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Moving on and moving out: The implications of socio-spatial mobility for union stability

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Abstract

This study explores the role of family migration in the life course of couples. We ask whether internal migration and residential mobility for contemporary dual-earner couples has negative consequences for the stability of their partnership and investigate whether any negative changes in partners' employment characteristics following family migration are associated with higher risks of dissolution of their unions. We use the British Household Panel Survey, which provides nationally representative data on households and couples, over the period of 18 years and has a wide range of potentially important prospective and retrospective information on households and individuals. We undertake a duration analysis of union dissolution by modelling the hazard of union dissolution. The findings show that union stability is affected by spatial movesgeographically mobile couples are at higher risk of union dissolution. Long-distance internal migration and frequent moves increase the risk, whereas short-distance residential moves are associated with greater union stability. Overall, we found that the negative effect of family migration on union stability is relatively small and decreases over the time. Similarly, positive effects that some types of family migration might have on union stability also tend to decrease over the time. We found that the risk of union dissolution is better explained by partners' socio-demographic characteristics (age and level of education), and by the characteristics of their union such as its type and duration. Union stability is also associated with the employment and occupational characteristics of both partners, as well as with changes in these characteristics. Negative changes in occupational position or employment status of either partner, but especially of the male partner, increase the risk of union dissolution. However, the effect of changes in the employment characteristics of each partner on the union stability is relatively small and tend to disappear over the time. We found some evidence that the impact of the negative changes in employment characteristics of geographically mobile couples postmigration on the stability of their union is mediated by the gender of the partner who experienced these changes. Negative changes in the employment status of the male partner postmigration slightly increase the risk of union dissolution, whereas negative changes in female partner's employment postmigration slightly decrease that risk. We found that the risk to the union's stability is highest immediately

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after the adverse changes in the male partner employment status happen, but that the risk reduces with the passage of time.

KEYWORDS

BHPS, family life, longitudinal analysis, socio-economic mobility, spatial mobility

1 | INTRODUCTION

Living arrangements are influenced by social and demographic trends and changes in social norms related to marriage, childbearing, and women's employment (Andersson, 2002; Bures, 2009). As a result, family life has been reshaped, with cohabitation becoming more usual aspect (Beaujouan & Ní Bhrolcháin, 2011) and union dissolution (i.e., a split for an unmarried couple, and a separation or a divorce for a married couple) becoming a common demographic feature in many Western countries including the UK (e.g., Boyle, Kulu, Cooke, Gayle, & Mulder, 2008; Wu & Penning, 2017). The factors that are associated with union dissolution are numerous and include increased diversity within populations. Contemporary partners are bringing to the union different attitudes and expectations about family life, preferences about the type of union, different perceptions about gender roles, and differences in socio-economic status, and in educational characteristics. Contemporary partners in a union often have different prior cohabitation/marital histories, children from previous unions, etc., and these previous experiences influence union stability (e.g., Wu & Penning, 2017; Feijten & van Ham, 2013; Goldscheider, Kaufman, & Sassler, 2009; Boyle, et al., 2008; Reczek, Elliott, & Umberson, 2009; Lehrer & Chiswick, 1993; Morgan & Rindfuss, 1985; Glick, 1977, 1988).

This increased diversity in the experiences of partners in a union is linked to increased socio-economic and geographical mobility. It can be argued that both types of mobility have an increasing impact on family life, and on union stability. Yet the role of family migration on the subsequent stability of a union, which is the focus of the present study, is largely underexplored. Although there are several studies that examine the effect of family life-course events such as union formation and union dissolution on subsequent residential mobility (e.g., Asher & Bloom, 1982; Clark, 2013; Cooke, Mulder, & Thomas, 2016; Feijten & van Ham, 2013; Flowerdew & Al-Hamad, 2004; Wu & Penning, 2017), only a few studies have considered the potential impact of family migration on the subsequent union stability, and even fewer studies have attempted to model this impact using life-history data (e.g., Boyle, et al., 2008; Frank & Wildsmith, 2005; Mincer, 1978; Muszynska & Kulu, 2007; Trovato, 1986). Furthermore, although many studies have looked into the relationship between spatial and socio-economic mobility of couples (e.g., Clark & Morrison, 2012; Clark, van Ham, & Coulter, 2014; Clark & Withers, 2002; Fielding, 1996; Savage, 1988; van Ham & Manley, 2014), there are no previous studies that attempt to disentangle the interaction between geographic mobility, social-economic mobility (both upwards and downwards), and the stability of cohabitation/marriage unions, which is the second focus of the present study.

In this paper, we examine the impact of family migration for British married and cohabitating couples, along with the accompanying changes in employment status and occupational position for both partners, on the stability of their unions using longitudinal data for years 1991–2008 from the British Household Panel Survey (BHPS).

2 | MIGRATION, EMPLOYMENT, AND UNION STABILITY

2.1 | Family migration and union stability

Union dissolution is a widespread demographic feature in the Western societies. Studies show that union dissolution has become an increasingly common experience (Milan, Wong, & Ve'zina, 2014). Studies also show that life-course transitions such as dissolution of a union are dependent upon and shaped by previous life-course transitions, including the timing and sequencing of such events as marriage, childbirth, employment and retirement, (e.g., Wu & Penning, 2017).

Among the factors that affect union stability is the type of union: married couple are less likely to separate than cohabitating couples (Hoem & Hoem, 1992). A higher number of previous unions is positively correlated with union instability (e.g., Martin & Bumpass, 1989; Reczek, et al., 2009). Duration of the union and the presence of younger children are also consequential for union stability: longer unions are more likely to survive and couples with young children are more likely to stay together (Manning, 2004; Waite & Lillard, 1991; but also see Chan & Halpin, 2003, who found evidence to the contrary in the UK). Age at union formation is negatively correlated with union dissolution (Chan & Halpin, 2003). Values and attitudes, in particular the gender role attitudes of the partners in a union, are important and research evidence shows that unions where women hold more egalitarian views are more likely to dissolve (Cooke, 2008; de Graff & Kalmijn, 2006; Lye & Biblarz, 1993; but see Bianchi, Milkie, Sayer, & Robinson, 2000).

Educational and employment characteristics, as well as the differences between partners in these characteristics, were also identified as consequential for union stability. Increased educational level, labour market participation, and occupational attainment of women are generally believed to be contributors to union instability through reduced women's financial dependence on their partners (Becker, 1974; Mincer, 1978; Chan & Halpin, 2003). Yet the evidence regarding the relationship between the level of education of female partners and the stability of their unions is sometime contradictory. Although there is some evidence that separation has become more common in relationships where the woman is better educated, there is also research evidence that better educated couples are less likely to divorce (e.g., Morgan & Rindfuss, 1985).

There is an extensive literature showing that migration can be a very stressful event that puts a strain on a relationship. Even short distance

changes in residence have been found to influence psychological wellbeing and has been linked to depression (Magdol, 2002; Makowsky, Cook, Berger, & Powell, 1988; McCollum, 1990; Meyer, 1987; Weissman & Paykel, 1972). It seems reasonable to expect, therefore, that migration may affect union stability and lead to union dissolution.

Family migration often brings changes in the partners' employment characteristics, such as labour market participation, occupational standings, and wages. Both partners in a couple may experience negative changes in their employment characteristics postmigration. Studies show that the unemployment rates of married male migrants are lower at the point of destination than at the point of origin, but that their unemployment rates at the destination point are higher than those of nonmigrant males at the destination (Mincer, 1978). Yet studies also show that family spatial moves, and especially the male partner's employment-related migration more often benefits the male spouse at the expense of the female spouse than the other way around (Bird & Bird, 1985). Shortly after migration, female migrants are more likely to be economically inactive or unemployed than nonmigrant women with similar characteristics (Boyle, Cooke, Halfacree, & Smith, 1999a,b; Boyle, Cooke, Halfacree, & Smith, 2001; Gayle, Boyle, Flowerdew, & Cullis, 2008; Kulu & Milewski, 2007; Shihadeh, 1991). When employed, female migrants tend to be underemployed, having lower incomes and working shorter hours, for example, than non-migrant women with similar characteristics (e.g., Boyle, et al., 2003; Boyle, et al., 1999a; Boyle, et al., 2001; Cooke, 2001, 2004; Cooke & Bailey, 1999; Clark & Withers, 2002; Withers & Clark, 2006). The female spouse's potential personal losses from the move are smaller if she was not employed prior to migration or was employed in a job with a good degree of spatial transferability (Bird & Bird, 1985).

Negative changes in employment status and characteristics (such as exist from employment, reduced working hours, and worsened occupational status) are linked to union stability. Although unemployment for either partner might have a negative impact on the quality of marital relationships, unemployment of the male partner has the potential to increase the family's financial hardship to a greater extent than the female partner's unemployment and has been found to have a negative impact on family stability (e.g., Bailey, Blake, & Cooke, 2004; Boyle, et al., 2003; Broman, Hamilton, & Hoffman, 1990; Cooke, 2001, 2004; Gayle, et al., 2008; Morrison & Lichter, 1988; Peterson, Steinmaiz, & Sussman, 1999).

2.2 | Tied spouses and tied migrants: Gendered impact of spatial mobility on socio-economic outcomes of the partners in a family union

Migration is often undertaken to enhance individuals' socio-economic outcomes. In accordance with the economic model of family migration (Bergstrom, 1996; DaVanzo, 1976; Jacobsen & Levin, 2000; Sjaastad, 1962), families move when the perceived gains of moving surpass the costs. Yet the impact of migration on the socio-economic outcomes of partners in union might be different for the initiator of migration and for their partner. Mincer (1978) a was among the first to analyse migration taking family context into consideration. He explored the effect of family ties on the probability of migration and on consequent changes in employment and earnings of family members, as well as on family integrity itself. He examined the phenomena of "tied moving" and "tied staying" and defined "tied" persons in the family as those whose gains from migration were dominated by gains or losses of the spouse (ibid.) consequently describing potential losses from migration experiences by the "tied" partner as "net personal loss" versus "net family gain" (ibid.).

