 1 shows the unweighted frequencies, percentages, means, and standard deviations for the variables examined in each of the analyses. In the Analysis 1 sample, about 20 per cent transitioned into marriage, 14 per cent conceived a child during the period of analysis, and 26 per cent separated. Another 40 per cent remained in cohabitation, which is higher than expected, but may be due to the relatively short follow-up of three years. In the Analysis 2 sample, 20 per cent separated, 24 per cent experienced a conception, and 55 per cent did not experience either transition. Note that the unemployed comprised a small proportion of both samples, and nearly half of the sample members were in the highest education group.

Analysis 1: Cohabiting couples' transitions to marriage, birth, or separation

First, we investigate whether relationship happiness is associated with family transitions (RQ1). Note that all couples had been living together for less than three years and not yet had a child together. Kaplan–Meier survival estimates (see supplementary material, section 3) indicate that those who report being perfectly or extremely happy with their relationship experience a higher rate of marriage than those with lower reported levels of happiness. Table 2 presents competing risk hazard models including controls. The estimates from model 1 show relative risk ratios that compare marriage, separation, and conception, relative to remaining in cohabitation. These ratios can be roughly interpreted as relative risks because the outcome variables represent rare outcomes: in the vast majority of person-months, no event occurs. We immediately see that, as in the Kaplan–Meier estimates, relationship happiness is positively associated with marriage. The risk of marriage is 57 per cent lower (p-value = 0.009) among those who are unhappy with their relationship than among those who are extremely happy. The marriage risk is 61 per cent (p-value < 0.001) lower for those who are happy with their relationship and 54 per cent (p-value < 0.001) lower for individuals who are very happy compared with the extremely happy group. People who regard their relationship as perfect are as likely to marry as those who are extremely happy with their relationship. Analyses with interaction terms for sex indicate slight sex differences (supplementary material, section 2); the difference between reporting an extremely happy or happy relationship for marriage risks is larger for men than for women.

Relationship happiness seems largely unrelated to the risk of conception. Those who are unhappy or very happy with their relationship or who report their relationship to be perfect do not differ significantly (at the 0.10 or 0.05 level) in conception risk from those who are extremely happy with their relationship. However, among those who are happy with their relationship, the conception risk is 54 per cent lower than for those who are extremely happy. Overall, these results indicate that the happiest cohabitors do not experience a higher risk of childbearing than those with poor relationships; instead, the happiest cohabitors are more likely to marry sooner.

Surprisingly, for those who are unhappy with their relationship (p-value = 0.064) and also those who find their relationship to be perfect (p-value = 0.031), the separation risk is higher than for those who are extremely happy with their relationship. Additionally, there is a higher separation risk among men who are happy with their relationship, but not for women (supplementary material, section 2). Robustness analyses indicate that when we censor the data two years after the initial interview, the very happy and happy groups experience a higher separation risk than those who are extremely happy with their relationship, but the perfect group does not. When we do not censor the data, no relationship happiness category is related to separation risk (see supplementary material, section 1). These findings indicate that the time frame is crucial when studying the association between relationship happiness and separation: relationship happiness is most clearly related to separation in the short term.

Table 2 also addresses research question 2(a) and provides weak evidence that economic insecurity is

Table 1 Percentages, means, and standard deviations for transitions and independent variables for the two analysis samples, UK 2009–17

	Analysis 1				Analysis 2			
	Transitions from childless cohabitation (n = 1,197)				Transitions from childless cohabitation or marriage (n = 1,670)			
	N	Percentage	Mean	SD	*N*	Percentage	Mean	SD
Transition								
No transition	484	40.4	–	–	924	55.3	–	–
Marriage	236	19.7	–	–	–	–	–	–
Conception	162	13.5	–	–	405	24.3	–	–
Separation	315	26.3	–	–	341	20.4	–	–
Relationship happiness (categorical)								
Extremely unhappy	48	4.0	–	–	69	4.1	–	–
Fairly unhappy	24	2.0	–	–	32	1.9	–	–
A little unhappy	42	3.5	–	–	57	3.4	–	–
Happy	185	15.5	–	–	238	14.3	–	–
Very happy	290	24.2	–	–	385	23.1	–	–
Extremely happy	454	37.9	–	–	630	37.7	–	–
Perfect	154	12.9	–	–	259	15.5	–	–
Household income (tertiles)								
Higher income	433	36.2	–	–	617	37.1	–	–
Middle income	403	33.7	–	–	553	32.4	–	–
Lower income	361	30.2	–	–	500	30.5	–	–
Employment status								
Employed	1,027	85.8	–	–	1,437	86.1	–	–
Unemployed	70	5.9	–	–	97	5.8	–	–
Non-employed	100	8.4	–	–	136	8.1	–	–
Partner's employment status								
Employed	959	80.1	–	–	1,350	80.8	–	–
Unemployed	75	6.3	–	–	111	6.7	–	–
Non-employed	83	6.9	–	–	115	6.9	–	–
No information available	80	6.7	–	–	94	5.6	–	–
Education								
Higher	595	49.7	–	–	878	52.6	–	–
Middle	292	24.4	–	–	371	22.2	–	–
Lower	310	25.9	–	–	421	25.2	–	–
Sex								
Female	679	56.7	–	–	938	56.2	–	–
Male	518	43.3	–	–	732	43.8	–	–
Partnership status								
Cohabitation	1,197	100.0	–	–	971	58.1	–	–
Marriage	0	0.0	–	–	699	41.9	–	–
Relationship history								
No previous relationship	724	60.5	–	–	1,045	62.6	–	–
Had previous relationship	473	39.5	–	–	625	37.4	–	–
No. of children before relationship (0–6)	–	–	0.4	0.9			0.4	0.9
Country of residence								
England	990	82.7	–	–	1,382	82.8	–	–
Wales, Scotland, Northern Ireland	207	17.3	–	–	288	17.3	–	–
Ethnicity								
White British	1,033	86.3	–	–	1,329	79.6	–	–
Other	164	13.7	–	–	341	20.4	–	–
Age (16–45)	–	–	29.3	6.8	–	–	30.0	6.8
Relationship duration before wave (0–3.9 years)	–	–	1.4	1.1	–	–	1.6	1.1
Panel wave								
Wave 1	901	75.3	–	–	1,308	78.3	–	–
Wave 3	193	16.1	–	–	239	14.3	–	–

