Union Formation and Dissolution Among Immigrants and Their Descendants in the British Welfare State Context

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Abstract:
This study investigates union formation and dissolution among immigrants and their descendants in the UK. Although there is a growing literature on the dynamics of immigrant fertility and mixed marriages, partnership trajectories among immigrants and ethnic minorities are little studied. We use data from the Understanding Society study and apply the techniques of event history analysis. We contrast partnership trajectories of various immigrant groups and compare these with those of the 'native' British population. The analysis shows significant differences in partnership formation and dissolution among immigrants and ethnic minorities. Women of Caribbean origin have the highest cohabitation and the lowest marriage rates, whereas cohabitation remains rare among immigrants from South Asia and their descendants, as most of them marry directly. Immigrants from the Caribbean region and their descendants also show higher divorce rates than 'native' British women, whereas women of South Asian origin have a low divorce risk.

Keywords: immigrants, ethnic minorities, the 'second generation', marriage, cohabitation, divorce, separation, UK

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1. Background

European countries are witnessing increases in immigration streams and the ethnic heterogeneity of their populations (Castles and Miller 2009). Immigrants' adaptation has become an important issue and research topic among social scientists. A large body of literature has examined various aspects of immigrants' lives in Europe, including their employment and education (Adsera and Chiswick 2007; Kogan 2007; Rendall et al. 2010; Rebhun 2010), health and mortality (Sole-Auro and Crimmins 2008; Wengler 2011; Hannemann 2012), residential and housing patterns (Musterd 2005; Arbaci 2008), legal status and citizenship (Seifert 1997; Bauböck 2003; Howard 2005), and linguistic, cultural and religious diversity (Foner and Alba 2008; Gungor et al. 2011). The recent literature has also exhibited an increasing interest in the study of family dynamics and patterns among immigrants and their descendants. One stream of research examines the formation and dissolution of exogamous marriages in Europe, with the aim of deepening our understanding of the factors that influence the spread and stability of mixed marriages and their role in immigrant integration (González-Ferrer 2006; Kalmijn and Tubergen 2006; Dribe and Lundh 2012; Milewski and Kulu 2013). Another stream investigates fertility dynamics among immigrants and their descendants (Andersson 2004; Toulemon 2004; Milewski 2007; Kulu and Milewski 2007; Goldscheider et al. 2011).

The aim of the current paper is to compare the union formation and dissolution of immigrants and their descendants in the UK to those of the 'native' British population. We extend the previous literature in the following ways. First, we study various partnership transitions, including formation and dissolution of cohabitations and marriages, among immigrants and their descendants. Furthermore, we study both first and second unions. We, thus, move beyond the 'one life-event-at-a-time' approach, which is dominant in the literature on migrant families. We believe that the study of partnership dynamics over the life course provides us with much richer information about the opportunities and constraints that migrants face than does an analysis of only one (or first) marriage of the migrants.

Second, we examine family trajectories among descendants of migrants whose share significantly increased in the last several decades, particularly young adults (Sobotka 2008). Research has shown that the fate of the 'second generation' is not as rosy as we may wish. Their educational qualifications often remain below those of the majority population, and

their labour market performance is poor (Fassmann 1997; Alba 2005; Meurs et al. 2006; Aparicio 2007; Brinbaum and Cebolla-Boado 2007; Van Niekerk 2007; Kristen et al. 2008; Aeberhardt et al. 2010; Fibbi et al. 2007). The current study provides valuable information on the demographic behaviour of important population subgroups in the UK society and improves our understanding of how various factors shape the fate of the 'second generation' in the European context.

Third, to our knowledge, this is the first study on union formation among immigrants and ethnic minorities in the UK that explicitly compares their partnership trajectories to those of the 'native' population from the longitudinal and life course perspectives. Although the dynamics of mixed marriages and fertility of ethnic minorities in Britain have been examined (Coleman and Dubuc 2010; Feng et al. 2012; Hampshire et al. 2012), the topics of union formation and dissolution, and particularly the rise of cohabitations, have not been covered in the recent literature. This lack of examination is typically attributed to the lack of relevant data.

Finally, this paper focuses on union formation and dissolution among immigrants and their descendants in the UK. However, this UK case study is a first step towards a comparative study to investigate partnership dynamics among immigrants and ethnic minorities in a number of European countries. The latter can be used to examine how socio-economic, institutional and policy settings shape the family lives of immigrants and their descendants in different European societies.

1.1. Literature review: from migrant fertility to their partnership dynamics

A large share of research on migrant families focuses on fertility behaviour, which is traditionally linked to partnership formation and dissolution processes. The previous research on migrant fertility proposed four hypotheses on whether and how an individual's fertility behaviour changes following a move from one country to another (Singley and Landale 1998; Andersson 2004; Kulu 2005; Kulu and Milewski 2007; Kulu and Gonzaléz-Ferrer 2013). We briefly review these four hypotheses and demonstrate their relevance to the study of partnership dynamics among immigrants and their descendants. The *socialisation hypothesis* assumes that the fertility behaviour of migrants reflects the childbearing preferences and behaviour that are dominant in their childhood environment. Therefore, migrants show

fertility preferences and behaviour that are similar to those of 'stayers' in the country of origin. Thus, the socialisation hypothesis assumes that an individual's childbearing preferences and behaviour are relatively stable over her/his life and primarily shaped by the childhood living environment. By contrast, the *adaptation hypothesis* assumes that an individual's current living environment, rather than the childhood environment, exerts the greatest influence. The fertility behaviour of migrants eventually resembles the mainstream behaviour in the country of destination. Migrants, thus, adapt to the economic and cultural conditions of the destination country.

The *selection hypothesis* argues that people who move from one county to another are a select group in terms of their childbearing preferences and behaviour. As a result, their fertility preferences differ from those of the population in the country of origin and are more similar to that of individuals in the destination country. This selectivity may occur on the basis of individual characteristics such as education and occupation that shape and reflect an individual's life plans and opportunities. Recent research has shown that marriage-driven migration leads to elevated fertility levels after migration (Andersson 2004; Kulu 2005; Milewski 2007). Finally, the *disruption hypothesis* suggests that fertility levels are particularly low immediately after migration due to the economic costs and psychological stress related to the event of moving and changing the living environment. After a certain time of adjustment, fertility levels are expected to rise again.

While the factors of the origin and destination and those associated with the migration process interact to shape immigrants' childbearing preferences and behaviour, the fertility behaviour of the descendants of migrants is (primarily) influenced by the social environment in the country in which they were raised. However, the living environment may significantly differ for the descendants of immigrants. Some may grow up under the influences of the *mainstream society* and are, thus, socialised into the norms and behaviours of the native population. By contrast, others may grow up under the influences of the *minority subculture* (assuming that such subculture exists) and, thus, exhibit childbearing preferences and behaviour that differ from those of the native population (Katus et al. 2002; Bernhardt et al. 2007; Milewski 2010; Goldscheider et al. 2011).

These competing approaches, which were developed to study the childbearing of immigrants and their descendants, are equally relevant to the study of partnership dynamics among

immigrants and their descendants, particularly given that these two careers in an individual's life course are closely related. The key question is whether immigrant partnership trajectories follow those of the population in the country of origin or those that are dominant in the destination country. The former pattern can be interpreted as evidence that supports the *socialisation* argument, whereas the latter can provide support for the *adaptation* or potentially the *selection* hypothesis. The selection can be identified and controlled by standardising partnership patterns for the socio-economic characteristics of individuals.

Similarly, it is important to determine whether the partnership behaviour of the descendants of immigrants is similar to that of their parents (or patterns in their parents' country of origin) or to the patterns that are dominant in the mainstream society. This assumes significant differences in demographic behaviour between the baseline groups (population in the origin country and that in the destination country), which may be true in some cases (e.g., when comparing immigrants from economically less developing countries to the native population in an industrialised country) but not in others (e.g., migrants between two similar industrialised countries). The simultaneous analysis of various partnership transitions, including both first and second unions, provides an advantage in detecting potential differences in partnership behaviour between otherwise similar population groups.