Historically, in Britain, female employment was seen as subsidiary (Kelan, 2008). Due to lower earning power and discontinuous labour force participation, women were more likely to be "tied" spouses and "tied" movers than men (Shihadeh, 1991; Bird & Bird, 1985; Boyle & Halfacree, 1999). It was taken for granted that priority would be given to employment opportunities for the male partner and employment-related spatial moves were almost always associated with the male partner's career. Of all the dramatic changes in patterns of employment in Western industrialised economies over the past 50 years, among the most notable has been the significant rise in female labour market participation and the increasing heterogeneity of female work experiences (Fraser, 1994; Lewis, 2001). The contemporary British labour market is characterised by dual-earner couples, where both partners engage in employment (Bailey et al., 2004; Bardasi & Gornick, 2003; Bures, 2009; Gornick & Meyers, 2004).

Although male partner's employment continued to play an important role in migration decisions, occupational characteristics of women started to play an increasing role in family migration decisions (Smits, et al., 2004). In dual-earner couples, a decision to move is shaped by considerations of losses or gains for each of the partners, and career-related and earning-related variables of both partners at current location affect their migration decision (Lichter, 1982). Clark and Huang (2006) demonstrated that economic gains from moving for dual-earning couples are modest and come when women enter the labour market after migration. Female partners with higher levels of education, higher occupational status, or higher contributions to family earnings are those who stand to lose most as the result of family migration (Lichter, 1980, 1983, 1988; Morrison & Lichter, 1988).

Indeed, dual-earning couples are less likely to move than couples where only one partner is employed (e.g., Shields & Shields, 1993; Clark & Huang, 2006). Recent research shows that "tied migration" is becoming relatively rare and not limited just to women: rates of tied migration are similar for men and women (e.g., Cooke, 2013). Cooke (2013) analysed not only those who moved but also those who would not have moved had they been single (tied migrants) and those who did not move but would have moved had they been single ("tied" stayers). He concluded that "tied staying" is both more common than tied migration and equally experienced by men and women. In modern dual-earning/dual-career couples, there is no longer an obvious "lead migrant" and a "trailing spouse" (ibid.).

When employment opportunities arise that require migration, it is reasonable to assume that the decision to migrate will be negotiated rather than being automatically structured by the couple's established gender roles. Cooke (2008) demonstrated the importance of the gender role beliefs of partners in a union in the relationship between the family migration decision and the female partner's employment status. Thus, families have a lower probability of moving when the wife is employed and the couple shares egalitarian gender role beliefs. An "egalitarian" couple has a higher probability of moving when the wife is unemployed and wants to work. If a couple is not "egalitarian" then according to Clark (ibid.), the migration decision is dominated by the husband's labour market characteristics.

Given these recent trends of an increase in the share of dualearning couples, and the rise of female employment, it is particularly 4 of 20 WILEY

SHAPIRA ET AL.

important to understand the joint impact of family migration and the accompanying changes in the labour market characteristics experienced by either/both of partners in a union, on the stability of that union and on the likelihood of union dissolution.

2.3 | Relating geographical and social mobility to union stability

The effect of spatial mobility on family life goes beyond the stress that partners might experiences due to negative changes in employment characteristics of one or both of the partners. Even if spatial mobility brings positive changes in employment characteristics, the partners might still find the situation challenging. Thus, Tzeng and Mare (1995) found that positive changes in wives' socio-economic and labour force characteristics over the course of their marriages increase the odds of marital disruption. This negative effect of upward social mobility on family stability is not very surprising. After all, both geographic and social mobility bring change and uncertainty, might sever existing ties with familiar social and/physical surroundings, and lead to isolation and stress, hence, affecting various aspect of the family life.

Indeed, social and geographic mobility have lots in common. First of all, these two types of mobility are often conflated by participants: social mobility may necessitate spatial mobility on varying scales (daily, permanent, etc.). Social mobility might be linked directly to geographical mobility, so that those individuals who are best able to move geographically are also most likely to achieve intragenerational social mobility (i.e., within the course of their working life). Very often to become socially mobile one first needs to become spatially mobile (Clark & Morrison, 2012; Clark et al., 2014; Clark & Withers, 2002; Fielding, 1996; Savage, 1988). Studies show that spatially mobile individuals are more likely to be employed, and/or to live in a better neighbourhood postmigration than spatially immobile individuals (Clark & Morrison, 2012; Clark & Withers, 2002; Clark et al., 2014).

Because spatial and socio-economic mobilities have many similarities in terms of their consequences for individuals involved (Clark et al., 2014), it is reasonable to suggest that the study of the relationship between spatial mobility and union stability would benefit if information about related changes in labour market participation, employment and earnings is also considered. Moreover, one can expect, that theories and hypotheses that relate between geographical mobility and family life would also be relevant for studying the relationship between the latter and social mobility (ibid.).

Based on the similarities between special and social mobility outlined above, the following hypotheses can be drawn regarding the impact of either/both of these mobilities on family life:

The selectivity hypothesis suggests that geographically and/or socially mobile people are less likely to establish family or partnership unions because they are preselected according to their socio-demographic and characteristics—as a rule such individuals are often younger, better educated, more individualistic, career oriented, etc. (e.g., Bartram, Poros, & Monforte, 2014; Harris & Todaro, 1970; Mincer, 1978). A similar line of reasoning could be used to suggest that not only do socially and/or spatially mobile individuals postpone the union formation, but once in a union they might more readily opt for union dissolution when problems and tensions arise in the union (Allan & Hawkins, 2017). Therefore, according to the selectivity of migration hypothesis geographically and socio-economically mobile couples are more likely to exit the existing union than nonmobile couples.

Similarly, to the selectivity of migration hypothesis, the *socialisation hypothesis* suggests that mobile people are less likely to establish family or partnership unions and are also less likely to remain in such unions compared to nonmobile individuals. This hypothesis relies on the premise that geographically and socially mobile people would move away from physical and social environment of their origin, with particular social norms, which may encourage early union formation and discourage separation (Kulu, 2005). Geographically and socially mobile individuals become exposed to new environments, where it might be more common to stay single or where separation is more socially acceptable. This socialisation hypothesis is matched well with the *adaptation hypothesis*, which suggests that as time goes by, the behaviour of mobile individuals increasingly comes to resemble the dominant behaviour at the destination (ibid.).

To the contrary, In contrast *the isolation hypothesis* suggests that any move between social/physical environments forces individuals into a new, potentially hostile environment, where they are poorly integrated and do not receive support from former networks. Therefore, increased bonds in the family might be viewed as a coping strategy in a situation of social isolation, with mobile individuals becoming more oriented towards their families, and partners becoming more reliant on each other (Andersson, 2002; Kasarda & Billy, 1985; Mulder & Malmberg, 2014; Mulder & Wagner, 2001). Thus, according to the isolation hypothesis, socially and/or geographically mobile couples are more likely to stay together after migration than nonmobile couples.

2.4 | Aims of this study and the research hypotheses

This study aims to address a gap in the research evidence and to contribute to a better understanding of the relationship between family migration and union stability. We investigate the impact of family migration and (related) changes in employment and occupation statuses of both partners on the union stability of married and cohabitating couples in Britain during the period 1991–2008.

2.4.1 | Research question

The overarching research question is "does family migration and subsequent changes in employment characteristic of the partners in a union increase the risk of union dissolution and, if so, under what circumstances?"

2.4.2 | Research hypotheses

The following research hypothesis are tested in order to answer this research question:

H1. The selectivity of migration hypothesis leads to the expectation that spatially mobile couples will have higher rates of union dissolution than nonmobile couples. The selectivity hypothesis also suggests that couples that move frequently may have the very characteristics that correlate negatively with union stability (e.g.,

dissatisfaction with the current state of affair, individualism, and orientation towards professional success), and therefore couples that undertake repeated migrations are more likely to experience union dissolution.

H2. The socialisation hypothesis suggests that union dissolution rates would be highest soon after the couple moved to new, unknown surroundings, and needed to adjust to these surroundings. However, according to the adaptation hypothesis, with the passage of time after migration, the union dissolution rates of "movers" would become similar to those of nonmovers in their locality of destination. Based on the socialisation hypothesis, one can also expect that long-distance migration would bring a greater disruption from habitual surroundings and hence increase the risk of union dissolution compared to short-distance migration.

H3. "Tied moving" hypothesis: The existing evidence on "tied" movers and on the differential impact of family migration on the socio-economic outcomes of the male and female partners in a union suggests that the relationship between the change in employment characteristics postmigration and union stability would also be differentiated by (a) the gender of the partner who is experiencing these changes and (b) the initiator of the migration.

H3.1. Couples with "tied" movers (i.e., couples where one partner moved for employment reasons associated with the other partner) would be less stable and more at risk of union dissolution than couples that moved for a common aim (either employment-related or other, such as moving for accommodation reasons).

H3.2. It could be expected that negative changes in employment characteristics post-migration of the "tied" mover would be less consequential for union stability than the negative changes in employment characteristics of the partner who initiated the migration.

H4. Existing research on the impact of family migration on the socio-economic outcomes of partners in a couple suggests that the impact of family migration on union stability is heightened if one of the partners or both partners experience changes in their employment and occupational characteristics post-migration. However, we expect that the effect of the negative changes in employment characteristics of partners on union stability will be gendered.

H4.1. Because male partners are more likely to initiate a move for a job-related reasons we expect that negative changes in employment characteristics of male partners postmigration will be linked to a higher risk of union dissolution than negative changes in employment characteristics of female partners post-migration.

H4.2. Because female partners are more likely lose local ties and support and friendship networks after moving,

they are more likely to suffer from social isolation in the new place especially of they become unemployed or economically inactive. Therefore, we expect that if female partner employment characteristics worsen after a move, this would encourage female partners to hold on to the partnership and thus reduce the odds of union dissolution.

The study tests these hypotheses, controlling for other factors that are expected to influence union dissolution, such as individual characteristics of the partners (age, level of education, employment status and occupation, attitudes to gender roles, etc.) and characteristics of their unions (such as the type of the union, the length of the union, the number of previous unions, the presence and age of the children, and the gender role beliefs of the partners in the union).

We use longitudinal data to study the effects of family migration, including both internal, long-distance migration and short-distance residential moves, on union dissolution (defined as divorce or separation of married couples and a split of cohabitating couples) and examine the joint effects of family migration and changes in employment status and occupational characteristics of both members postmigration, on the stability of the couple's union.