(*Continued*)

Table 1 Continued.

	Analysis 1				Analysis 2			
	Transitions from childless cohabitation (n = 1,197)				Transitions from childless cohabitation or marriage (n = 1,670)			
	N	Percentage	Mean	SD	*N*	Percentage	Mean	SD
Wave 5	103	8.6	–	–	123	7.4	–	–
Time to event or censoring (1–36 months)	–	–	18.4	11.7	–	–	21.9	12.1

Notes: Ranges in parentheses. SD is the standard deviation.
Source: Authors' analysis of UKHLS 2009–17.

associated with remaining in cohabitation relative to marriage. It presents the models with all socio-economic variables (income, employment status, and education) included simultaneously, but because these variables are highly correlated, we also conducted analyses with each indicator separately (see supplementary material, section 4). Table 2 shows that marriage risks for those in the lowest income tertile are 37 per cent lower than for those in the highest income tertile (p-value = 0.091). When the other socio-economic indicators are not included, this is a 46 per cent lower risk (p-value = 0.011). Risks of marriage, separation, and conception are similar among the unemployed and the employed. When the other socio-economic factors are not included, the marriage risk is lower among the non-employed (p-value = 0.069), and respondents' separation risk is higher when they or their partner

Table 2 Transitions from childless cohabitation to marriage, conception, or separation, from competing risk hazard models: Relative risk ratios, UK 2009–17

	Analysis 1. Transitions from childless cohabitation to: Model 1								
	Marriage			Conception			Separation		
	RRR	CI lower	CI upper	RRR	CI lower	CI upper	RRR	CI lower	CI upper
Relationship happiness									
Unhappy	0.427	0.225	0.807	1.027	0.566	1.865	1.460	0.978	2.181
Happy	0.392	0.233	0.660	0.464	0.257	0.838	1.270	0.873	1.846
Very happy	0.461	0.320	0.664	0.859	0.580	1.274	1.264	0.923	1.732
Extremely happy	Ref.	–	–	Ref.	–	–	Ref.	–	–
Perfect	1.006	0.677	1.497	1.073	0.678	1.698	1.532	1.039	2.259
Household income (tertiles)									
Higher income	Ref.	–	–	Ref.	–	–	Ref.	–	–
Middle income	0.760	0.518	1.115	0.902	0.537	1.517	0.813	0.579	1.140
Lower income	0.626	0.364	1.078	1.117	0.642	1.943	0.918	0.631	1.337
Employment status									
Employed	Ref.	–	–	Ref.	–	–	Ref.	–	–
Unemployed	0.828	0.393	1.745	1.195	0.696	2.052	1.265	0.819	1.956
Non-employed	0.682	0.383	1.216	0.723	0.410	1.273	1.044	0.702	1.554
Partner's employment status									
Employed	Ref.	–	–	Ref.	–	–	Ref.	–	–
Unemployed	0.680	0.291	1.585	1.336	0.744	2.400	1.440	0.913	2.272
Non-employed	1.115	0.651	1.908	0.988	0.537	1.818	1.221	0.776	1.922
No information available	0.620	0.341	1.128	1.067	0.581	1.960	1.098	0.750	1.606
Education									
Higher	Ref.	–	–	Ref.	–	–	Ref.	–	–
Middle	0.805	0.560	1.157	1.424	0.905	2.242	0.890	0.657	1.206
Lower	0.929	0.618	1.397	1.474	0.948	2.290	1.085	0.797	1.476

Notes: Controlled for sex, relationship history, number of children before relationship, country, ethnicity, age, relationship duration, wave, and t (baseline hazard of duration). RRR is the relative risk ratio; 'Ref.' refers to the reference category; 'CI lower/upper' are the lower/upper limits of the 95 per cent confidence interval.
Source: As for Table 1.

are unemployed (p-values = 0.080 and 0.045, respectively). Additional analyses (supplementary material, section 2) indicate sex differences: men's unemployment reduces marriage risks, whereas women's unemployment and non-employment increase marriage risks; however, these findings are based on very low numbers of observations.