Although much of the discussion on the family and fertility of immigrants and their descendants focuses on *cultural* and *economic* factors and determinants, it is equally important to emphasise the role of *welfare state setup* and *policies* in shaping partnership and childbearing patterns among immigrants and their descendants. The adaptation of immigrants and their descendants to dominant patterns are assumed to be faster in countries with a wide range of policies to reduce differences between population subgroups and promote equality in all spheres of society in comparison to the countries where market forces are expected to (mostly) dominate over an individual's life. Although these issues can only be thoroughly addressed in a comparative study with a similar design and data and with comparable population subgroups, a detailed case study can be sufficiently informative to improve our understanding of the role of state policies in shaping the partnership behaviour of immigrants and their descendants.

1.2. Historical background of immigrants and their descendants in Britain

Before World War II, the main immigrant groups in Britain were Irish and Jews from Eastern Europe. The Irish moved to England in large numbers after the 1846−47 famine; their migration continued during the entire Victorian period (1837−1901). The Jews arrived in Britain in the late 19th and early 20th century as refugees, mostly from Russia (Castles and Miller 2009). WWII brought further refugee groups to Britain, including the Polish, Germans and people from the Baltic States. The 1951 census data showed that the largest refugee groups were those born in Ireland, followed by Poland, India, Germany and Russia. The Indian group mostly consisted of the children of British service personnel from India (ONS 2013).

Similar to other Western and Northern European countries, Britain became a destination country of post-war international labour migration (Castles and Miller 2009). The British economy suffered from a labour shortage due to the economic growth and small pre-war cohorts entering the labour market after the war. The first group to arrive were workers from Caribbean countries, especially from Jamaica. Many of these workers were recruited by the London Transport and the National Health Service (NHS), which the local population viewed as unattractive places to work because of poor wages (Peach 1998). Immigration from the Caribbean region reached its peak between the mid-1950s and mid-1960s. The Caribbeans were soon followed by Indians and Pakistanis, whose migration to Britain peaked in the late 1960s and early 1970s. Many of these workers became employed in the textile industry, which was another area of hard working conditions (e.g., night-shift work) and poor wages (Peach 1998). The 1971 census data showed that Indians had became the second-largest immigrant group in the UK (after Irish), followed by Jamaicans and Pakistanis (which also included Bangladeshis at that time) (ONS 2013). Although the need for labour declined in the 1970s due to deindustrialisation and the entry of the baby-boomers to the labour market, immigration streams continued, including family reunion and refugees. The largest new groups were refugees of Indian-descent from African countries (Kenya and Uganda). The number of Bangladeshi-born people also increased significantly after the Bangladeshi war of independence in 1971 and subsequent military coup in 1975 (ONS 2013). In 2001, the largest immigrant groups were the Irish, Indians, Pakistanis, Germans, Bangladeshis and Jamaicans. The first decade of the 21st century brought along further changes, with significant migration streams from Poland. After the enlargement of the European Union in 2004, Polish-born

people became the second-largest migrant group (after Indians) by the end of the decade (ONS 2013). The share of the population born outside of the UK increased from 4% in 1951 to 13% in 2011.

The ethnic minority population has also increased in the UK over time. The 1991 census was the first to collect information on the ethnic origin of respondents. According to the census, 7% of the UK population identified themselves as other than 'White' in 1991. The largest groups were people of Indian, Caribbean and Pakistani ethnic origin, followed by those of Chinese and Bangladeshi origin. The share of ethnic minorities of the UK population increased to 13% in 2001 and to 20% in 2011 (other than 'White British': English, Welsh, Scottish, Northern Irish or British). The largest groups in 2011 were people of Polish, Indian, Caribbean and Pakistani origin. The number of those who reported mixed ethnicity, especially White and Black Caribbean or White and Asian, also significantly increased (ONS 2013).

2. Data

2.1. Understanding Society

The empirical analysis of this paper is based on data from the Understanding Society study, a large longitudinal study in the UK that was launched in 2009 (further referred to as the UoS). The main immigrant and ethnic minority groups in Britain were over-represented in the study, thus ensuring a sufficient sample size to study ethnic differences in attitudes and behaviour. The interviews for the first wave of the UoS were conducted between January 2009 and January 2010. Information was collected on approximately 50,994 individuals. Full interviews were conducted with 47,901 individuals, whereas the remaining interviews were proxy interviews for non-present household members. For the former group of individuals, information is also available on partnership history. For the current study, 306 individuals were excluded from the analysis for the following reasons: 125 cases had inconsistent event dates in their life histories; 123 cases had some missing life events in their records; 30 cases had no information on migration status; and 28 cases had no information on the start date of their current union. The final sample consists of 47,595 individuals.

This study investigates the partnership formation and dissolution of different immigrant and ethnic minority groups. The research population is divided into 'native' British, immigrants (the 'first generation') and their descendants (the 'second generation'). 'Natives' are individuals who themselves and whose both parents were born in the UK; they form 70% of the (unweighted) sample. Individuals who were born outside of the UK, independent of the origin of their parents, are classified as immigrants. This study does not distinguish whether the events of union formation and dissolution were occurring before or after the migration process for the group of immigrants. If a person was born in the UK but at least one of his/her parents was born outside of the UK, the individual was classified as a descendant of immigrant(s). If a descendant of immigrant(s) had parents of different foreign origins, priority was given to the father's country of birth. Due to small sample sizes, especially for the analysis of second unions, the following aggregated regions of origin are used in the analysis: 1) Europe and other Western/industrialised countries (further referred to as Europe); 2) South Asia, containing individuals from India, Pakistan and Bangladesh; 3) Caribbean countries; and 4) all other origins. The last group contains individuals from many different countries and continents, including Africa, Far and Middle East, China and Latin America. Although this group is large in comparison to the other sub-groups, no specific origin has a sufficient size to be analysed separately.

Table 1 displays the distribution of the male and female population by migrant status. The further analysis is presented for women only.

(Table 1 about here)

2.2. Data quality

The analysis of the UoS data shows a high degree of consistency with the data from the Office for National Statistics (ONS), suggesting that the data quality is good. Figures 1 through 3 display the results from the UoS study in comparison with those from the ONS data for the following life events: ever married women (Figure 1), ever divorced for both sexes (Figure 2), and the percentage of remarried women (Figure 3), each by cohort and age. Overall, there are only minor differences between the UoS data and the ONS records, which can be explained by the fact that the ONS data include only individuals in England and Wales, whereas the UoS data also contain individuals from Northern Ireland and Scotland as

part of the UK. In addition, Figure 4 shows the distribution of women who have ever cohabited by cohort and age. For cohabitations, no official data are available. However, a comparison with the estimates obtained by Murphy (2010), using data from four different surveys, shows a high degree of similarity in cohabitation levels and trajectories.

For the older cohorts, there are few differences in the proportion of ever married women between the two data sources (Figure 1). For the younger cohorts, some differences are evident, particularly for those born in the 1970s. The results for men show similar trajectories (not shown). As expected, the analysis reveals a trend of later marriages and lower marriage levels for the younger cohorts.

(Figure 1 about here)

The comparison of the proportion of ever divorced individuals by marriage cohort also shows a high consistency between the estimates of the two data sources. The estimates differ by only a few percentage points among the various marriage cohorts (Figure 2, note a change in the scale of the graph). As expected, the proportion of ever divorced individuals has significantly increased over the last decades. Although one-fifth of the marriages that were formed in the period of 1965–74 ended in divorce before their 15th anniversary, nearly one-third of marriages experienced separation in the most recent marriage cohorts of 1995-2004.

(Figure 2 about here)

Figure 3 shows the proportion of ever remarried women. Of note, the ONS data show the proportion of remarried relative to the total population without considering whether the person was previously married and divorced. For this comparison, the proportion of remarried women is calculated in the same way using the UoS data. For the analytical part of this study, only the actual risk population (married and divorced once) is used. A slow rise in the proportion of second marriages over time can be observed in both data sources.