3 | METHODOLOGY

3.1 | Survey data

The BHPS is a large-scale panel study which was carried out between 1991 and 2008 (see Taylor, Brice, Buck, & Prentice-Lane, 2010) and was then subsumed into Understanding Society—The UK Household Longitudinal Study. The BHPS dataset is especially well suited to the current analyses because it provides a nationally representative sample and allows tracking of the residential moves of households and examination of the short-term and long-term consequences of the moves on family stability over a long period (up to 18 years).

The structure of the BHPS enables the linking of prospective data to retrospective data on partnership, employment, and migration histories. The core data collection instrument in the BHPS is an interview with all adult members of the household. The design of the BHPS facilitates the linking of individual-level information for the head of household and their spouse and thus the creation of records for couples, which was done in this study. Due to the "following rules" of the survey, adults continue to be tracked even after they leave the household. This is especially critical for the study of union dissolution.

We created a specialised dataset from the BHPS, which allows the joint investigation of partnership history, the couple's migration history and the employment history of both partners. Our subsample are couples (females aged 16–64 and their spouses living in Britain between 1991 and 2008). We follow couples in unions (marriage or cohabitation) until either the union dissolves or they are censored at the end of the study period. The respondents were asked about the date their union was dissolved. For married couples both dates

6 of 20 WILEY

of separation and dates of divorce are recorded; we used the date of the separation rather than divorce date as the end of the union.

To create records for couples, we selected into our sample individuals from the BHPS who lived with a partner at any time during the lifetime of the BHPS (which included both cohabitating and married couples). We selected female respondents (aged 16–64) first, and to every female respondent record, we attached information about her partner/s. Respondents who never had a partner during the lifetime of the BHPS were excluded. For those female respondents who had several cohabiting partners during the lifetime of the BHPS, we created a record, which contained information about their partners in the current or the most recent union. The final dataset consists of 2,342 couples; there are 24,166 union-year observations, and on average 1,375 observations per wave. The variables used in this study are described in Table 1.

The focus of the study is spatial mobility and employment and occupational changes and union dissolution of married and cohabitation couples. The outcome variable is union dissolution.

Family migration was defined as change of address for both partners in the couple, between any two consecutive annual BHPS household interviews. If such change took place, the respondents were asked about the date of their move, and about the distance of the move and the reasons for the move. Using this information, we constructed a migration history dataset from the BHPS data for waves 1–18 (UK Data Archive Study Number 5151) for each respondent before combining the migration histories of the male and the female partners into a single record.

To exclude possibility that only one partner moved spatially whereas the other partner stayed behind, we defined spatially mobile couples as those couples where both partners were movers and belonged to the same household after the move.

Knowing the dates of spatial moves and the dates of union dissolutions was crucial for the aims of our study because this allowed us to establish the sequence of the events and to model the causal relationship between family migration and union dissolution.

The BHPS contains suitable measures of family and home life. The records for each couple were augmented with data from the BHPS Consolidated Marital Cohabitation and Fertility Histories dataset (UK Data Archive Study Number 5629) for the female partners, and other relevant information about each partner's date of birth, ethnicity, religion, education, employment, and occupational characteristics.

The BHPS contains appropriate information on employment, although it does not record the date when changes in employment or occupational characteristics of the respondents happen. These changes can be established through a comparison of the employment and occupational characteristics of respondents between any two consecutive BHPS waves. Therefore, although we are able to establish whether these changes happened during the same year as a spatial move, it is not possible to establish whether changes in the employment and occupational characteristics of either partner occurred prior to, or after, the family migration event. Without an established a time sequence between these event we cannot claim that changes in the movers' employment and occupational characteristics were caused by the move because we cannot exclude the possibility that these changes took place prior to the move and perhaps contributed to the decision about family migration. $^{1} \label{eq:change}$

Therefore, although our main focus is on the way spatial moves impact union stability and union dissolution, we also consider how overall changes in employment and occupational characteristics affect union stability and then examine the combined effect of the spatial move and changes in the employment and occupational status of each partner postmigration on the stability of the union.

3.2 | Analytical method

We estimated Cox proportional hazard models for survival analysis of couples' unions. The method does not assume any particular distribution within the independent variables, but it does assume that the effects of the independent variables on survival are constant over time and are additive on one scale (Cox & Oakes, 1984; Singer & Willett, 1993).

The dependent variable in the model was the hazard of union dissolution for a couple. Independent variables captured (a) the impact of the baseline (i.e., the duration of the union over the years of the BHPS); (b) the effects of a time-varying variable that is a continuous function of the duration of the BHPS (e.g., the age of the partners, number of previous migrations/moves, time since the last migration/ move, the length of the union in months from the time it started, and the age of the couple's children); (c) the values of a time-constant variable (e.g., gender, race, religion age when union started, age difference in the couple, and attitudes to gender roles); and (d) the effects of time-varying variables whose values can change only at discrete times (e.g., level of education, employment status and occupational status and the changes in those). To test the proportional hazard assumption, we fitted models where some covariates (e.g., distance of migration, reasons for migration, and changes in both partners' employment and occupational characteristics) have both time-invariant and time-variant components (i.e., the main effect and the interaction with the time variable; Statacorp 11 2009; Longhi & Nandi, 2015; Boyle, Feng, & Gayle, 2009). To control for the clustering of events within individuals and possible unobserved determinants of union dissolution, we fitted our models with robust standard errors.

4 | RESULTS

4.1 | Descriptive statistics

There was only one same-sex couple in the dataset, therefore, we decided not to differentiate between heterosexual and same-sex couples. Over the lifetime of the unions, the average age of female respondents is 42 years whereas the average age of their partners is 46 years. Twenty-six percent of female respondents are older than their partners, while 62% of them are younger than their partners. Twenty-eight percent of the female respondents and 24% of the male

¹For example, a male partner who lost his job or/and accepted a lower pay/ a worse position at his current location might decide to move to a locality where housing is known to be more affordable, whereas for the female partner losing her job in the locality of the couple's current residence might make it easier to decide to move with her partner as a trailing spouse.

TABLE 1 Descriptive statistics

	Individuals (last episode when union ended or was censored)	Union years (over the lifetime of the union until it ended or was censored)
Union dissolved	11.6% (259)	1.1% (259)
Censored	88.9% (2083)	98.9% (23907)
Number of unions		
1	54.4% (1273)	56.4% (13626)
2	27.2% (638)	27.1% (6558)
More	18.4% (431)	16.5% (3982)
How previous union ended (if any)		
Ended	66.1.8% (1565)	65.4% (15796)
Marriage (continued)	33.2% (777)	34.6% (8370)
Type of the current union		
Marriage	85.7% (2008)	92.2% (22284)
Cohabitation	14.3% (334)	7.8% (1882)
Average number of children (st. d. in parentheses)	1.8 (1.3)	
Age of children ^a		
No children	4% (72)	15% (3173)
Under5	13% (257)	12% (2615)
5-9	12% (237)	15% (3192)
10-14	15% (283)	16% (3293)
15-18	12% (239)	11% (2403)
Over 18	44% (854)	31% (6631)
Partner's sex		
Male	99.6% (2334)	99.4% (24137)
Female	0.4% (9)	0.6% (39)
Female's average age (st. d. in parentheses)		42.3 (10.1)
Partner's average age (st. d. in parentheses)		44.4 (10.9)
Female older than her partner	26.5% (621)	24.0% (5847)
Female vounger than her partner	62.0% (1452)	63.7% (15413)
Age of female at the start of the union		
Under 20	1.5% (36)	
20-29	30,5% (714)	
30-39	31.0% (734)	
40-49	28.0% (661)	
50 and over	8 4% (197)	
Ethnicity		
Female White	93.7% (2194)	94,9% (22932)
Black	1.0% (21)	0.5% (123)
Other	4 1% (97)	4.0% (960)
Partner White	96 7% (2327)	96 5% (23326)
Black	0.6% (15)	0.5% (123)
Other	2.8% (66)	3 1% (758)
Labour force characteristics:	2.070 (00)	0.176 (700)
Female employed		70 5% (17029)
		2.0% (381)
Not in Jahour force		28.0% (6756)
Average Female Cambridge Scale Score		40.0
Partner employed		84.7% (20472)
Unemployed		3.8% (911)
Not in labour force		11.5% (2783)
Average Male Cambridge Scale Score		36.2
Educational qualifications: Female		

^{8 of 20} WILEY

TABLE 1 (Continued)

	Individuals (last episode when union ended or was censored)	Union years (over the lifetime of the union until it ended or was censored)
No qualifications		28.4% (6872)
Secondary qualifications		59.0% (14246)
Degree-level qualifications		12.6% (3046)
Educational qualifications: Male		
No qualifications		23.7% (5719)
Secondary qualifications		62.0% (14990)
Degree-level qualifications		14.3% (3457)
Female has traditional gender role attitudes	11.2% (263)	
Partner has traditional gender role attitudes	16.6% (388)	
Female is a member of a religious group	10.6% (249)	
Partner is a member of a religious group	7.5% (175)	

^aThose for whom the information about the child age was available.

respondents have no educational qualifications, whereas about 13% of female respondents and 14% of male respondents have degree-level academic qualifications. Two percent of the female respondents are unemployed and 28% are economically inactive at some point during the lifetime of the BHPS. By contrast, 4% of male respondents are unemployed, and 12% are outside the labour force. Socio-economic status is measured using the Cambridge Occupational Scale (see Stewart, Prandy, & Blackburn, 1980). The average Cambridge Scale Score² for the female respondents is 40 and 36 for the male respondents.

We investigate a series of background variables that previous studies have indicated are associated with union dissolution. About 11% of female respondents and 17% of the male respondents reported that they held traditional views on gender roles within the family. Only 11% of females and 8% of male said that they were members of a religious group. Ninety-four percent of the females and 97% percent of their partners are self-classified as White British.

4.2 | Dissolution of marriages and cohabitating unions

For our sample of households, union dissolution is relatively rare. Overall, 11.6% of unions were dissolved within the lifetime of the panel (259 out of 2,343), and 86% of couples were married at some point during the panel. This latter figure may initially seem high but is plausible because we are analysing current (or most recent) unions. For a third of couples, their current marriage is a continuation of a previous cohabitation.