Overall, education is not significantly related to marriage and separation (Table 2). However, the conception risk is 47 per cent higher among the lower educated (p-value = 0.085). This rises to a 58 per cent higher conception risk when household income and (partner's) employment status are not included (p-value = 0.042; supplementary material, section 4). Models without relationship happiness (supplementary material, section 5) show similar associations between each socio-economic indicator and family transitions, suggesting that relationship happiness is not mediating these associations, but that the highly educated are more likely to postpone childbearing within cohabitation relative to their less educated counterparts.

Other controls in the model are associated with the outcomes largely as expected (see supplementary material, section 6). Having been in a previous partnership increases the risk of conception (p-value = 0.025), but is not related to marriage and separation risks. Those living in UK countries other than England experience higher conception risks within cohabitation (p-value = 0.063). Among White British, the marriage risk is lower (p-value = 0.036), as is the separation risk (p-value = 0.090), compared with people from other ethnic backgrounds. Younger cohabitors experience higher risks of both separating (p-value = 0.004) and conceiving (p-value < 0.001). However, sex, relationship duration, and number of children before the relationship are not significantly associated with the three outcomes. The baseline hazard of duration (t) since the first observation (when relationship happiness was measured) is not significantly associated with marriage and conception, but follows a linear specification for separation (p-value < 0.001).

To answer research question 2(b), we used interactions to test whether the association between relationship happiness and family transitions differ by SES (supplementary material, section 7). Due to the small number of unemployed individuals and their partners in our sample, we do not show interactions between employment status and relationship happiness. The interactions between relationship happiness and household income are not significant for marriage, conception, or separation. Thus, for income, the results provide no support for the idea that relationship happiness among the disadvantaged leads to conception rather than marriage. For education, small differences are found in which the lower educated reporting a perfect relationship are at higher risk of conceiving (p-value = 0.085) and lower risk of separation (p-value = 0.074) compared with their more highly educated counterparts. Considering the large number of categories, we condensed the categories of relationship happiness and education in robustness analyses (supplementary material, section 8). These analyses indicate that any significant interactions regarding relationship happiness and education are not robust. We therefore conclude that relationship happiness is similarly associated with marriage, conception, and separation risks among all cohabitors, irrespective of an individual's SES.

Analysis 2: Partnered (both married and cohabiting) couples' transitions to parenthood or separation

To answer question 3(a), Table 3 shows the risks of conception and separation for those living in a partnership, whether married or cohabiting, by relationship happiness. Note that all couples had been living together for less than three years and not yet had a child together. Similar to Analysis 1, the conception risk is 36 per cent lower for those who are happy with their relationship compared with those who are extremely happy (p-value = 0.021). Furthermore, as seen in model 2, the separation risk is 56 per cent higher (p-value = 0.022) for those who are unhappy and 50 per cent higher (p-value = 0.032) for those who regard their relationship to be perfect than for individuals who are extremely happy with their relationship. Similar to Analysis 1, these estimates are no longer significant when we do not censor the observations (supplementary material, section 1). Again, when we censor two instead of three years after the initial interview, people who are unhappy, happy, or very happy (but not those in the perfect category) experience a higher separation risk than those who are extremely happy with their relationship.

In contrast to the weak relationship between relationship happiness and childbearing, Table 3 shows that marriage is strongly associated with childbearing: the risk of conception is more than 2.6 times higher for married individuals than cohabiting individuals (p-value < 0.001). As expected, married individuals also experience an 87 per cent lower risk of separation than cohabiting couples (p-value <

Table 3 Transitions from childless cohabitation or marriage to conception or separation, from competing risk hazard models: Relative risk ratios, UK 2009–17