(Figure 3 about here)

Finally, Figure 4 shows the proportion of ever cohabitated women using the UoS data. A steady rise in cohabitation rates can be observed across birth cohorts. While one-fifth of the

individuals who were born in the 1940s have ever cohabited by age 45, more than three-fifth of the women who were born in the 1960s have cohabited. Although the younger cohorts have not yet reached age 45, the percentage of cohabitants can be assumed to be even higher among them, e.g., 70-80 percent.

(Figure 4 about here)

3. Methods

We study partnership transitions, including formation and dissolution of cohabitations and marriages, among immigrants and their descendants. Furthermore, we study both first and second unions. Thus, we move beyond the 'one life-event-at-a-time' approach, which is dominant in the literature on migrant families, and investigate partnership dynamics over the life course of immigrants and ethnic minorities. Figure 5 provides details on the partnership transitions that are analysed in this study.

(Figure 5 about here)

We use event-history analysis to calculate the union formation and dissolution rates. The basic model can be formalised as follows:

$$\ln \mu_i(t) = \ln \mu_0(t) + \sum_j \beta_j x_{ij}(t), \qquad (1)$$

where $\mu_i(t)$ denotes the hazard of union formation or dissolution for individual i, and $\ln\mu_0(t)$ denotes the baseline log-hazard, which we specify as piecewise constant. The baseline for the first union (marriage or cohabitation) and marriage (ever married) is a woman's age in months (women are considered at risk since age 16). For union or marital dissolution, the baseline is union or marriage duration. For second union or marriage, the baseline is time since first dissolution or marital separation. For the process of divorce from either first or second marriage, the individual is censored in the case of the partner's death. Furthermore, $x_{ij}(t)$ represents the values of a variable, which can be either time-constant or time-varying.

We extend the basic model to a competing-risks model to study partnership formation and the outcomes of cohabitation:

$$\begin{aligned} \ln \mu_i^A(t) &= \ln \mu_0^A(t) + \sum_j \beta_j^A x_{ij}(t) \\ \ln \mu_i^B(t) &= \ln \mu_0^B(t) + \sum_j \beta_j^B x_{ij}(t) \end{aligned} \qquad (2)$$

where for partnership formation, $\mu_i^A(t)$ denotes the hazard of cohabitation for individual *i* and $\mu_i^B(t)$ is the risk of marriage in the competing risk framework. For cohabitation outcomes, $\mu_i^A(t)$ denotes the hazard of marriage and $\mu_i^B(t)$ is the risk of cohabitation dissolution.

In our modelling strategy, we first investigate partnership transitions by migrant status while controlling for birth cohort. The inclusion of the birth cohort in the analysis is critical to gain an adequate overview of the patterns by migrant status, as partnership patterns vary across cohorts and different migrant groups consist of different cohorts (e.g., the descendants of immigrants are significantly younger than 'natives' or immigrants). Then, we control for women's socio-economic and demographic characteristics to explore the extent to which these characteristics explain differences by migrant status. We include the *educational level* (no qualification, other qualification, GCSE, A-level, other higher degree and tertiary degree) of the woman, *age at union formation* (for separation and divorce), the *presence of premarital cohabitation* (for divorce) and *type of first union* (for the event of divorce and second union) in the models. The distribution of exposure time and occurrences by migrant status for various partnership transitions is provided in Table 2. The number of events for most partnership transitions is sufficient to study patterns by migrant status.

(Table 2 about here)

Figure 6 provides the number of women for each union status change to gain a first overview of partnership trajectories. Of the total number of 26,621 women, 332 started a relationship before the age of 16; these women are excluded from the analysis. Only individuals in the household who were age 16 or older were given the adult-questionnaire in the UoS project; therefore, the observation period for all first unions begins at age 16. Approximately one-third of the initially single women remain single until censored (at interview). Among those who form a partnership, slightly more women enter a marriage directly than enter a

cohabitation. Of the 9,442 women who enter a cohabitation, approximately half marry. One-third of the cohabitations end in dissolution, whereas the remaining cohabitations continue until the interview date. Of the more than 17,000 women who marry in their first union, 4,241 experience a divorce. Approximately two-thirds of all women who separate from their first partner enter a second union in the UoS sample. For second unions, a high preference for cohabitation over direct marriage is observed. The remaining second union trajectories follow patterns that are similar to those of first unions. These are numbers of individuals who have experienced various events. In the analysis, we also consider duration and censoring.

(Figure 6 about here)

4. Results for partnership transitions by immigrant status

We first analysed patterns of union formation (any union). Then, we distinguished between cohabitations and marriages. Next, we studied marital separation and cohabitation outcomes. Finally, we studied the formation and dissolution of second unions.

Table 3 presents the relative risks of first union formation by migrant status. Women from South Asia have a 10% higher risk of union formation than 'native' British respondents, whereas immigrant women from the Caribbean region have a 49% and women from other countries a 36% lower risk of union formation. There are no significant differences between 'native' British women and those from other European (and industrialised) countries (Model 1). These patterns persist when we control for women's educational level (Table 3, Model 2). The descendants of immigrants have a significantly lower risk of union formation than 'native' British women. Further analysis revealed that this is largely due to differences in the timing of union formation. Most ethnic minority women start unions later, and their first partnership is often a marriage, which is typically formed at a later age than cohabitation. Furthermore, their histories are censored in their 30s; thus, our proportional hazards model shows lower union formation rates for them. However, of note, the share of women who have entered a union at least once is large among 'native' British women. The figure is as high as 95% for older cohorts.

(Table 3 about here)

To gain a better understanding of the pathways to union formation, we analysed the type of first union by distinguishing between cohabitations and direct marriages. The analysis shows that immigrants from South Asia have a 94% lower risk of cohabitation than 'native' British women, whereas women from the Caribbean region and European countries have only a 21% and 14% lower risk, respectively (Table 4, Model 1). The levels for the descendants of immigrants are surprisingly similar to those for immigrants of the same background. The descendants of South Asian immigrants have a 85% lower risk of cohabiting than 'native' British, and the descendants of Caribbean immigrants have a 27% lower risk. Furthermore, the differences persist after educational differences are controlled (Table 4, Model 2).

(Table 4 about here)

The patterns of direct marriage formation differ. Whereas women from South Asian countries have a 2.6 times higher risk of marrying directly than 'native' British women, immigrants from Caribbean countries have a 63% lower risk of direct marriage formation (Table 5, Model 1). Again, the patterns are similar for the descendants of immigrants. Those with parents from South Asian countries have a significantly higher likelihood of marrying directly than 'natives', whereas those of Caribbean origin show relatively low direct marriage levels. Interestingly, immigrants from European countries and their descendants have a lower likelihood of marrying directly than 'native' British women. Again, the differences between migrant groups persist after we control for the educational composition of the population (Table 5, Model 2).

(Table 5 about here)

We also examined first marriage formation among the research population. We modelled time to marriage without consideration of whether women had married directly or after a period of cohabitation. The differences between the groups slightly decline, but the main patterns persist, with the highest marriage rates for South Asian immigrants and their descendants and the lowest for women of Caribbean origin (Table 6). Clearly, significant differences exist between various immigrant and ethnic minority groups in Britain. The share of women who cohabit before marriage has increased over time among British women. However, whereas the female population of Caribbean origin shows relatively high

cohabitation and low marriage rates, cohabitation remains rare among immigrants from South Asian countries and their descendants. Most of these women marry directly.

(Table 6 about here)

Cohabitation is viewed as a 'trial marriage' in which a couple determines whether they wish to marry soon or end the partnership due to personal mismatch. The large number of cohabitation endings (marriage or separation) in the UoS sample supports this hypothesis. Only 1,561 of the 9,442 women who entered first cohabitation remain in their first cohabitation at the time of interview. It is likely that a large share of them will marry or separate as their relationship progresses. Cohabitation as a long-term partnership remains rare.

The analysis reveals that immigrants from Europe and South Asia are more likely to end cohabitation than are the 'native' British, although the differences between South Asian immigrants and 'natives' are not significant once control variables are included in the model (Table 7, Model 2). This is largely due to the small number of cohabitants among South Asians; only 35 women in the sample cohabit. No differences are observed between 'natives' and the descendants of immigrants, independent of their origin.