A total of 1.5% of female respondents entered their most recent union when under age 20; 30% entered their current union between ages 20 and 29, 31% began their most recent unions between ages 30 and 39, and the remaining 36% entered their current union aged 40 or older.

The average number of children is 1.8 per couple. Over the lifetime of the unions, 15% of couples had no children under 18 years

of age, 12% of couples had children under age 5, 15% had children aged between 5 and 9, 16% had children aged between 10 and 14, and 11% had children aged between 15 and 18 years old.

4.3 | Migration-related variables

The survey collected information on the date of the migration, reasons for the migration, and the distance of the migration. We distinguish between short-distance (or residential) moves (under 30 miles) and long-distance migration within the UK (30 plus miles) and constructed time-changing variables for the number of previous migrations and for the length of time since the last migration. The migration-related variables are presented in Table 2.

There are 1,878 migration events within the lifetime of the panel (i.e., 24,166 union years). Sixty-two percent of geographically mobile couples moved only once, 24% moved twice, and the rest of the migrants moved three or more times. Among spatially mobile couples, 28.2 miles was the average distance of a move. Only 22% of couples moved 30 miles or more.

4.4 | Reasons for migration

In the BHPS, respondents were asked to report their reasons for moving (postmigration) and were able to give more than one reason. It is a challenging task to capture the complexity of the reasons behind family migration, especially when the partners in the couple are asked about reasons post-migration. It is possible that reasons a move given by "movers" give postmigration (as in the BHPS) are slightly different from those they used in their decision-making process about migration. Yet we have no reasons to believe that the reasons given by the movers postmigration are uncorrelated with the reasons that influenced their migration decision in the first place.

The reasons for migration provided in the survey can be broadly categorised as (a) migration for accommodation-related reasons (this includes buying, selling, and moving into larger or smaller accommodation), (b) family-related reasons (e.g., moving in with family members or moving closer to relatives), (c) environmental and lifecycle-related reasons (e.g., health, better environment, improved safety, retirement, or academic study), and (d) job-related reasons. If a respondent reported

²The Cambridge Scale is a measure of similarity of lifestyle and therefore generalised advantage/disadvantage. The scale is a continuous measure of social and material advantages. Scale scores represent an occupational unit's relative position within the national order of social interaction and stratification. Separate scales are produced for men and women (Prandy, 1990). It is consistent therefore that the mean for females is higher than the mean for males in this sample.

TABLE 2Migration-related variables

Total number of migration events during the BHPS lifetime	1878
Reasons for moving for migrants ^a :	
Accommodation-related reasons (e.g., purchased new house)	21.3% (400)
Family-related reasons (being closer to one's family)	13.4% (252)
Environment/Life cycle reasons (e.g., better environment, moving out of parental home, retirement)	15.1% (284)
Female partner only mentioned job-related reasons	2.2% (41)
Male partner only mentioned job-related reasons	2.6% (48)
Both partners mentioned job-related reasons	10.6% (199)
Reasons were not specified	21.3% (400)
Long-distance migration(≥30 miles) ^b	22.0% (380)
Total number of migrations	
1	62.4% (1172)
2	24.3% (456)
3	8.5% (160)
4	2.9% (54)
5 or more	1.9% (90)

 $^{\rm a}{\rm See}$ Charts 1 and 2 in Appendix A for detailed reasons for migration. See Charts 2 and 3 in Appendix A for detailed job-related reasons for migration.

 $^{b}\ensuremath{\mathsf{Those}}\xspace$ migrants for whom information about the distance of move was available.

a job-related reason for migration, they were invited to provide further details (see Appendix A). From this information, we constructed a new variable "reasons for moving" by combining responses regarding the reasons for moving for both the female and her partner. Because the focus of our study is on family migration that results from job-related reasons of one or both or the partners, when more than one reason for migration was reported, we gave a priority to job-related reasons for migration.

Similarly, if the female partner reported a nonjob-related reason for moving (e.g., accommodation-related), but her male partner reported a job-related reason (e.g., new job), we classified the couple's reason for moving as being related to the male partner's job, because we assumed that the job-related reason was a paramount reason, and other reasons (e.g. an accommodation-related reason such as moving into a bigger house) was a consequence of the move for the job-related reason.

We attempted to identify the initiator of the move and the "trailing" spouse from the reasons for migration. Yet from the data it was not always possible to understand whether the move was triggered by the male or the female partner's job reasons. Overall, very similar proportions of male and female partners reported the job-related reasons for moving. Overall, job-related reasons for family migration were reported by 288 migrant couples (17% of all migrants). In 240 cases, job-related reasons were stated by female respondents. In 247 cases, job-related reasons for migration were reported by the male partners. For 199 spatially mobile couples (69% of all spatially mobile couples), both partners stated common, job-related, reasons for migration, and in these cases, it was not possible to identify who initiated the move, and therefore, to identify who was the "leading"

migrant, and who was the trailing partner. In 41 cases, only the female partner reported a job-related reason for the move, and therefore this migration can be defined as female-led, whereas in 46 instances, the migration was male-led (i.e., only the male partner reported a jobrelated reason for the move). Due to the ambiguity of the data, we decided not to differentiate between the initiator of migration and the "trailing" partner and instead to differentiate between two categories of couples: first, those that moved for job-related reasons and where both partners stated job-related reasons for migration; second, those where a job-related reason was reported only by one partner.

4.5 | Relationship between reasons for migration and distance of migration

There is a relationship between distance of migration and reasons for migrating. The majority of those who moved for a reason not related to a job (from 78% to 89%), moved within less than 30 miles. Half of the couples who moved for one partner's job also moved a distance of less than 30 miles. Two thirds of long-distance moves were job-related. For short-distance moves there was often a discrepancy between the male and the female partner reasons for the move. Among the couples who moved long distance, in two third of cases both partners reported job-related reasons for the move (see Table 3).

These findings suggest that job-related moves involving long-distance relocation are more often perceived as a joint family venture, whereas in the case of short-distance migration each partner tends to stick to their own reasons and perceived benefits from moving.

4.6 | Dissolution of unions by different characteristics

To investigate the associations between union dissolution and other characteristics of the couple, we examined the survival time of unions over the lifetime of the BHPS.

TABLE 3 Distance of migration by reasons for couple's migration (for those with nonmissing values for distance of migration), row percentages

	Distance of migration			
Reasons for couple's migration:	up to 30 miles %	30 miles or more %	Total	
Accommodation-related	89.3	10.7	654	
Family-related	77.8	22.2	252	
Environment/lifestyle/life cycle-related	84.2	15.8	284	
Other/unspecified reasons	85.8	14.2	246	
Female partner only stated job-related reasons	53.7	46.3	41	
Male partner only stated job-related reasons	52.1	47.9	48	
Both partners stated job-related reasons	33.7	66.3	199	
Total	78 (1344)	22 (380)	1724	

Note. Those migrants for whom information about the distance of move was available.







Kaplan-Meier survival estimates by age of female when union started



Kaplan-Meier survival estimates: Age of youngest child

Kaplan-Meier survival estimates: by member of a religeous group Kaplan-Meier survival estimates by female's highest level of gualifications





Kaplan-Meier Survival Function by female's economic activities Kaplan-Meier survival estimates: by spouses emloyment status



FIGURE 1 Kaplan-Meier survival estimated by characteristics of the respondents

Figure 1 presents plots with Kaplan-Meier survival estimates for unions by type of relationship (rates of union survival are higher for married couples); the age of the female partner at the start of the union (survival rate are better for couples where females were older at the start of the union); age of the youngest child (survival rates are better for couples without children under 18); female respondent's membership of a religious group (couples where the respondent is a member of a religious group have higher survival rates³); and ethnicity (unions where the male partner is White British have slightly higher rates of survival).

The highest level of educational qualifications is also related to union stability, with couples where the female has a degree-level

³A very small share of the respondents is non-White or stated that they are a member of a religious group (see Table 1).

qualification showing higher rates of survival. Further, the labour force characteristics of the partners in the couple are important for union stability, and there is a noticeable difference between couples where the male partner is outside the labour force and couples where the male partner is employed, with the latter couples having higher survival rates.

Figure 2 compares the union survival estimates for migrant and nonmigrant couples (with the former having worse rates of survival overall) and presents plots with union survival rates for different categories of migrants. Over the life of the unions, those who moved for the reasons of one partner's job have worse survival rates compared with the rest of the migrant couples; partners who migrated more than once, and in particular those who moved three or more times, are more likely to split, separate, or divorce than those who did not move or moved only once. Those who moved within 30 miles have better survival rates



FIGURE 2 Kaplan-Meier union survival estimates for migrant and nonmigrant

soon after the family migration; however, as time passes the survival rates of both long- and short-distance mover couples converge.

4.7 | Impact of changes in employment status and characteristics on the stability of unions

During the life of the BHPS, the partners in a couple experienced a number of changes in their employment characteristics. We define as "negative" an adverse change that took place between any two consecutive waves of BHPS in either the main type of economic activity (i.e., a change from employment to either unemployment or economic inactivity) and/or in socio-economic status (measured by a decrease in the Cambridge Scale score). We are interested in the long-term impact of these negative changes on union stability rather than simply the impact of the changes when they occurred. Therefore, we constructed variables which measure not just a single event of negative change in the employment characteristics of either partner in the couple between two consecutive episodes, but instead identified a "negative spell" in employment characteristics. The negative spell could last throughout a sequence of BHPS waves until a positive change happens in the employment characteristics of either partner in the couple (i.e., they return to employment or their socio-economic status increases).

The changes in the employment characteristics of respondents and their partners are summarised in Table 4.

A share of spells when a negative change happens in economic activity status is 6% and 3.5% for men and their partners, respectively. The overall share of negative employment spells is 19% and 10% respectively for women and their partners. The average length of a negative spell in employment status is approximately 3 years for both men and women.

Negative changes in socio-economic status are more frequent than negative changes in economic activity. For women, the share of episodes during which negative socio-economic status changes happened and persisted was 17%, whereas for their partners it was 18%. Overall, the share of such "negative spells" is 36% both for men and for women (with the average length of the negative spell being 2 years).