	Analysis 2. Transitions from childless cohabitation or marriage to:											
	Model 2						Model 3					
	Conception			Separation			Conception			Separation		
	RRR	CI lower	CI upper	RRR	CI lower	CI upper	RRR	CI lower	CI upper	RRR	CI lower	CI upper
Relationship happiness												
Unhappy	0.922	0.620	1.370	1.558	1.066	2.277	1.105	0.610	2.003	1.449	0.971	2.161
Happy	0.642	0.442	0.935	1.261	0.877	1.813	0.505	0.277	0.921	1.250	0.861	1.815
Very happy	0.965	0.748	1.246	1.253	0.922	1.704	0.879	0.586	1.319	1.254	0.915	1.718
Extremely happy	Ref.	–	–	Ref.	–	–	Ref.	–	–	Ref.	–	–
Perfect	0.974	0.725	1.308	1.497	1.034	2.165	1.152	0.729	1.820	1.481	1.004	2.183
Partnership status												
Cohabitation	Ref.	–	–	Ref.	–	–	Ref.	–	–	Ref.	–	–
Married	2.601	1.990	3.399	0.126	0.079	0.203	2.568	1.801	3.660	0.107	0.044	0.258
Relationship happiness × Partnership status												
Unhappy × Married	–	–	–	–	–	–	0.728	0.338	1.569	2.121	0.622	7.232
Happy × Married	–	–	–	–	–	–	1.574	0.727	3.412	1.106	0.253	4.832
Very happy × Married	–	–	–	–	–	–	1.185	0.712	1.971	0.932	0.246	3.526
Perfect × Married	–	–	–	–	–	–	0.780	0.433	1.405	1.180	0.318	4.384
Household income (tertiles)												
Higher income	Ref.	–	–	Ref.	–	–	Ref.	–	–	Ref.	–	–
Middle income	0.738	0.545	0.999	0.922	0.667	1.274	0.735	0.543	0.995	0.920	0.666	1.271
Lower income	0.712	0.482	1.051	1.032	0.726	1.467	0.711	0.481	1.052	1.027	0.722	1.460
Employment status												
Employed	Ref.	–	–	Ref.	–	–	Ref.	–	–	Ref.	–	–
Unemployed	1.161	0.754	1.788	1.200	0.790	1.821	1.164	0.755	1.794	1.205	0.792	1.833
Non-employed	0.741	0.488	1.125	0.987	0.671	1.453	0.741	0.488	1.124	0.990	0.673	1.457
Partner's employment status												
Employed	Ref.	–	–	Ref.	–	–	Ref.	–	–	Ref.	–	–
Unemployed	1.468	0.965	2.234	1.336	0.867	2.060	1.445	0.949	2.200	1.347	0.873	2.077
Non-employed	0.964	0.625	1.484	1.313	0.865	1.992	0.954	0.618	1.473	1.324	0.872	2.011
No information available	1.202	0.799	1.806	1.054	0.723	1.537	1.206	0.802	1.815	1.059	0.727	1.544
Education												
Higher	Ref.	–	–	Ref.	–	–	Ref.	–	–	Ref.	–	–
Middle	1.008	0.756	1.345	0.890	0.662	1.195	1.011	0.757	1.350	0.892	0.664	1.197
Lower	1.294	0.982	1.706	1.012	0.751	1.363	1.291	0.980	1.702	1.012	0.751	1.363

Notes: Controlled for sex, relationship history, number of children before relationship, country, ethnicity, age, relationship duration, wave, and *t* (baseline hazard of duration). RRR is the relative risk ratio; 'Ref.' refers to the reference category; 'CI lower/upper' are the lower/upper limits of the 95 per cent confidence interval.
Source: As for Table 1.

0.001). An interaction term between partnership status and relationship happiness (model 3) is not significant at the 0.05 or 0.10 levels, indicating that relationship happiness is similarly (un)important for childbearing or separation among cohabitors and married couples. This is also the case when the relationship quality categories are condensed (supplementary material, section 8). The results of the interaction term indicate that first birth rates for cohabitors with higher relationship happiness are not similar to those of happily married individuals (RQ3(b)). Thus, on average, relationship happiness does not help to explain childbearing within cohabitation.

Results regarding the socio-economic indicators and conception (RQ4) are mixed. Middle- and lower-income individuals experience 26 and 29 per cent lower conception risks, respectively, than people with higher incomes (p-values = 0.050 and 0.087; Table 3, model 2). Note that the income gradient may exist because the sample included married couples who had postponed marriage until financially secure and then rapidly transitioned to parenthood after marriage. When the other SES indicators are not included (supplementary material, section 4), conception risks are 31 per cent lower (p-value = 0.039) among those with middle income, but estimates for the lowest income group are not significant. Those whose partner is unemployed experience a 1.5 times higher risk of conception (p-value = 0.073; models without other SES indicators, RRR = 1.639, p-value = 0.041), while those with lower education experience a 1.3 times higher risk of conception (p-value = 0.067). However, the associations between conception and income, partner's employment, and education are not robust to models censoring observations after two years or at the end of the observation period (supplementary material, section 1). The SES indicators are also not significantly related to separation.

Most of the controls are not significant (supplementary material, section 6), with the exception that a previous relationship increases the risk of separation by 32 per cent (p-value = 0.055); having children from a previous relationship reduces the risk of conception by 19 per cent per child (p-value = 0.026); living in UK countries other than England increases the risk of conception by 37 per cent (p-value = 0.054); and age decreases the risks of both separation and conception (p-values < 0.001 and = 0.001, respectively). Interactions between relationship happiness and SES are not significant (see supplementary material, section 7 and, for reduced categories, section 8). Note that interactions between (partner's) unemployment and conception or separation were not estimated, because the number of transitions among the unemployed was very small.

Our last research question (RQ4) asked whether relationship happiness is differentially associated with conception depending on both SES and partnership type (a three-way interaction term). We combined the middle and lower educated for parsimony, and because their coefficients were very similar in prior analyses. As shown in the supplementary material (section 7, Figure 2), married couples' relationship happiness does not increase their risk of conception, regardless of educational level or household income. In contrast, it appears that among low/middle-educated cohabitors, but not more highly educated cohabitors, higher relationship happiness increases the risk of conception. Only some relationship happiness categories, however, are significant at the 0.05 level: for example, the conception risk for perfectly happy cohabitors is higher than for those who describe their relationship as happy (p-value = 0.015; results not shown). Thus, because the trends overall are not robust, we cannot conclude that relationship happiness increases conception risk among the low/middle educated. The patterns are even less clear when differences by household income are investigated (supplementary material, section 7, Figure 2).