(Table 7 about here)

Cohabitation has two possible outcomes. Most immigrants and their descendants, particularly those of Caribbean origin, have a higher risk of separation than the 'native' British women. However, immigrants from South Asia have a lower (estimated) risk, although the differences are not significant (Table 8). The patterns for marriage are opposite. Immigrants from South Asia have a 1.8 times higher risk of marrying after cohabitation than 'natives'. The descendants of immigrants show lower risks, even those with South Asian origins, although the difference to the reference group is not significant (Table 9). The analysis of cohabitation outcomes shows that women from South Asia and their descendants are more likely to proceed from cohabitation to marriage, whereas those of Caribbean origin show relatively high separation and low marriage rates. Rather similar patterns, compared to the British 'natives', are also observed for immigrants from Europe and their descendants.

(Table 8 about here)

(Table 9 about here)

Another form of union separation is divorce. The risk population consists of women who either married directly or married after a period of cohabitation. Marital separation is measured as divorce or separation, whichever comes first (marital records are censored at the death of the partner). There are significant differences in the propensity of marital separation. Women from the Caribbean region have a 1.7 times higher risk of divorce compared to 'native' British women, whereas women from South Asia have a 75% lower divorce risk (Table 10, Model 1). There are no significant differences between 'native' British and immigrants from Europe after controlling for women's socio-demographic characteristics (Table 10, Model 2). The differences are smaller between the 'native' British population and the descendants of immigrants, but remain significant. Women of Caribbean origin (and those from other countries) have the highest divorce levels, whereas those of South Asian descent have the lowest levels.

(Table 10 about here)

A total of 7,378 women separated from their first partner. This group forms the risk population for second union formation. All immigrants and their descendants (except Europeans) show a much lower risk of entering a second union compared to the British 'native' population (Table 11, Model 2).

(Table 11 about here)

The patterns are similar when we analyse only entry into cohabitation (Table 12). Interestingly, both immigrants from South Asia and Caribbean countries and their descendants have a relatively low risk of cohabitation; however, the reasons for this low risk likely differ. For women of South Asian origin, the main reason for low cohabitation rates is the preference for marriage over cohabitation (even among those few who have separated from their first partner). This idea is supported by the analysis of direct marriages, as immigrants from South Asia and their descendants have a more than three times higher risk of marrying directly to a second partner than the 'native' British (after controlling for

women's socio-demographic characteristics) (Table 13). The large differences can be explained by the fact that nearly all 'native' British women start a second relationship as cohabitation. In addition, a small South Asian group who separates from their first partner may be willing to marry soon after the 'failure' of their first union in the context where the cultural pressure to form a stable relationship is high.

(Table 12 about here)

(Table 13 about here)

The prevalence of cohabitation over marriage for immigrants from the Caribbean region and their descendants is not immediately clear when investigating their second partnerships. However, given their low rates of second union formation and similarity to the 'native' British (whose second union is typically cohabitation) in the likelihood of marrying directly, the dominance of cohabitation over direct marriage is remarkable, although the sample size is insufficient for detailed interpretation.

As we progress to cohabitation outcomes, the sample size and the number of events become small, particularly for immigrants from South Asia and their descendants. Furthermore, this may be a select group, as most South Asians follow a traditional partnership formation pathway and do not leave their first union. In addition, the low average age of the descendants of immigrants suggests that many have not reached the stage in life where separation from the second partner typically takes place. Therefore, we only report the results for which the group size and the number of events are sufficient. The analysis shows little difference in the likelihood of ending cohabitation between the groups (Table 14). However, after distinguishing between separation and marriage as outcomes of cohabitation, we observe that the descendants of Caribbean immigrants are significantly more likely to separate from cohabitation than the 'native' British. Interestingly, the estimates show a higher risk for immigrants from South Asian and their descendants, but the number of events for South Asians is insufficient to detect whether this is due to sampling error or selectivity (Table 15). Immigrants from Caribbean countries have a relatively low risk of directly marrying their second partner, but the number of events is insufficient to draw final conclusions (Table 16).

(Table 14 about here)

(Table 15 about here)

(Table 16 about here)

The analysis of the second marital dissolution seems to support the previously observed patterns. The estimated risk levels are higher for the Caribbean population and lower for South Asian women; however, the number of events is insufficient to confirm the patterns (Table 17). Interestingly, immigrants from other countries and their descendants exhibit high levels of marital dissolution (and this population is sufficiently large). Whether this is related to high divorce rates of mixed marriages or other factors is a further topic to explore.

(Table 17 about here)

Finally, we also analysed the formation of a third union. Immigrants from Europe have a higher risk of forming a third union than the 'natives' British, whereas the descendants of people from the Caribbean region have a lower risk (Table 18).

(Table 18 about here)

5. Summary and discussion

We investigated union formation and dissolution among immigrants and their descendants in the UK using data from the Understanding Society study. Most women in Britain form at least one union and many also marry; however, the pathways to marriage differ across cohorts. The older cohorts of 'native' British women married directly. However, cohabitation prior to marriage has become dominant among the younger cohorts. The separation and divorce rates have also increased over time; approximately one-third of recent marriage cohorts end in divorce by the 15th year of marriage.

The analysis showed significant differences in partnership trajectories between 'native' British women and immigrants and, more importantly, across immigrant groups. The female

populations of Caribbean and European origin show the highest cohabitation, the Caribbean women show the lowest direct marriage rates and cohabitation is rare among immigrants from South Asian countries and their descendants, as most of them marry directly. Similar patterns are observed for cohabitation outcomes. Marriage is the likely outcome for the South Asian group, whereas separation is typically experienced by women from the Caribbean and European countries. These patterns extend to union dissolutions, with women from the Caribbean region and their descendants showing higher divorce rates than 'native' British women and women of South Asian origin having a low divorce risk. Although the size of some migrant groups is insufficient to study second unions and selectivity plays a role, particularly for those groups for which few leave their first unions, we can conclude that the trajectories of the formation of a second union are similar to those observed for the first union. The large differences and often opposite union trajectories for different immigrant and ethnic minority groups lead to the conclusion that ethnic minorities should not be analysed as a homogenous group in countries with a complex and diverse immigration history, such as the UK. The heterogeneity among immigrants and their descendants should also be explicitly taken into account when analysing partnership dynamics in the UK and predicting future trends (Voas 2009).

Although further research is needed to identify the factors that shape partnership formation and dissolution among immigrants and their descendants, our preliminary conclusion is that the socialisation environment plays an important role. Two immigrant groups, South Asians and Caribbeans, showed distinct patterns and pathways; however, it is difficult to measure the degree to which their patterns resemble those in their countries of origin. The results for the immigrant groups may also be influenced by the fact that we included partnership transitions that occurred both prior to and after migration in the analysis. The patterns of the descendants of immigrants resemble those of their parents. However, for some of the transitions, the descendants' patterns resemble those observed of the 'native' British population. This result supports the idea that both the 'mainstream society' and 'minority subculture' have an effect on their behaviour, although it is difficult to conclude which culture has a greater impact. We presented two models for each partnership transition, one model with and one model without socio-economic variables. The differences between the results were small. Therefore, the differences in union formation and dissolution by migrant status are not directly influenced by the individuals' socio-economic characteristics. Thus, we conclude that an individual's migration background and/or ethnic origin is force that drives the observed partnership

trajectories, although the role of various factors (culture *versus* economy; choice *versus* structure) must be investigated.

The current study observed specific patterns of union formation and dissolution among South Asian and Caribbean immigrants that largely support the findings of Berrington (1994; 1996), who analysed first unions by ethnicity using large-scale cross-sectional data. Interestingly, although Berrington's research showed some convergence in marriage patterns among the descendants of immigrants towards those of the 'native' population, the current study demonstrates that significant differences persist. An issue for further research is the degree to which the migrant groups are homogeneous / heterogeneous. Our preliminary analysis showed similar trajectories for Indian, Pakistani and Bangladeshi ethnic minorities, thus justifying their inclusion in the analysis as one South Asian group. However, a large sample may reveal some differences between these groups.