Table 5 offers some insight into the relationships between gender, negative changes in the employment status, and occupational characteristics of the partners in a couple and migration events. It shows that female migrants have a higher share of negative spells in their economic activity, that is, female migrants tend to spend longer periods of time being unemployed or economically inactive than females that do not move spatially. Both migrant males and migrant females are more likely to have longer share of negative spells in their socio-economic status than nonmigrant males and female. However, the female migrants are more likely to experience negative changes in their socio-economic status than the male migrants. The relationship between migration and negative changes in the employment characteristics/socio-economic status of the partners in a couple are statistically significant both for the female and the male partners.

Figure 3 plots the estimates of union survival between couples who did and did not experience negative changes in employment characteristics. The plots show that (a) union survival rates are better for TABLE 4 Changes in couple's employment characteristics during the life course of the union

12 of 20

	% (number) of spells when negative change in the employment characteristics between two consecutive episodes happened	% (number) of spells when negative change in the employment characteristics between two consecutive episodes once happened, sustained (before improving)	Average number of consecutive 'negative' spells	
Negative changes in main ec	onomic activities (i.e., from employment to	unemployment or economic inactivity): female		
No negative changes	94% (22754)	81% (19582)		
Yes	6% (1412)	19% (4584)	3.2	
Negative changes in main eco	onomic activities (i.e., from employment to	unemployment or economic inactivity): male		
	96.5% (23322)	90% (21642)		
	3.5% (844)	10% (2524)	3.0	
Negative changes in socio-ec	conomic status (decreases in CSS): female			
No negative changes	83.3% (20130)	64% (15575)		
Yes	16.7% (4036)	36% (8591)	2.12	
Negative changes in socio-economic status (decrease in CSS): spouse				
No negative changes	81.7% (19747)	62% (15000)		
Yes	18.3% (4419)	38% (9166)	2.07	

TABLE 5 Changes in employment characteristics/socio-economic status of couples by migration status

		Not migrants (%)	Migrants (%)	Total	
Main economic activ	ity				
Female	No negative change Negative change	84 16	77 23	19,582 4,584	Chi2 = 151 <i>p</i> = 0.000
Spouse	No negative change Negative change	89 11	90 10	21,642 2,524	Chi2 = 11 <i>p</i> = 0.001
Cambridge Scale Sco	ores (CSS)				
Female	No negative change Negative change	67 33	61 39	15,575 8,591	Chi2 = 70 <i>p</i> = 0.000
Spouse	No negative change Negative change	63 37	60 40	15,000 9,166	Chi2 = 25 <i>p</i> = 0.000

those unions where partners were not affected by negative changes in employment characteristics and (b) negative changes in the employment characteristics of male partners have a stronger adverse impact on union survival rates. We also examined the union survival rates of spatially mobile couples who experienced negative changes in employment in relation to reasons for migration. We found that couples who moved for accommodation-related reasons, and where females subsequently experienced negative changes in their employment status, had the lowest survival rates.

4.8 | Modelling the relationship between family migration and union dissolution

We report the results of four Cox proportional hazard regression models. For each independent variable odds ratios and robust standard errors are presented. Model 1 includes only migrationrelated independent variables. As shown in Table 6 (column 1), there is a lower risk of union dissolution for geographically mobile couples who moved within 30 miles, and for couples who moved 5 or more years ago. Those who migrated more than once are at higher risk of union dissolution, with every subsequent move increasing this risk. Reasons for migration that are accommodation-related or job-related and stated by both partners are associated with lower risks of union dissolution, whereas migration for job-related reasons stated by only one of the partners is associated with a higher union dissolution rate, although none of the corresponding odd ratio estimates are statistically significant. Couples who moved for any reason other than job or accommodation are at lower risk of union dissolution. Interestingly, the latter variable also interacts with time (the BHPS waves); that is, it has a statistically significant coefficient for its time-varying component. The coefficient of the time-variant component is greater than one, which means that, although the risk of union dissolution is low for couples soon after migration for other than job- or accommodation-related reasons, this risk increases, and the survival rates of unions decline over time.

Descriptive statistics presented in the previous sections indicate that, among those who moved over long distances (more than 30 miles), a job-related reason for migration is more common than among those who moved a shorter distance (see Table 3). We estimated a variant of Model 1 (Table 6 column 1) that included a set of interactions between reasons for migration and distance of move. None of these interaction terms was statistically significant.⁴

Model 2 (Table 6 column 2) includes both migration variables and measures of the socio-demographic characteristics of the female respondents and their partners, as well as the variables describing the union.

⁴Available from authors on request.





Kaplan-Meier survival estimates by changes in main activities of the spouse



Kaplan-Meier survival estimates by changes in female's main economic activities



Kaplan-Meie survival estimates by changes in female's activities after migration Kaplan-Meier survival estimates es in spouse's economic activity after migration







FIGURE 3 Kaplan-Meier survival estimates by changes in employment characteristics

This second model is a dramatic improvement on Model 1 (Wald Chi²-s are 51.1 and 274.7 for Model 1 and Model 2, respectively). This shows that characteristics of the male and the female partners and their union characteristics are far more important for the union stability than the geographic mobility. Union type, union duration, and age of children are all significant factors. Married couples have significantly lower rates of union dissolution than cohabitating couples. The risk of union dissolution decreases with the length of the union. Those who have children are at higher risk of union dissolution, and this risk increases with the age of the youngest child. If the female partner is more educated, this reduces the odds of union dissolution and couples where the woman has a degree-level qualification show greater union stability.

20

Whether the female is working or is economically inactive or unemployed at any given time point (i.e., BHPS wave) does not have a

14 of 20 | WILEY

TABLE 6 Cox proportionate hazard discrete time regression (exponentiated coefficients, robust standard errors [rse] in parentheses)

	Odds ratios (rse)	Odds ratios (rse)	Odds ratios (rse)	Odds ratios (rse)
Main	Model 1(_t)	Model 2 (_t)	Model 3 (_t)	Model 4 (_t)
	Migration variables	Model 1 + Socio- demographic characteristics	Model 2 + Changes in employment characteristics	Model 2 + Changes in employment characteristics after migration ^a
Distance of move				
under 30 miles	0.96* (.01)	0.97* (.01)	0.97* (.01)	0.97* (.01)
30 miles of more	1.00 (.00)	1.00* (.00)	1.00* (.00)	1.00 (.00)
Time since the last move				
first 12 months	1.00 (.55)	0.91 (.35)	1.06 (.40)	1.05 (.50)
13-60 months	1.00 (.00)	1.01** (.00)	1.01* (.00)	1.01* (.00)
more than 60 months	0.99** (.01)	0.99** (.01)	0.99 (.00)	0.99 (.00)
Reasons for move				
Not job/accommodation-related	0.59 (.27)	0.25** (.12)	0.23** (.11)	0.22** (.11)
Accommodation-related	1.07 (.46)	0.72 (.30)	0.65 (.26)	0.63 (.26)
One partner stated job-related	1.80 (1.09)	1.21 (.66)	0.93 (.44)	0.93 (.45)
Both partners stated job-related	0.88 (.50)	0.82 (.47)	0.67 (.36)	0.68 (.37)
Total number of moves	1.14** (.69)	1.25** (.10)	1.19* (.01)	1.21* (.09)
Type of union: marriage		0.39*** (.06)	0.36*** (.05)	0.36*** (.05)
Female older than male		0.98 (.12)	0.99 (.12)	1.01 (.12)
Female's age at the start of the union		1.01 (.01)	1.00 (.01)	1.00 (.01)
Female White British		1.56 (.52)	1.31 (.42)	1.32 (.43)
Partner White British		0.44 (.19)	0.52 (.18)	0.55 (.24)
Partner has traditional gender attitudes		1.06 (.19)	1.08 (.18)	1.08 (.18)
Female is member of a religious group		0.90 (.22)	0.84 (.21)	0.84 (.21)
Length of the union		0.99*** (.00)	0.99*** (.00)	0.99*** (.00)
Number of children		1.04 (.07)	1.09 (.08)	1.09 (.07)
Age of the youngest child (ref. group: no children under 18)				
Child's age under 5		1.62* (.37)	1.29 (.29)	1.27 (.29)
Child's age 5–10		1.91** (.42)	1.68* (.37)	1.65* (.37)
Child's age 10–15		1.83** (.40)	1.69* (.37)	1.66* (.36)
Child's age 15–18		2.22** (.56)	2.07** (.51)	2.00** (.50)
Female has degree-level qualifications		0.55** (.12)	0.49** (.11)	0.51** (.11)
Main economic activity (ref. group: employed)			
Female unemployed		1.15 (.42)	1.12 (.43)	1.13 (.43)
Female inactive		0.98 (.16)	0.84 (.18)	0.84 (.18)
Partner unemployed		1.39 (.37)	0.99 (.32)	0.99 (.32)
Partner inactive		1.71** (.33)	0.89 (.30)	0.89 (.31)
Female's CSS		1.00 (.00)	1.01 (.00)	1.01 (.01)
Partner's CSS		1.01* (.00)	1.01*** (.00)	1.02*** (.00)
Negative changes in CSS and main economic activities				
Female's economic status worsens (until improved)		1.46 (.35)	2.02* (.59)	
Partner's economic status worsens (until improved)		2.74** (.95)	2.39* (.94)	
Female's CSS worsens (until improved)		1.63** (.24)	1.63** (.25)	
Partner's CSS worsens (until improved)		5.46*** (1.69)	5.34*** (1.65)
Female's economic activity status worsens after migration (until improved)			0.56+ (.16)	
Partner's economic activity status worsens after migration (until improved)			2.02+ (.75)	
Time-varying components				

TABLE 6 (Continued)

	Odds ratios (rse)	Odds ratios (rse)	Odds ratios (rse)	Odds ratios (rse)
Not job- or accommodation-related reason for move	1.07** (.02)	1.11** (.04)	1.11** (.04)	1.13** (.04)
Partner's CSS worsens (until improved)			0.92** (.03)	0.92*** (.02)
Partner's economic activity status worsen after migration for reasons other than job- or accommodation-related reasons				0.93* (.03)
Observations	21,738	21,738	21,738	21,738
No. of subjects	2,275	2,275	2,275	2,275
No. of failures	248	248	248	248
Time at risk	29,532	29,532	29,532	29,532
Wald χ^2	51.1	274.7	338.33	410.7

^aWe run this model also with variables that indicated changes in employment characteristics than happened after migration; however, none of these variables found to be statistically significant.