Conclusion

As in many Western countries, cohabitation in the UK has rapidly increased over the past few decades, raising questions about whether cohabitation is a substitute for marriage. Here, we found that this was not the case, on average: cohabitors with happier relationships were much quicker to marry, suggesting that marriage continues to represent the preferred type of relationship for the British population. The results suggest that cohabitors who reported they were extremely or perfectly happy with their relationship experienced higher risks of marriage than those who were very happy or in a lower happiness category. If official marriage was 'just a piece of paper', as some have suggested (Berrington et al. 2015), we would expect no association between relationship happiness and marriage. But our findings indicate that on average the happiest couples marry before childbearing.

These results are in line with qualitative research, which has continued to highlight the importance of marriage as a symbol of meaningful relationships in British society. Focus group participants generally

agreed that marriage signals 'the ultimate commitment' and is 'a real statement' (Berrington et al. 2015). While some participants said that cohabitors could be as committed as married couples, the overall opinion was that marriage represents a different type of bond. Here we studied relationship happiness and not commitment, but we found that marriage is a way of expressing the quality of the relationship. Those who perceived their relationships as happier than the average couple married more quickly and did not linger in cohabitation. The distinct cut-off for those who reported being extremely or perfectly happy suggests that individuals may need to achieve a relationship happiness bar in order to transition into marriage. This bar is analogous to the economic or wealth bar for marriage (Edin and Kefalas 2005; McLanahan and Percheski 2008; Gibson-Davis et al. 2018; Ishizuka 2018), a concept suggesting that standards associated with marriage have become more difficult to achieve. As the social expectation for marriage recedes, only those with the highest quality relationships end up marrying.

The average association between relationship happiness and childbearing, therefore, does not appear to be direct, but instead goes through marriage. In general, we found no association between relationship happiness and conceiving a child within cohabitation, except for the happy group, which according to the questionnaire, 'represents the degree of happiness of most relationships'. We found that the happiest individuals were more likely to marry, and married individuals were more likely to go on to have children, regardless of happiness level. In our childbearing analysis (Analysis 2), relationship happiness was again not significant, except for the happy group, whose conception risks were lower. In addition, the interaction term between partnership type and relationship happiness was not significant, but the marriage coefficient continued to be significant. This indicates that at all levels of happiness, birth risks are higher for married individuals, again suggesting the importance of marriage in childbearing.

The associations between SES and marriage weakly confirmed previous findings that childbearing within cohabitation is associated with a pattern of disadvantage (Perelli-Harris et al. 2010). Cohabitors with lower incomes were less likely to marry, although the association was not strong, and cohabitors with the highest level of education were more likely to postpone childbearing in cohabitation, as found in prior studies (Mikolai et al. 2018). Most of the interaction terms between relationship happiness and SES, however, were not significant, suggesting that the happiest low-SES couples were more likely to marry than the least happy low-SES couples.

Overall, the results show that relationship happiness is a more important predictor for marriage than economic situation. However, our study found little evidence that relationship quality is the main factor behind childbearing within cohabitation. The study cannot explain the high percentage of births within cohabitation in the UK, even among those with lower education. Other unmeasured factors are prompting people to have children within cohabitation. It is also important to keep in mind that some cohabitors may not even deliberately decide to have a child but may experience an unplanned pregnancy (Sassler and Miller 2017).

Our study was not without limitations. First, as mentioned earlier, relationship quality is a complex construct, which can fluctuate and decline over time (Lavner and Bradbury 2010; James 2015). Our analyses captured relationship happiness at a single point in time, but more refined measures may produce different results, especially since prior studies have suggested that the deterioration in relationship quality differs across groups (Lavner and Bradbury 2010). Second, because the UKHLS does not include an indicator for whether the couple is engaged, we could not analyse plans to marry which could potentially improve couples' happiness, resulting in reverse causality. Third, although the UKHLS is one of the largest surveys in the world, restricting our analysis to cohabitors who had been in a partnership for up to three years resulted in a small sample with relatively few transitions. Such a small sample size may produce non-significant results that could become significant with a larger sample size. This is particularly important for conclusions related to the disadvantaged: for example, a larger sample may reveal that relationship happiness prompts marriage among high-income individuals more than among low-income individuals.

Despite these limitations, our findings provide new insights into family processes. Prior studies on the association between relationship quality and partnership type have often assumed that cohabiting and married individuals are fundamentally different. Here we have shown that these two union types are instead part of a process of partnership formation, with happier cohabitors transitioning into marriage before a first birth. Our study implies that relationship happiness leads to marriage, rather than marriage being defined by or causing higher relationship happiness, although as just noted, we cannot definitively rule out reverse causality.

Nonetheless, it is important for family researchers to avoid comparing the relationship quality of these two union types directly and to recognize that cohabitation is often a step on the path to marriage, especially for those with high-quality relationships.

Finally, recent work by demographers has focused primarily on socio-economic factors and family transitions; however, it is important to acknowledge that overall, relationship happiness appears to be most salient for transitions into marriage. Relationship happiness is important for explaining childbearing among low-educated cohabiting couples, but their risk of conception is still lower than for low-educated married couples. Also keep in mind that after childbearing, separation rates are higher for low-SES cohabiting couples than married couples (Musick and Michelmore 2018), which suggests that relationship happiness may deteriorate more rapidly among cohabitors, even those who are parents. Therefore, in order to promote stable families, future research needs to consider the role of relationship happiness, as well as other underlying psychological and social factors which lead to poor relationship outcomes after childbearing.