This study was unable to test the validity of the selection and disruption hypotheses and their potential impact on the union formation of immigrants and their descendants in the UK because union formation was only compared to the British population and not to the respective populations of origin. Future research should also analyse partnership patterns by time since immigration.

Some individuals have parents from different countries; therefore, the results may be sensitive to the definition of migration background for the descendants of immigrants. In this study, we prioritised the fathers' origin. For example, an individual with a father from India and a mother from the UK was categorised as a descendant of an Indian immigrant, whereas the opposite combination of the parents' origins resulted in the individual's affiliation with the European group. We conducted a sensitivity analysis with two further options. First, the priority was given to the foreign parent if one of the parents was born outside of the UK. Second, an extra category was created for individuals with one parent who was born in the UK, independent of the origin of the other parent. The analysis showed that the main results were not sensitive to the different definitions of the descendants of immigrants.

Finally, this study presented the results for the female population in Britain. The analysis was also conducted with males (not shown). The results on partnership formation and dissolution

processes by migrant status were similar for males and females, despite the well-known gender-specific effects such as men's higher age at entry into first union.

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Appendix

Table 1. Distribution of individuals by immigrant status and sex.

	Men		Women		Total	
Immigrant status	N	%	N	%	N	%
Native	14,478	69	18,699	70	33,177	70
Descendants of immigrants						
Europe	814	4	1,068	4	1,882	4
South Asia	646	3	825	3	1,471	3
Caribbean	297	1	439	2	736	2
Other	563	3	756	3	1,319	3
Immigrants						
Europe	588	3	842	3	1,430	3
South Asia	1,428	7	1,284	5	2,712	6
Caribbean	163	1	220	1	383	1
Other	1,963	9	2,438	9	4,401	9
Total	**20,940**	**100**	**26,571**	**100**	**47,511**	**100**

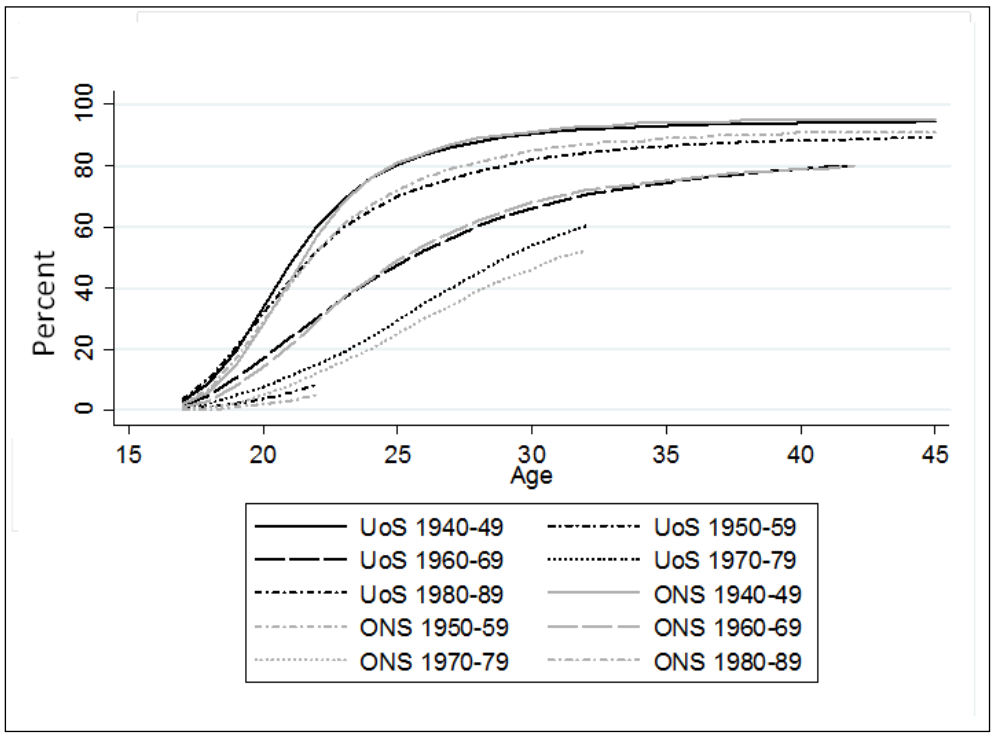

Figure 1. Ever married women: comparison between UoS and ONS data by cohort.

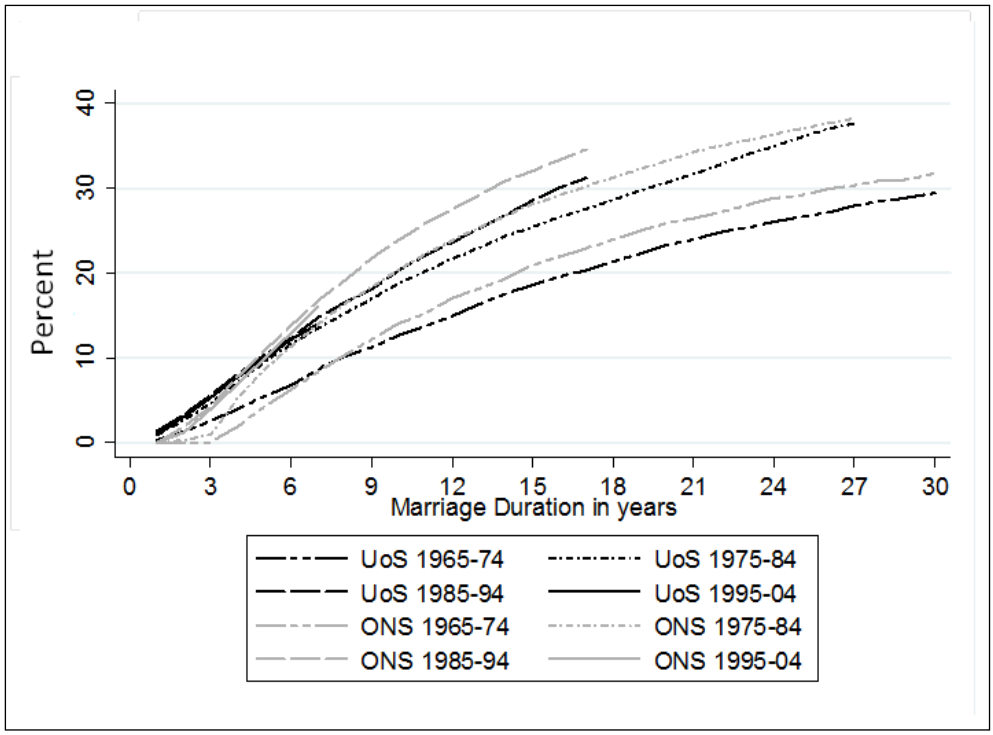

Figure 2. Ever divorced individuals: comparison of the UoS and ONS data by marriage cohort.