***p = 0.001; **p = 0.01; *p = 0.05; *p = 0.06

statistically significant impact on union stability. However, the economic inactivity of the male partner at any time point is strongly and positively associated with a higher risk of union dissolution. Rather surprisingly, higher socio-economic status of the male partner (measured by the Cambridge Scale Score) at any time point was also found to be negatively associated with union stability. The effects of other covariates such as ethnicity and religious affiliation are not statistically significant.

Controlling for the characteristics of the partners and their unions had little effect on the associations between the migrations-related covariates and the risks of union dissolution estimated by Model 1. In Models 2 and 3, a long-distance migration (30 miles or more) is associated with higher risks of union dissolution. The association between "other" (i.e., not job- or accommodation-related) reasons for moving and greater union stability becomes slightly weaker, whereas couples show a higher predisposition for ending their unions in the period of 13 to 60 months after the most recent migration.

Model 3 (Table 6 column 3) includes all of the previous covariates but also variables that indicate negative changes in employment status and socio-economic characteristics of the female and the male partners in the couple. The model reveals that negative changes in socio-economic characteristics of partners are associated with an increased risks of union dissolution. If the female partner's socio-economic characteristics worsen or the male partner's employment status and/or socio-economic characteristics worsen, these adversely affect union stability and the effect of adverse changes in the characteristics of the male partner is much stronger than that of the female partner. In particular, the worsening of the male partner's socio-economic status strongly increases the risks of union dissolution. This latter covariate has also a time-variant component, which is smaller than 1. This can be interpreted as indicating that, although the initial risk of union dissolution after the partner's socio-economic status worsens is high, if the couple stayed together this risk declines over time.

Compared with Model 2, in Model 3 (Table 6 column 3) only the period of 13 to 60 months after migration is associated with greater union instability and the male partner's economic inactivity at any single time point ceases to be related to a higher risk of union dissolution. It appears that not economic inactivity itself but a change from employment to unemployment or economic inactivity is a factor that negatively affects the stability of the union. Finally, Model 4 (Table 6 column 4) includes additional variables, which indicate changes in the employment status of the partners in spatially mobile couples. The results show that any negative change in these characteristics for either partner increases union instability. The largest increase in the risk of union dissolution is associated with a male partner becoming unemployed or economically inactive. The coefficient of the respective time-varying component of this covariate is negative and statistically significant. This means that the adverse impact of negative changes in the male partner's employment status on union stability is particularly strong soon after these changes happen, but this negative impact declines as time passes even if the partner stays economically inactive or unemployed.

The estimated parameter of the interaction term between a negative change in the male partner's economic activity and migration is greater than 1 (although the p value is 0.06). This provides a limited indication that when such a negative change takes place after migration the stability of the union may be at greater risk. Conversely, when the female's economic activity status is negatively affected after migration this is related positively to union stability (the estimate of the respective interaction term is smaller than 1, although the p value is 0.06). Controlling for changes in the employment characteristics of the partners in relation to the reasons for migration does not change the estimates of any other covariates in Model 3. Overall, it can be said that negative changes in the employment characteristics of each of the partners are affecting union stability to a small extent. The direction of that effect is differentiated by gender and the magnitude of the impact of these negative changes in the employment characteristics of either of the partners on union stability is smaller in magnitude than the impact of the migration event on union stability, although both impacts tend to decrease and disappear over the time.

5 | SUMMARY, DISCUSSION, AND CONCLUSIONS

In the contemporary socially and geographically mobile world, an understanding of the relationship between different forms of mobility and stability of family life is becoming increasingly important (Boyle, Feng, & Gayle, 2009). Migration is known to be a stressful event for

<u>16 of 20</u>WILEY

family life and the sources of stress are likely to be multiple. Yet despite the large multidisciplinary literature on union dissolution, there has been little investigation of the potential relationship between family migration, changes in the employment characteristics of partners in a union postmigration and union dissolution. To our knowledge there are no other studies that have explored large-scale panel data to model this relationship empirically. Therefore, the results presented in this paper make an original contribution in this area.

This study modelled the impact of internal migration and residential mobility and related changes in employment and occupation status of the partners in a couple, on union dissolution postmigration, using longitudinal data over a period of up to 18 years. We first explored whether family migration increases the risk of the union dissolution. We then examined whether adverse changes in employment status of either of the partners, including such changes postmigration, have an additional adverse effect on union stability. The BHPS offered an appropriate, nationally representative, longitudinal dataset for the study, allowing us to use a wide range of socio-demographic characteristics of partners in a union, and provided us with measures of family migration, over the period of 18 years.

The study offers several interesting insights. First, examining the relationship between migration and union dissolution shows that, overall, in accordance with our research hypotheses, unions of spatially mobile couples are at higher risk of dissolution, although the magnitude of the risk is relatively small. Among the movers, couples that move a short distance have higher rates of survival, whereas long-distance moves (30 miles and more) are associated with higher rates of union dissolution. Couples that move more frequently, have higher risks of union dissolution. Yet we also found that family migration has a short-term effect (which can be either positive or negative depending on the reasons for the move and the distance of the move) on union stability, and that this effect decreases over the time. In line with the adaptation hypothesis we found that the risk of union dissolution for spatially mobile couples was the highest soon after migration but then decreased and disappeared 5 years after migration. Some types of moves (e.g., for retirement reasons, or to enrol in full time study) initially decrease the risk of union dissolution but this effect decreases over time too.

Such characteristics of partnerships as the length and type of union, the age of children, and the socio-economic characteristics of the partners are far more important for union stability, than family migration. In line with previous research, we found that married couples have more stable unions than cohabitating ones (e.g., Hoem & Hoem, 1992), and the longer partners in union stay together, the higher the chances that they will remain together (Chan & Halpin, 2003). In accordance with existing evidence, we found that couples are less likely to separate when they do not have children or have young children (Waite & Lillard, 1991, Chan & Halpin, 2003), when the female has a degree-level qualification (Morgan & Rindfuss, 1985), and when the male partner is employed (e.g., Boyle, et al., 2009).

Overall, the effect of family migration on union stability is relatively small. The estimated parameters of migration-related covariates are much smaller than the estimated parameters of the covariates which measure couples' socio-demographic characteristics, the characteristics of their unions and the adverse changes in the employment and occupational characteristics of the partners. An examination of the values of the regression models' Wald Chi-square, which can be used for evaluation of the goodness of fit of the models, shows that the value of the Wald Chi-square of Model 2 (that includes sociodemographic characteristics of partners in a union and the characteristics of the union), is four times as big as the Wald Chi-square value of Model 1 that comprises the migration variables only.

In line with our research hypotheses, the analysis shows that union survival rates are higher for those couples where partners are not affected by negative changes in employment and occupational characteristics. Negative changes in these characteristics of either partner, such as a worsening of occupational status or exit from employment, are associated with higher odds of union dissolution at any time. Adding the variables that measure a worsening in employment characteristics of either partner to the model brings a 19% improvement in the model's fit.

Negative changes in the employment statuses of partners postmigration are associated with union instability and variables that measure these changes for either of the partners in a union, are responsible for further 19% improvement in the fit of the model. These effects are particularly strong soon after the adverse changes in partners' employment characteristics happen. Yet the effects of these changes on union stability tend to decrease and disappear over time.

Our findings confirm our hypotheses about the differential impact of negative changes in employment characteristics postmigration on the stability of the union. We found that when family migration was accompanied by negative changes in the employment characteristics of partners in a union, the effect of these changes on union stability was gendered. Our findings show that adverse changes in employment characteristics of the male partner post-migration are associated with greater instability of marital/cohabitation unions. In contrast, negative changes in the female partner's employment status postmigration are linked to a decrease in the risk of union dissolution. These findings support existing evidence that negative changes in male partner's employment characteristics have a stronger negative effect on union stability than similar changes in female partner's employment (Peterson, et al., 1999).

This study's findings show that, for contemporary dual-earner couples, the idea of a "leading" male migrant who benefits from the move and a "trailing" female spouse who loses from the move does not capture the complexity of contemporary family migration. In particular, our findings do not support the 'the tied moving' hypothesis stating that loss of employment or occupational losses suffered by the "tied" (usually female) partner as a result of migration (usually undertaken for the employment reasons of the male partner) put a strain on the relationship and increase the chances of union dissolution (e.g., Boyle, et al., 2009). Existing research evidence shows that female partners in spatially mobile couples are more likely to become unemployed and stay unemployed or economically inactivate or experience a downwards occupational mobility than the female partners in geographically immobile couples. Yet we did not find an evidence that these adverse changes in the female partner's employment characteristics post-migration had a negative impact on the stability of their unions.

Nevertheless, there are still some traces of the traditional family model through the gendered effects that geographic mobility and employment/occupational changes have on union stability. Our findings indicate that the jobs of each of the partners in a couple are not necessarily regarded as being equivalent or equally valued and that many households are still primarily organised around the male partner's employment. Together, our findings support the idea that the "male breadwinner" model of the family has not been completely expunged from gendered responses to migration. Interruptions in career trajectories that may follow migration appear to elicit different responses depending on the gender of the partner who suffers these adverse changes, and union stability is most at risk when the male partner suffers adverse employment changes. These interruptions have a far more important impact on the stability of the union than the migration event per se, with migration contributing to union instability indirectly, through accompanying changes in the employment characteristics of each partner, and especially the male partner. However, we also found that the longer couples stay together after a stressful event such as family migration, or adverse changes in their employment/occupational characteristics the less impact these events tend to have on union stability.

The modest and a short-term effect of family migration on union stability, which was found in our study, as well as the lack of evidence that worsening in the employment characteristics of the female partner post-migration is linked to greater union instability is in line with the reasoning of Mincer (1978). He suggested that the employment status and occupational position of the tied spouse (or the female partner) play an important role in the family decision about migration. Those women who have a greater degree of labour market attachment and a greater earning power are less like to compromise "locationally" and agree to move if they think that their personal losses from migration would be larger than gains (ibid. p. 756). Such couples either remain the current location, or they dissolve prior to migration. Those women who agreed to move, were ready to compromise on their personal occupational and employment gains, either because their perceived losses were small, or because they had transferable occupations, or because they have accepted being tied spouses. This line of reasoning is supported by our finding showing that in geographically mobile couples the female partner becoming unemployed or economically inactive, decreases the risk of union dissolution.