Notes and acknowledgements

1 Brienna Perelli-Harris is based in the Department of Social Statistics and Demography, Centre for Population Change, at the University of Southampton. Niels Blom is based in the Department of Social and Policy Sciences, at the University of Bath. Please direct all correspondence to Brienna Perelli-Harris, Department of Social Statistics and Demography, Centre for Population Change, School of Economic, Social, and Political Science, University of Southampton, SO17 1BJ; or by Email: B.G.Perelli-Harris@soton.ac.uk

2 This research was supported by UK Economic and Social Research Grant ES/R005907/1.

ORCID

Brienna Perelli-Harris http://orcid.org/0000-0001-8234-4007
Niels Blom http://orcid.org/0000-0003-0742-4554

References

Barlow, Anne, and Grace James. 2004. Regulating marriage and cohabitation in 21st century Britain, *Modern Law Review* 67(2): 143–176. doi:10.1111/j.1468-2230.2004.00482.x

Berrington, Ann, and Ian Diamond. 2000. Marriage or cohabitation: A competing risks analysis of first-partnership formation among the 1958 British birth cohort, *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 163(2): 127–151. doi:10.1111/1467-985X.00162

Berrington, Ann, Brienna Perelli-Harris, and Paulina Trevena. 2015. Commitment and the changing sequence of cohabitation, childbearing, and marriage: Insights from qualitative research in the UK, *Demographic Research* 33(2015): 327–362. doi:10.4054/DemRes.2015.33.12

Billari, Francesco C., Nicole Hiekel, and Aart C. Liefbroer. 2019. The social stratification of choice in the transition to adulthood, *European Sociological Review* 35(5): 599–615. doi:10.1093/esr/jcz025

Blom, N. 2019. *Partner Relationship Quality Under Pressing Work Conditions: Longitudinal and Cross-National Investigations.* Nijmegen: Radboud University.

Blom, Niels, and Brienna Perelli-Harris. 2021. Temporal dimensions of unemployment and relationship happiness in the United Kingdom, *European Sociological Review* 37(2): 253–270. doi:10.1093/esr/jcaa044

Brown, Susan L. 2000. Union transitions among cohabitors: The significance of relationship assessments and expectations, *Journal of Marriage and Family* 62(3): 833–846. doi:10.1111/j.1741-3737.2000.00833.x

Brown, Susan L. 2003. Relationship quality dynamics of cohabiting unions, *Journal of Family Issues* 24: 583–601. doi:10.1177/0192513X03024005001

Brown, Susan L. 2004. Moving from cohabitation to marriage: Effects on relationship quality, *Social Science Research* 33(1): 1–19. doi:10.1016/S0049-089X(03)00036-X

Brown, Susan L., Wendy D. Manning, and Krista K. Payne. 2017. Relationship quality among cohabiting versus married couples, *Journal of Family Issues* 38(12): 1730–1753. doi:10.1177/0192513X15622236

Chao, Shih-Yi, Niels Blom, Ann Berrington, and Brienna Perelli-Harris. 2020. How partnerships have changed in the UK over the last 30 years. *Centre for Population Change Policy Brief.* University of Southampton.

Cherlin, Andrew J. 2004. The deinstitutionalization of American marriage, *Journal of Marriage and Family* 66: 848–861. doi:10.1111/j.0022-2445.2004.00058.x

Conger, Rand D., Katherine J. Conger, and Monica J. Martin. 2010. Socioeconomic status, family processes, and individual development, *Journal of Marriage and Family* 72(3): 685–704. doi:10.1111/j.1741-3737.2010.00725.x

Crawford, Claire, Alissa Goodman, Ellen Greaves, and Rob Joyce. 2012. Cohabitation, marriage and child outcomes: An empirical analysis of the relationship between marital status and child outcomes in the UK using the millennium cohort study, *Child & Family Law Quarterly* 24: 176. Available: SSRN: https://ssrn.com/abstract=2245029

Duncan, S., and M. Phillips. 2008. New families? Tradition and change in modern relationships, in A Park (eds), *British Social Attitudes: The 24th Report*. London: Sage, pp. 2–28.

Edin, Kathryn, and Maria Kefalas. 2005. *Promises I Can Keep: Why Poor Women Put Motherhood Before Marriage*. Berkeley and Los Angeles, CA: University of California Press.

Fincham, Frank D., and Ron Rogge. 2010. Understanding relationship quality: Theoretical challenges and new tools for assessment, *Journal of Family Theory & Review* 2(4): 227–242. doi:10.1111/j.1756-2589.2010.00059.x

Finkel, Eli J., Jeffry A. Simpson, and Paul W. Eastwick. 2017. The psychology of close relationships: Fourteen core principles, *Annual Review of Psychology* 68: 383–411. doi:10.1146/annurev-psych-010416-044038

Garriga, Anna, and Brienna Perelli-Harris. 2019. The "Pattern of Disadvantage" revisited across Europe: Education, employment precarity, and fathers' partnership status. *Population Association of America*. Austin, TX.