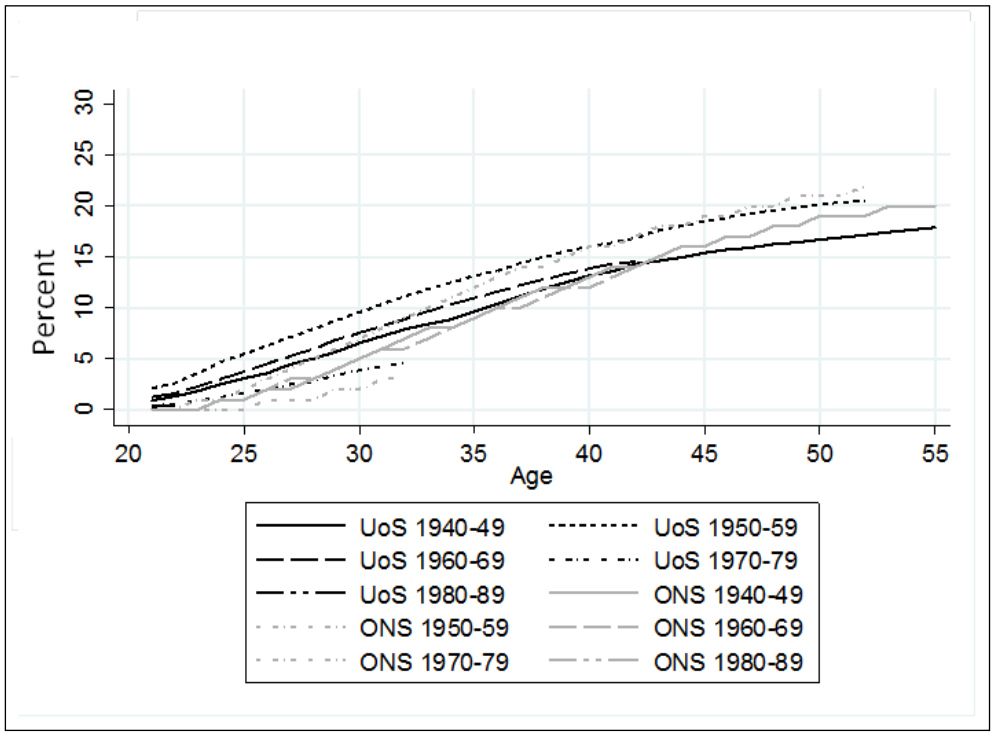

Figure 3. Ever remarried women: comparison of the UoS and ONS data by cohort.

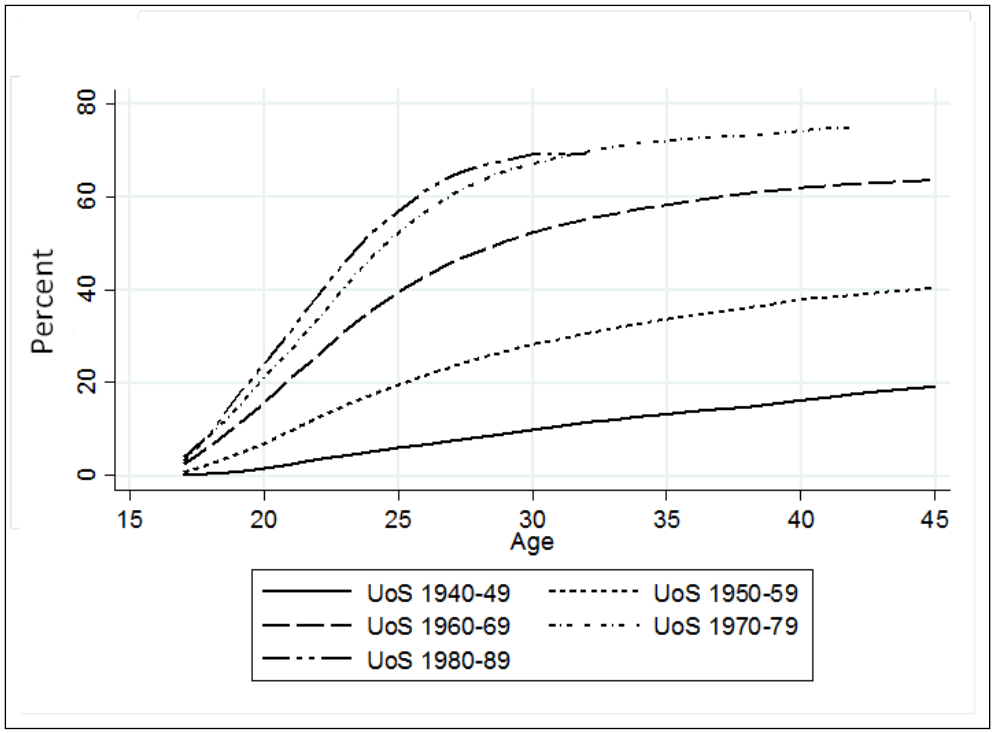

Figure 4. Ever cohabited women: UoS data by cohort.

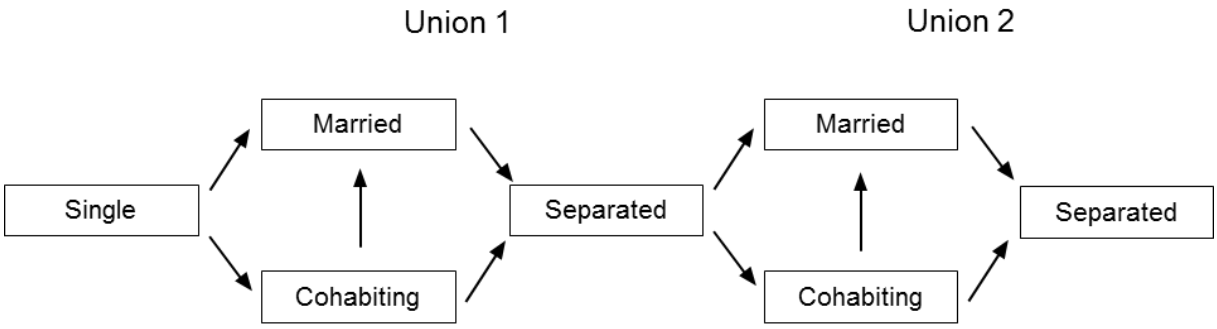

Figure 5. Partnership transitions analysed in the study.

Note: The group of separated included also widowed women.

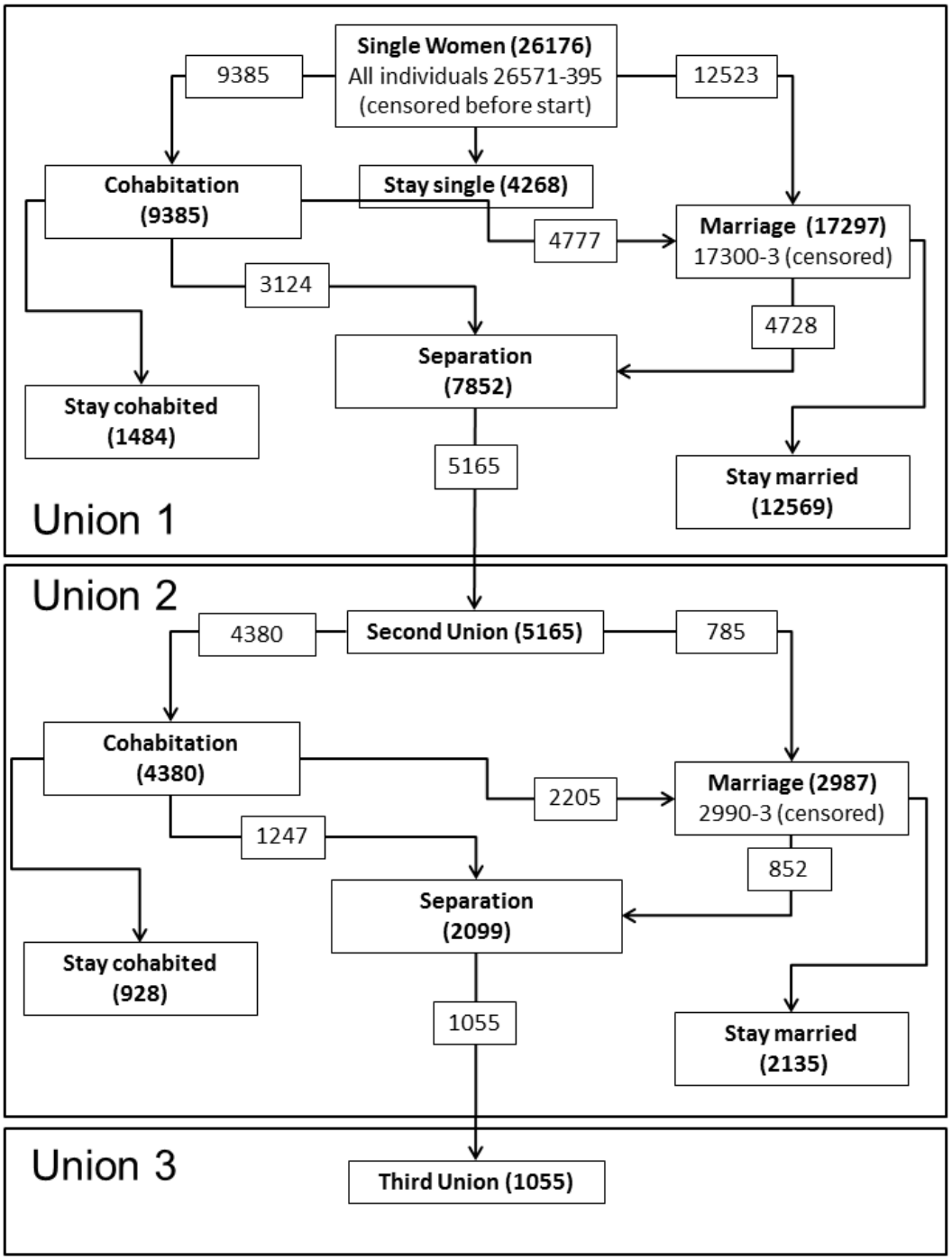

Figure 6. Female population of UoS data and their union formation and dissolution trajectory.