It is clear from this study that the mechanisms through, which spatial mobility and migration affect the stability of a union are complex and should be investigated further. It is quite difficult to summarise the potentially complex relationship between family change and mobility quantitatively. For example, from the social survey data that were used in this study, we could not possibly know whether geographically mobile couples (and especially those who move frequently) contemplated spatial moves because they were not happy with the state of their relationship prior to the move. Thus, a mixed method research design could offer further interesting and revealing insights into the relationship between spatial and the stability of a union.

Our results have policy implications. They suggest that the period shortly after a move is the period when families experience the biggest strain and, therefore, this is the period when the union is most likely to dissolve. Providing couples and families moving into an area with help, advice, and general support on the levels of workplaces, local authorities, and local communities may reduce the strain and increase union stability. Such support is often in place for families of international migrants and this study shows that families of internal migrants could benefits from a similar support too.

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REFERENCES

- Allan, S., & Hawkins, A. J. (2017). Theorising the decision making process of divorce and reconciliation. *Journal of Family Theory & Review*, 9, 50–68. https://doi.org/10.111/jftr.12176
- Andersson, G. (2002). Dissolution of unions in Europe: A comparative overview. Zeitschrift für Bevölkerungswissenschaft, 27, 493–504. https://www.demogr.mpg.de/papers/working/wp-2003-004.pdf
- Asher, S. J., & Bloom, B. L. (1982). Geographic mobility as a factor in adjustment to divorce. *Journal of Divorce.*, 6(4), 69–84. https://doi.org/ 10.1300/J279v06n04_05
- Bailey, A. J., Blake, M. K., & Cooke, T. J. (2004). Migration, care, and the linked lives of dual earner households. *Environment and Planning A*, 36(9), 1617–1632. https://doi.org/10.1068/a36198
- Bardasi, E., & Gornick, J. C. (2003). Women's part-time employment across countries: Workers' 'choices' and wage penalties. In B. Garcia, A. Richard, & A. Pinnelli (Eds.), Women in the labour market in changing economies: Demographic issues (pp. 209–243). Oxford: Oxford University Press.
- Bartram, D., Poros, M. V., & Monforte, P. (2014). *Key concepts in migration*. (SAGE Key Concepts series), Sage.
- Beaujouan, E., & Ní Bhrolcháin, M. (2011). Cohabitation and marriage in Britain since the 1970s. *Population Trends*, 145Autumn Issue, 1–25. https://eprints.soton.ac.uk/id/eprint/198915
- Becker, G. S. (1974). A theory of marriage. In T. W. Schultz (Ed.), *The economics of the family: Marriage, children, and human capital* (pp. 299–351). Chicago: University of Chicago Press.
- Bergstrom, T. C. (1996). Economics in a family way. Journal of Economics Literature, 34(4), 1903–1934. https://EconPapers.repec.org/RePEc: aea:jeclit.v:34:y:1996:i:4:p:1903-1934
- Bianchi, S., Milkie, M., Sayer, L., & Robinson, J. (2000). Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, 79(1), 191–228. https://doi.org/10.1093/sf/79.1.191
- Bird, G. A., & Bird, G. W. (1985). Determinants of mobility in two earner families: Does the wife's income count? *Journal of Marriage and the Family*, 47(3), 753–758. https://doi.org/10.2307/352279
- Boyle, P., Cooke, T., Halfacree, K., & Smith, D. (1999a). Gender inequality in employment status following family migration in GB and the US: The effect of relative occupational status. *International Journal of Sociology* and Social Policy, 19 (9/10/11), 115–150. https://doi.org/10.1108/ 01443339910788910
- Boyle, P., Cooke, T., Halfacree, K., & Smith, D. (1999b). Integrating GB and US census microdata for studying the impact of family migration on partnered women's labour market status. *International Journal of Population Geography*, 5(3), 157–178. https://doi.org/10.1002/(SICI)1099-1220(199905/06)5:3<157::AID-IJPG136>3.0.CO;2-#
- Boyle, P., Cooke, T., Halfacree, K., & Smith, D. (2001). A cross-national comparison of the impact of family migration on women's employment status. *Demography*, 38(2), 201–213. https://doi.org/10.1353/ dem.2001.0012

18 of 20 WILEY

- Boyle, P., Cooke, T., Halfacree, K., & Smith, D. (2003). The effect of longdistance family migration and motherhood on partnered women's labour market activity rates in GB and the US. *Environment and Planning* A, 35(12), 2097–2114. https://doi.org/10.1068/a35138
- Boyle, P., Feng, Z., & Gayle, V. (2009). A new look at family migration and women's employment status. *Journal of Marriage and Family*, 71(2), 417–431. https://doi.org/10.1111/j.1741-3737.2009.00608.x
- Boyle, P., & Halfacree, K. (1999). Migration and gender in the developed world. London: London: Routledge.
- Boyle, P. J., Kulu, H., Cooke, T. J., Gayle, V., & Mulder, C. (2008). Moving and union dissolution. *Demography*, 45(1), 209–222. https://doi.org/ 10.1353/dem.2008.0000
- British Household Panel Survey (BHPS) Waves 1–18, 1991–2009 [Computer file]. 7th Edition. University of Essex, Institute for Social and Economic Research, Colchester, Essex: UK Data Archive [distributor], July 2010. SN: 5151, https://doi.org/10.5255/UKDA-SN-5151-1
- Broman, C. L., Hamilton, V. L., & Hoffman, W. S. (1990). Unemployment and its effects on families: Evidence from a plan closing study. *American Journal of Community Psychology*, 18(5), 643–659. https://doi.org/ 10.1007/BF00931235
- Bures, R. M. (2009). Living arrangements over the life course: Families in the 21st century. *Journal of Family Issues*, 30(5), 579–585. https://doi. org/10.1177/0192513X08331131
- Chan, T. W., & Halpin, B. (2003). Union dissolution in the United Kingdom. International Journal of Sociology, 32(4), 76–93. http://users.ox.ac.uk/ ~sfos0006/papers/ijs2002.pdf
- Clark, W. A. V. (2013). Life course events and residential change: Unpacking age effects on the probability of moving. *Journal of Population Research*, 30(4), 319–334. http://www.jstor.org/stable/ 42636330
- Clark, W. A. V., & Huang, Y. Q. (2006). Balancing move and work: Women's labour market exits and entries after family migration. *Population, Space* and Place, 12(1), 31–44. https://doi.org/10.1002/psp.388
- Clark, W. A. V., & Morrison, P. S. (2012). Socio-spatial mobility and residential sorting: Evidence from a large-scale survey. Urban Studies, 49(15), 3253–3270. https://doi.org/10.1177/0042098012442418
- Clark, W. A. V., van Ham, M., & Coulter, R. (2014). Spatial mobility and social outcomes. J Hous and the Built Environ, 29(4), 699–727. 10.1007/s10901-013-9375-0
- Clark, W. A. V., & Withers, S. D. (2002). Disentangling the interaction of migration, mobility, and labour-force participation. *Environment and Planning A*, 34(5), 923–945. https://doi.org/10.1068/a34216
- Cooke, T. J. (2001). Trailing wife' or 'trailing mother'? Family migration, life course events, and the labour market participation of married women. *Environment and Planning A*, 33(3), 419–430. https://doi.org/10.1068/ a33140
- Cooke, T. J. (2004). Family migration and the relative earnings of husbands and wives. Annals of the Association of American Geographers, 93(2), 338–349. https://doi.org/10.1111/1467-8306.9302005
- Cooke, T. J. (2008). Gender role beliefs and family migration. Population, Space and Place, 13(3), 163–254. https://doi.org/10.1002/psp.485
- Cooke, T. J. (2013). All tied up: Tied staying and tied migration within the United States, 1997 to 2007. *Demographic Research.*, 29(30), 817–636. https://doi.org/10.4054/DemRes.2013.29.3
- Cooke, T. J., & Bailey, A. J. (1999). The effects of family migration, migration history, and self-selection on married women's labour market achievement. In P. Boyle, & K. H. Halfacree (Eds.), *Migration and gender in the developed world* (pp. 102–113). London: Routledge.
- Cooke, T. J., Mulder, C. H., & Thomas, M. (2016). Union dissolution and migration. *Demographic research.*, 34(26), 741–760. https://doi.org/ 10.4054/DemRes.2016.34.26
- Cox, D. R., & Oakes, D. (1984). Analysis of survival data. New York: Chapman & Hall.
- DaVanzo, J. (1976). Why families move: A model of the geographic mobility of married couples. Rand: Santa Monica, CA.