Gibson-Davis, Christina, Anna Gassman-Pines, and Rebecca Lehrman. 2018. "His" and "Hers": Meeting the economic bar to marriage, *Demography* 55(6): 2321–2343. doi:10.1007/s13524-018-0726-z

Graham, James M., Yenling J. Liu, and Jennifer L. Jeziorski. 2006. The dyadic adjustment scale: A reliability generalization meta-analysis, *Journal of Marriage and Family* 68(3): 701–717. doi:10.1111/j.1741-3737.2006.00284.x

Hardie, Jessica Halliday, and Amy Lucas. 2010. Economic factors and relationship quality among young couples: Comparing cohabitation and marriage, *Journal of Marriage and Family* 72(5): 1141–1154. doi:10.1111/j.1741-3737.2010.00755.x

Heuveline, Patrick, and Jeffrey M. Timberlake. 2004. The role of cohabitation in family formation: The United States in comparative perspective, *Journal of Marriage and Family* 66(5): 1214–1230. doi:10.1111/j.0022-2445.2004.00088.x

Hiekel, Nicole, Aart C. Liefbroer, and Anne-Rigt Poortman. 2014. Understanding diversity in the meaning of cohabitation across Europe, *European Journal of Population* 30(4): 391–410. doi:10.1007/s10680-014-9321-1

Hiekel, Nicole, Aart C. Liefbroer, and Anne-Rigt Poortman. 2015. Marriage and separation risks among German cohabiters: Differences between types of cohabiter, *Population Studies* 69(2): 237–251. doi:10.1080/00324728.2015.1037334

Ishizuka, Patrick. 2018. The economic foundations of cohabiting couples' union transitions, *Demography* 55 (2): 535–557. doi:10.1007/s13524-018-0651-1

James, Spencer L. 2015. Variation in trajectories of women's marital quality, *Social Science Research* 49: 16–30. doi:10.1016/j.ssresearch.2014.07.010

Kalmijn, Matthijs. 2013. The educational gradient in marriage: A comparison of 25 European countries, *Demography* 50(4): 1499–1520. doi:10.1007/s13524-013-0229-x

Karney, Benjamin R., and Thomas N. Bradbury. 2020. Research on marital satisfaction and stability in the 2010s: Challenging conventional wisdom, *Journal of Marriage and Family* 82(1): 100–116. doi:10.1111/jomf.12635

Kennedy, Sheela, and Larry Bumpass. 2008. Cohabitation and children's living arrangements: New estimates from the United States, *Demographic Research* 19: 1663. doi:10.4054/DemRes.2008.19.47

Lavner, Justin A., and Thomas N. Bradbury. 2010. Patterns of change in marital satisfaction over the newlywed years, *Journal of Marriage and Family* 72(5): 1171–1187. doi:10.1111/j.1741-3737.2010.00757.x

Le, Benjamin, Natalie L. Dove, Christopher R. Agnew, Miriam S. Korn, and Amelia A. Mutso. 2010. Predicting nonmarital romantic relationship dissolution: A meta-analytic synthesis, *Personal Relationships* 17(3): 377–390. doi:10.1111/j.1475-6811.2010.01285.x

McLanahan, Sara. 2004. Diverging destinies: How children are faring under the Second Demographic Transition, *Demography* 41(4): 607–627. doi:10.1353/dem.2004.0033

McLanahan, Sara, and Christine Percheski. 2008. Family structure and the reproduction of inequalities, *Annual Review of Sociology* 34: 257–276. doi:10.1146/annurev.soc.34.040507.134549

Mikolai, Julia, Brienna Perelli-Harris, and Ann Berrington. 2018. The role of education in the intersection of partnership transitions and motherhood in Europe and the United States, *Demographic Research* 39: 753–794. doi:10.4054/DemRes.2018.39.27

Moors, Guy, and Eva Bernhardt. 2009. Splitting up or getting married? Competing risk analysis of transitions among cohabiting couples in Sweden, *Acta Sociologica* 52(3): 227–247. doi:10.1177/0001699309339800

Musick, Kelly, and Katherine Michelmore. 2018. Cross-national comparisons of union stability in cohabiting and married families with children, *Demography* 55 (4): 1389–1421. doi:10.1007/s13524-018-0683-6

Office for National Statistics. 2018. *Families and households in the UK*. Available: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/bulletins/familiesandhouseholds/2018.

Perelli-Harris, Brienna, and Laura Bernardi. 2015. Exploring social norms around cohabitation: The life course, individualization, and culture: Introduction to special collection: "Focus on partnerships: Discourses on cohabitation and marriage throughout Europe and Australia", *Demographic Research* 33: 701–732. doi:10.4054/DemRes.2015.33.25

Perelli-Harris, Brienna, and Nora Sánchez Gassen. 2012. How similar are cohabitation and marriage? Legal approaches to cohabitation across Western Europe, *Population and Development Review* 38(3): 435–467. doi:10.1111/j.1728-4457.2012.00511.x

Perelli-Harris, Brienna, and Mark Lyons-Amos. 2016. Partnership patterns in the United States and across Europe: The role of education and country context, *Social Forces* 95(1): 251–281. doi:10.1093/sf/sow054

Perelli-Harris, Brienna, Wendy Sigle-Rushton, Trude Lappegård, Renske Keizer, Caroline Berghammer, and Michaela Kreyenfeld. 2010. The educational gradient of nonmarital childbearing in Europe, *Population and Development Review* 36(4): 775–801. doi:10.1111/j.1728-4457.2010.00357.x