Table 2. Number of events and person-months of partnership formation and dissolution events for women by migration status.

Women	**First Union**				**First Union (Cohabitation or Marriage)**					
	person-				person-		**cohabitation**		**marriage**	
Migration group	months	%	events	%	months	%	events	%	events	%
Native	1595073	67	15898	73	1595073	67	7032	75	8866	71
Descendants of immigrants										
Europe	103221	4	882	4	103221	4	452	5	430	3
South Asia	67336	3	471	2	67336	3	77	1	394	3
Caribbean	51827	2	317	1	51827	2	234	2	83	1
Other	76373	3	495	2	76373	3	330	4	165	1
Immigrants										
Europe	85918	4	704	3	85918	4	404	4	300	2
South Asia	103129	4	1112	5	103129	4	35	0	1077	9
Caribbean	31464	1	169	1	31464	1	92	1	77	1
Other	279097	12	1860	8	279097	12	729	8	1131	9
Total	**2393440**	100	**21908**	100	**2393440**	100	**9385**	100	**12523**	100
Risk population			**26176**				**26176**		**26176**	

Women	**First Cohabitation End**				**First Cohabitation End (Separation or Marriage)**					
	person-				person-		**separation**		**marriage**	
Migration group	months	%	events	%	months	%	events	%	events	%
Native	338961	76	5883	74	338961	76	2256	72	3627	76
Descendants of immigrants										
Europe	23240	5	381	5	23240	5	168	5	213	4
South Asia	3915	1	67	1	3915	1	32	1	35	1
Caribbean	12873	3	216	3	12873	3	114	4	102	2
Other	16259	4	286	4	16259	4	154	5	132	3
Immigrants										
Europe	15541	3	346	4	15541	3	143	5	203	4
South Asia	1064	0	26	0	1064	0	4	0	22	0
Caribbean	4678	1	87	1	4678	1	33	1	54	1
Other	28444	6	609	8	28444	6	220	7	389	8
Total	**444974**	100	**7901**	100	**444974**	100	**3124**	100	**4777**	100
Risk population			**9385**				**9385**		**9385**	

Women	**Ever Married**				**Marriage Dissolution**			
	person-				person-			
Migration group	months	%	events	%	months	%	events	%
Native	2154416	68	13252	72	3008254	77	3657	77
Descendants of immigrants								
Europe	143782	5	694	4	147800	4	200	4
South Asia	73730	2	437	2	58664	2	80	2
Caribbean	81308	3	205	1	32786	1	74	2
Other	110557	4	330	2	45041	1	92	2
Immigrants								
Europe	114276	4	552	3	100949	3	109	2
South Asia	104426	3	1100	6	216463	6	106	2
Caribbean	39484	1	134	1	29567	1	56	1
Other	326161	10	1584	9	265465	7	354	7
Total	**3148140**	100	**18288**	100	**3904989**	100	**4728**	100
Risk population			**26412**				**17297**	

Table 2. Number of events and person-months of partnership formation and dissolution events for women by migration status (continuation from page 28)

Women	**Second Union**				**Second Union (Cohabitation or Marriage)**					
	person-				person-		**cohabitation**		**marriage**	
Migration group	months	%	events	%	months	%	events	%	events	%
Native	391815	73	4117	80	391815	73	3537	81	580	74
Descendants of immigrants										
Europe	26300	5	241	5	26300	5	211	5	30	4
South Asia	5688	1	53	1	5688	1	27	1	26	3
Caribbean	15344	3	95	2	15344	3	84	2	11	1
Other	18275	3	139	3	18275	3	125	3	14	2
Immigrants										
Europe	15555	3	171	3	15555	3	152	3	19	2
South Asia	7845	1	37	1	7845	1	12	0	25	3
Caribbean	11210	2	31	1	11210	2	20	0	11	1
Other	45131	8	281	5	45131	8	212	5	69	9
Total	**537163**	100	**5165**	100	**537163**	100	**4380**	100	**785**	100
Risk population			**7852**				**7852**		**7852**	

Women	**Second Cohabitation End**				**Second Cohabitation End (separation or marriage)**					
	person-				person-		**separation**		**marriage**	
Migration group	months	%	events	%	months	%	events	%	events	%
Native	181692	81	2781	81	181692	81	949	76	1832	83
Descendants of immigrants										
Europe	11174	5	171	5	11174	5	59	5	112	5
South Asia	1132	1	24	1	1132	1	13	1	11	0
Caribbean	4408	2	76	2	4408	2	40	3	36	2
Other	5664	3	102	3	5664	3	47	4	55	2
Immigrants										
Europe	7011	3	111	3	7011	3	54	4	57	3
South Asia	797	0	10	0	797	0	5	0	5	0
Caribbean	1772	1	16	0	1772	1	9	1	7	0
Other	9540	4	161	5	9540	4	71	6	90	4
Total	**223190**	100	**3452**	100	**223190**	100	**1247**	100	**2205**	100
Risk population			**4380**				**4380**		**4380**	

Women	**Second Marriage Dissolution**				**Third Union**			
	person-				person-			
Migration group	months	%	events	%	months	%	events	%
Native	383269	84	676	79	277941	78	835	79
Descendants of immigrants								
Europe	20156	4	45	5	18173	5	51	5
South Asia	4073	1	10	1	3628	1	7	1
Caribbean	4632	1	15	2	8812	2	22	2
Other	8138	2	26	3	11587	3	35	3
Immigrants								
Europe	11206	2	20	2	10904	3	44	4
South Asia	2668	1	3	0	1379	0	4	0
Caribbean	2453	1	6	1	3736	1	2	0
Other	18804	4	51	6	18089	5	55	5
Total	**455399**	100	**852**	100	**354250**	100	**1055**	100
Risk population			**2987**				**2099**	

Table 3. Relative risks of first union formation for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
First Union (marriage or cohabitation)	Native	1		1		Individuals become under risk at age 16
	Decendants of Immigrants					
	Europe	0.85	***	0.85	***	
	South Asia	0.75	***	0.75	***	
	Caribbean	0.62	***	0.62	***	
	Other	0.69	***	0.69	***	
	Immigrants					
	Europe	0.85		0.85		Censoring last interview or age 45
	South Asia	1.10	***	1.10	***	
	Caribbean	0.50	***	0.50	***	
	Other	0.67	***	0.67	***	

Model 1: controlled for the woman's age and birth cohort
Model 2: additionally controlled for educational level
*** p<0.01, ** p<0.05, * p<0.1

Table 4. Relative risks of cohabitation for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
First Union (cohabitation with marriage censored)	Native	1		1		Individuals become under risk at age 16
	Decendants of Immigrants					
	Europe	0.92		0.94	*	
	South Asia	0.15	***	0.15	***	
	Caribbean	0.72	***	0.71	***	
	Other	0.74	***	0.75	***	
	Immigrants					
	Europe	0.87	***	0.90	*	Censoring at marriage, last interview or age 45
	South Asia	0.06	***	0.06	***	
	Caribbean	0.79	**	0.80	**	
	Other	0.42	***	0.43	***	

Model 1: controlled for the woman's age and birth cohort
Model 2: additionally controlled for educational level
*** p<0.01, ** p<0.05, * p<0.1