- de Graff, P., & Kalmijn, M. (2006). Change and stability in the social determinants of divorce: A comparison of marriage cohorts in the Netherlands. *European Sociological Review*, 22(5), 561–572. https:// doi.org/10.1093/esr/jcl010
- Feijten, P., & van Ham, M. (2013). The consequences of divorce and splitting up for spatial mobility in the UK. *Comparative Population Studies*, 38(2), 405–432. https://doi.org/10.4232/10.CPoS-2013-10en
- Fielding, A. (1996). Migration and social mobility: South East England as an escalator region. *Regional Studies*, 26(1), 1–15. https://doi.org/ 10.1080/00343409212331346741
- Flowerdew, R., & Al-Hamad, A. (2004). The relationship between marriage, divorce and migration in a British data set. *Journal of Ethnic and Migration Studies*, 30(2), 339–351. https://doi.org/10.1080/ 1369183042000200731
- Frank, R., & Wildsmith, E. (2005). The grass widows of Mexico: Migration and union dissolution in a binational context. *Social Forces*, 83(3), 919–947. https://doi.org/10.1353/sof.2005.0031
- Fraser, N. (1994). After the family wage: Gender equality and the welfare state. Political Theory, 22(4), 591–618. https://doi.org/10.1177/ 0090591794022004003
- Gayle, V., Boyle, P., Flowerdew, R., & Cullis, A. (2008). Family migration and social stratification. *International Journal of Sociology and Social Policy*, 28(7/8), 293–303. https://doi.org/10.1108/01443330810890709
- Glick, P. C. (1977). Updating the life cycle of the family. *Journal of Marriage* and the Family, 39(1), 5–13. https://doi.org/10.2307/351058
- Glick, P. C. (1988). Fifty years of family demography: A record of social change. Journal of Marriage and the Family, 50(4), 861–873. https:// doi.org/10.2307/352100
- Goldscheider, F., Kaufman, G., & Sassler, S. (2009). Navigating the 'new' marriage market: How attitudes towards partner characteristics shape union formation. *Journal of Family Issues*, 30(6), 719–737.
- Gornick, J. C., & Meyers, M. K. (2004). Welfare regimes in relation to paid work and care. In J. Z. Geile, & E. Holst (Eds.), *Changing life patterns in western industrial societies* (pp. 46–67). Netherlands: Elsevier Science Press.
- Harris, J. R., & Todaro, M. P. (1970). Migration, unemployment, and development: A two-sector analysis. American Economic Review, 60(1), 126–142. https://doi.org/10.2307/351058
- Hoem, B., & Hoem, J. M. (1992). The disruption of marital and non-marital unions in contemporary Sweden. In J. Trussel, R. Hankinson, & J. Tilton (Eds.), *Demographic applications of event history analysis* (pp. 61–93). Oxford: Clarendon Press.
- Jacobsen, J. P., & Levin, L. M. (2000). The effects of internal migration on the relative economic status of women and men. *Journal of Socio-Economics*, 34(3), 291–304. https://doi.org/10.1016/S1053-5357(00)00075-5
- Kasarda, J., & Billy, J. (1985). Social mobility and fertility. Annual Review of Sociology, 11, 305–328. https://doi.org/10.1146/annurev. so.11.080185.001513
- Kelan, E. K. (2008). Gender, risk and employment insecurity: The masculine breadwinner subtext. *Human Relations*, 61(9), 1171–1202. https://doi. org/10.1177/0018726708094909
- Kofman, E. (2004). Family-related migration: A critical review of European studies. Journal of Ethnic and Migration Studies, 30(2), 243–262. https:// doi.org/10.1080/1369183042000200687
- Kulu, H. (2005). Migration and fertility: Competing hypothesis re-examined European Journal of Population, 21(1), 51–87. https://doi.org/10.1007/ s10680-005-3581-8
- Kulu, H., & Milewski, N. (2007). Family change and migration in the life course: An introduction. *Demographic Research*, 17(19), 567–590. https://doi.org/10.4054/DemRes.2007.17.19
- Lehrer, E. L., & Chiswick, C. U. (1993). Religion as a determinant of marital stability. *Demography*, 30(3), 385–404. https://doi.org/10.2307/ 2061647
- Lewis, S. (2001). Restructuring workplace cultures: The ultimate work-family challenge? Women in Management Review, 16(1), 21–29. https://doi.org/ 10.1108/09649420110380256

- Lichter, D. T. (1980). Household migration and the labour market position of married women. Social Science Research, 9(1), 83–97. https://doi. org/10.1016/0049-089X(80)90010-1
- Lichter, D. T. (1982). The migration of dual-worker families: Does the wife's job matter? *Social Science Quarterly*, 63(1), 48–57. http://www. jstor.org/stable/42861377
- Lichter, D. T. (1983). Socioeconomic returns to migration among married women (US). Social Forces, 62(2), 487–503. https://doi.org/10.2307/ 2578318
- Longhi, S., & Nandi, A. (2015). A practical guide to using panel data. New York: Sage.
- Lye, D. N., & Biblarz, T. J. (1993). The effects of attitudes toward family life and gender roles on marital satisfaction. *Journal of Family Issues*, 14(2), 157–188. https://doi.org/10.1177/019251393014002002
- Magdol, L. (2002). Is moving gendered? The effects of residential mobility on the psychological well-being of men and women. Sex Roles, 47(11/12), 553–560. https://doi.org/10.1023/A:1022025905755
- Makowsky, P. P., Cook, A. S., Berger, P. S., & Powell, J. (1988). Women's perceived stress and wellbeing following voluntary and involuntary relocation. *Lifestyles*, 9(2), 111–122. https://doi.org/10.1007/BF00986934
- Manning, W. D. (2004). Children and the stability of cohabiting couples. Journal of Marriage and Family, 66(3), 674–689. https://doi.org/ 10.1111/j.0022-2445.2004.00046.x
- Martin, T. C., & Bumpass, L. L. (1989). Recent trends in marital disruption. Demography, 26(1), 37–51. https://doi.org/10.2307/2061492
- McCollum, A. (1990). The trauma of moving: Psychological issues for women. London: Sage Publications.
- Meyer, C. J. (1987). Stress: There's no place like a first home. Family *Relations*, 36(2), 198–203. https://doi.org/10.2307/583954
- Milan, A., Wong, I., & Ve'zina, M. (2014). Emerging trends in living arrangements and conjugal unions for current and future seniors (Statistics Canada Catalogue no. 75 006 X). Ottawa, Canada: Minister of Industry. https://www150.statcan.gc.ca/n1/pub/75-006-x/2014001/article/ 11904-eng.htm
- Mincer, J. (1978). Family migration decisions. Journal of Political Economy, 86(5), 749–773. http://doi.org/10.1086/260710
- Morgan, S. P., & Rindfuss, R. R. (1985). Marital disruption: Structural and temporal dimensions. *American Journal of Sociology*, 90(5), 1055–1077. Retrieved from http://www.jstor.org/stable/2780089
- Morrison, D., & Lichter, D. (1988). Family migration and female employment: The problem of underemployment among migrant married women. Journal of Marriage and the Family, 50(1), 161–172. https:// doi.org/10.2307/352436
- Mulder, C. H., & Wagner, M. (2001). The connections between family formation and first-time home_ownership in the context of West Germany and the Netherlands. *European Journal of Population*, 17(2), 137–164. https://doi.org/10.1023/A:1010706308868
- Mulder, C. H., & Malmberg, G. (2014). Local ties and family migration. Environment and Planning A, 46(9), 2195–2211. https://doi.org/ 10.1068/a130160p
- Muszynska, M., & Kulu, H. (2007). Migration and union dissolution in a changing socio-economic context: The case of Russia. *Demographic Research*, 17(27), 803–820. https://doi.org/10.4054/DemRes.2007.17.27
- Peterson, G., Steinmaiz, S. K., & Sussman, M. B. (1999). Handbook of marriage and family. NY: Plenum Press.
- Prandy, K. (1990). The revised Cambridge scale of occupations. *Sociology*, 24(4), 629–655. https://doi.org/10.1177/0038038590024004005
- Reczek, C., Elliott, S., & Umberson, D. (2009). Commitment without marriage: Union formation among long-term same-sex couples. *Journal*

of Family Issues, 30(6), 738-756. https://doi.org/10.1177/ 0192513X09331574

- Savage, M. (1988). The missing link? The relationship between spatial mobility and social mobility. *British Journal of Sociology*, 39(4), 554–577. https://doi.org/10.2307/590501
- Shihadeh, E. S. (1991). The prevalence of husband-centred migration: Employment consequences for married mothers. *Journal of Marriage* and the Family, 53(2), 432–444. https://doi.org/10.2307/352910
- Shields, G. M., & Shields, M. P. (1993). A Theoretical and Empirical Analysis if Family Migration and Household Production: U.S. 1980–1985. In: Southern Economic Journal, 59(4), 768–782. https://doi.org/ 10.3102/10769986018002155
- Singer, J. D., & Willett, J. B. (1993). It's about time: Using discrete-time survival analysis to study duration and the timing of events. *Journal of Educational Statistics*, 18(2), 155–195. https://doi.org/10.3102/ 10769986018002155
- Sjaastad, L. A. (1962). The costs and returns of human migration. Journal of Political Economy, 70(5), 80–93. https://doi.org/10.1086/258726
- Smits, J., Mulder, C. H., & Hooimeijer, P. (2004). Migration of couples with non-employed and employed wives in the Netherlands: The changing effects of the partners' characteristics. *Journal of Ethnic* and Migration Studies, 30(2), 283–301. https://doi.org/10.1080/ 1369183042000200704
- StataCorp (2011). Stata statistical software: Release 12. College Station, TX: StataCorp LP.
- Stewart, A., Prandy, K., & Blackburn, R. M. (1980). Social stratification and occupations. London: Macmillan.
- Taylor, M. F., Brice, J., Buck, N., & Prentice-Lane, E. (2010). British household panel survey user manual volume a: Introduction, technical report and appendices. Colchester: University of Essex. https://www. understandingsociety.ac.uk/sites/default/files/downloads/documentation/mainstage/user-guides/bhps-user-manual-volume-a.pdf
- Trovato, F. (1986). The relationship between migration and the provincial divorce rate in Canada, 1971 and 1978: A reassessment. *Journal of Marriage and the Family*, 48(1), 207–216. https://doi.org/10.2307/352245
- Tzeng, J. M., & Mare, R. D. (1995). Labour market and socioeconomic effects on marital stability. Social Science Research, 24(4), 329–351. https://doi.org/10.1006/ssre.1995.1013
- van Ham, M., & Manley, D. (2014). Occupational mobility and living in deprived neighbourhoods: Housing tenure differences in 'neighbourhood effects'. *Appl. Spatial Analysis*, 8(4), 309–324. https:// doi.org/10.1007/s12061-014-9126-y
- Waite, L. J., & Lillard, L. A. (1991). Children and marital disruption. American Journal of Sociology, 96(4), 930–953. https://doi.org/10.1086/229613
- Weissman, M. M., & Paykel, E. S. (1972). Moving and depression in women. Society, 9(9), 24–28. https://doi.org/10.1007/BF02695950
- Withers, S. D., & Clark, W. A. V. (2006). Housing costs and the geography of family migration outcomes. *Population, Space and Place*, 12(4), 273–289. https://doi.org/10.1002/psp.415
- Wu, Z., & Penning, M. J. (2017). Marital and cohabitation union dissolution in middle and late life. *Research on Aging*, 40(4), 340–364. https://doi. org/10.1177/0164027517698024

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SHAPIRA ET AL.

^{20 of 20 |} ₩Π FY

APPENDIX A

Below we summarised the categories of variables in BHPS that describe reasons for move.