Perelli-Harris, Brienna, Michaela Kreyenfeld, Wendy Sigle-Rushton, Renske Keizer, Trude Lappegård, Aiva Jasilioniene, Caroline Berghammer, and Paola Di Giulio. 2012. Changes in union status during the transition to parenthood in eleven European countries, 1970s to early 2000s, *Population Studies* 66(2): 167–182. doi:10.1080/00324728.2012.673004

Perelli-Harris, Brienna, Ann Berrington, Caroline Berghammer, Renske Keizer, Trude Lappegård, Monika Mynarska, Ann Evans, et al. 2014. Towards a new understanding of cohabitation: Insights from focus group research across Europe and Australia, *Demographic Research* 31(34): 1043–1078. doi:10.4054/DemRes.2014.31.34

Perelli-Harris, Brienna, Stefanie Hoherz, Trude Lappegård, and Ann Evans. 2019. Mind the "happiness" gap: The relationship between cohabitation, marriage, and subjective well-being in the United Kingdom, Australia, Germany, and Norway, *Demography* 56(4): 1219–1246. doi:10.1007/s13524-019-00792-4

Rijken, Arieke J., and Aart C. Liefbroer. 2009. The influence of partner relationship quality on fertility, *European Journal of Population / Revue Européenne de Démographie* 25(1): 27–44. doi:10.1007/s10680-008-9156-8

Rijken, Arieke J., and Elizabeth Thomson. 2011. Partners' relationship quality and childbearing, *Social Science Research* 40(2): 485–497. doi:10.1016/j.ssresearch.2010.10.001

Robles, Theodore F., Richard B. Slatcher, Joseph M. Trombello, and Meghan M. McGinn. 2014. Marital quality and health: A meta-analytic review, *Psychological Bulletin* 140(1): 140. doi:10.1037/a0031859

Sassler, Sharon, and Daniel T. Lichter. 2020. Cohabitation and marriage: Complexity and diversity in union-formation patterns, *Journal of Marriage and Family* 82 (1): 35–61. doi:10.1111/jomf.12617

Sassler, Sharon, and Amanda Miller. 2017. *Cohabitation Nation: Gender, Class, and the Remaking of Relationships*. Oakland, CA: University of California Press.

Schneider, Daniel, Kristen Harknett, and Matthew Stimpson. 2019. Job quality and the educational gradient in entry into marriage and cohabitation, *Demography* 56(2): 451–476. doi:10.1007/s13524-018-0749-5

Smock, Pamela J., Wendy D. Manning, and Meredith Porter. 2005. "Everything's there except money": How money shapes decisions to marry among cohabitors, *Journal of Marriage and Family* 67(3): 680–696. doi:10.1111/j.1741-3737.2005.00162.x

Spanier, Graham B. 1976. Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads, *Journal of Marriage and the Family* 38: 15–28. doi:10.2307/350547

Stanley, Scott M., Galena Kline Rhoades, and Howard J. Markman. 2006. Sliding versus deciding: Inertia and the premarital cohabitation effect, *Family Relations* 55(4): 499–509. doi:10.1111/j.1741-3729.2006.00418.x

Thomson, Elizabeth. 2014. Family complexity in Europe, *The Annals of the American Academy of Political and Social Science* 654(1): 245–258. doi:10.1177/0002716214531384

Umberson, Debra, and Jennifer Karas Montez. 2010. Social relationships and health: A flashpoint for health policy, *Journal of Health and Social Behavior* 51(1_suppl): S54–S66. doi:10.1177/0022146510383501

University of Essex. 2020. *Understanding society: Marital and cohabitation histories, 1991–2015*. Available: www.understandingsociety.ac.uk.

University of Essex, Institute for Social and Economic Research, NatCen Social Research, and Kantar Public. 2019. *Understanding Society: Waves 1-9, 2009-2018 and Harmonised BHPS: Waves 1-18, 1991-2009* (12th edn.: UK Data Service).

Waller, Maureen R., and Sara S. McLanahan. 2005. "His" and "Her" marriage expectations: Determinants and

consequences, *Journal of Marriage and Family* 67(1): 53–67. doi:10.1111/j.0022-2445.2005.00005.x

Wellings, Kaye, Kyle G. Jones, Catherine H. Mercer, Clare Tanton, Soazig Clifton, Jessica Datta, Andrew J. Copas, et al. 2013. The prevalence of unplanned pregnancy and associated factors in Britain: Findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3), *The Lancet* 382(9907): 1807–1816. doi:10.1016/S0140-6736(13)62071-1

Wiik, Kenneth Aarskaug, Eva Bernhardt, and Turid Noack. 2009. A study of commitment and relationship quality in Sweden and Norway, *Journal of Marriage and Family* 71(3): 465–477. doi:10.1111/j.1741-3737.2009.00613.x

Wiik, Kenneth Aarskaug, Renske Keizer, and Trude Lappegård. 2012. Relationship quality in marital and cohabiting unions across Europe, *Journal of Marriage and Family* 74(3): 389–398. doi:10.1111/j.1741-3737.2012.00967.x