Table 5. Relative risks of direct marriage for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
First Union (marriage with cohabitation censored)	Native	1		1		Individuals become under risk at age 16
	Decendants of Immigrants					
	Europe	0.78	***	0.79	***	
	South Asia	2.34	***	2.40	***	
	Caribbean	0.42	***	0.41	***	
	Other	0.50	***	0.54	***	
	Immigrants					
	Europe	0.70	***	0.75	***	Censoring at cohabitation, last interview or age 45
	South Asia	2.59	***	2.57	***	
	Caribbean	0.38	***	0.36	***	
	Other	0.95	*	0.98		

Model 1: controlled for the woman's age and birth cohort
Model 2: additionally controlled for educational level
*** p<0.01, ** p<0.05, * p<0.1

Table 6. Relative risks of marriage (ever married) for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Ever married	Native	1		1		Individuals become under risk at age 16
	Decendants of Immigrants					
	Europe	0.79	***	0.79	***	
	South Asia	1.55	***	1.58	***	
	Caribbean	0.48	***	0.48	***	
	Other	0.57	***	0.59	***	
	Immigrants					
	Europe	0.82	***	0.86	***	Censoring last interview or age 45
	South Asia	2.02	***	2.02	***	
	Caribbean	0.46	***	0.45	***	
	Other	0.87	***	0.89	***	

Model 1: controlled for the woman's age and birth cohort
Model 2: additionally controlled for educational level
*** p<0.01, ** p<0.05, * p<0.1

Table 7. Relative risks of cohabitation end (separation or marriage) for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Cohabitation End (separation or marriage)	Native	1		1		Individuals become at risk at cohabitation start (first union)
	Decendants of Immigrants					
	Europe	0.94		0.94		
	South Asia	1.05		1.02		
	Caribbean	0.95		0.93		
	Other	0.98		0.95		
	Immigrants					
	Europe	1.21	***	1.20	***	Censoring last interview or after 30 years of cohabitation
	South Asia	1.52	**	1.50	**	
	Caribbean	1.09		1.11		
	Other	1.20	***	1.18	***	

Model 1: controlled for the union duration and birth cohort
Model 2: additionally controlled for educational level and age at first cohabitation
*** p<0.01, ** p<0.05, * p<0.1

Table 8. Relative risks of cohabitation end as separation for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Cohabitation End (separation with marriage censored)	Native	1		1		Individuals become at risk at cohabitation start (first union)
	Decendants of Immigrants					
	Europe	1.17	*	1.17	*	
	South Asia	1.30		1.25		
	Caribbean	1.46	***	1.44	***	
	Other	1.40	***	1.35	***	
	Immigrants					
	Europe	1.38	***	1.37	***	Censoring last interview or after 30 years of cohabitation or marriage
	South Asia	0.70		0.68		
	Caribbean	1.49	**	1.52	**	
	Other	1.19	**	1.16	**	

Model 1: controlled for the union duration and birth cohort
Model 2: additionally controlled for educational level and age at first cohabitation
*** p<0.01, ** p<0.05, * p<0.1

Table 9. Relative risks of cohabitation end as marriage for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Cohabitation End (marriage with separation censored)	Native	1		1		Individuals become at risk at cohabitation start (first union)
	Decendants of Immigrants					
	Europe	0.80	***	0.81	***	
	South Asia	0.90		0.87		
	Caribbean	0.68	***	0.67	***	
	Other	0.73	***	0.71	***	
	Immigrants					
	Europe	1.11		1.10		Censoring last interview or after 30 years of cohabitation or separation
	South Asia	1.95	***	1.92	***	
	Caribbean	0.93		0.95		
	Other	1.22	***	1.19	***	

Model 1: controlled for the union duration and birth cohort
Model 2: additionally controlled for educational level and age at first cohabitation
*** p<0.01, ** p<0.05, * p<0.1

Table 10. Relative risks of first marriage dissolution for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
First Marriage Dissolution	Native	1		1		Individuals become under risk at time of first marriage (first union)
	Decendants of Immigrants					
	Europe	1.08		1.08		
	South Asia	0.56	***	0.59	***	
	Caribbean	1.45	***	1.42	***	
	Other	1.36	***	1.35	**	
	Immigrants					
	Europe	0.88		0.89		Censoring at last interview, after 30 years of marriage, age 60 or death of partner
	South Asia	0.24	***	0.26	***	
	Caribbean	1.95	***	1.89	***	
	Other	0.82	***	0.86	**	

Model 1: controlled for marriage duration and birth cohort
Model 2: additionally controlled for educational level, premarital cohabitation and age at first union
*** p<0.01, ** p<0.05, * p<0.1

Table 11. Relative risks of second union (cohabitation or marriage) for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Second Union (cohabitation or marriage)	Native	1		1		Individuals become under risk at end of first union
	Decendants of Immigrants					
	Europe	0.88	*	0.88	*	
	South Asia	0.66	***	0.69	***	
	Caribbean	0.55	***	0.55	***	
	Other	0.66	***	0.66	***	
	Immigrants					
	Europe	0.99		1.00		Censoring at last interview, after 30 years of separation or age 60
	South Asia	0.42	***	0.46	***	
	Caribbean	0.34	***	0.41	***	
	Other	0.58	***	0.63	***	

Model 1: controlled for time since separation and birth cohort
Model 2: additionally controlled for educational level, type of first union and age at first union
*** p<0.01, ** p<0.05, * p<0.1

Table 12. Relative risks of second union as cohabitation for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Second Union (cohabitation with marriage censored)	Native	1		1		Individuals become under risk at time of separation of first union
	Decendants of Immigrants					
	Europe	0.89		0.88	*	
	South Asia	0.37	***	0.40	***	
	Caribbean	0.53	***	0.53	***	
	Other	0.66	***	0.65	***	
	Immigrants					
	Europe	1.00		1.00		Censoring at last interview, after 30 years of separation or age 60
	South Asia	0.15	***	0.18	***	
	Caribbean	0.27	***	0.32	***	
	Other	0.50	***	0.55	***	

Model 1: controlled for time since separation and birth cohort
Model 2: additionally controlled for educational level, type of first union and age at first union
*** p<0.01, ** p<0.05, * p<0.1

Table 13. Relative risks of second union as marriage for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Second Union (marriage with cohabitation censored)	Native	1		1		Individuals become under risk at time of separation of first union
	Decendants of Immigrants					
	Europe	0.82		0.89		
	South Asia	4.11	***	3.14	***	
	Caribbean	0.70		0.88		
	Other	0.65		0.78		
	Immigrants					
	Europe	0.89		0.96		Censoring at last interview, after 30 years of separation or age 60
	South Asia	2.52	***	1.84	***	
	Caribbean	0.66		0.90		
	Other	1.20		1.21		

Model 1: controlled for time since separation and birth cohort
Model 2: additionally controlled for educational level, type of first union and age at first union
*** p<0.01, ** p<0.05, * p<0.1

Table 14. Relative risks of second cohabitation end for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Second Cohabitation End (separation or marriage)	Native	1		1		Individuals become under risk at time of second cohabitation
	Decendants of Immigrants					
	Europe	1.05		1.04		
	South Asia	1.28		1.21		
	Caribbean	1.07		1.10		
	Other	1.02		1.00		
	Immigrants					
	Europe	0.99		0.96		Censoring at last interview, 30 years of cohabitation or age 60
	South Asia	0.86		0.80		
	Caribbean	0.73		0.70		
	Other	1.08		1.06		

Model 1: controlled for union duration and birth cohort
Model 2: additionally controlled for educational level, type of first union and age at second union
*** p<0.01, ** p<0.05, * p<0.1

Table 15. Relative risks of second cohabitation end as separation for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Second Cohabitation End (separation with marriage censored)	Native	1		1		Individuals become under risk at time of second cohabitation
	Decendants of Immigrants					
	Europe	1.03		0.99		
	South Asia	1.94	**	1.94	**	
	Caribbean	1.56	***	1.50	**	
	Other	1.16		1.07		
	Immigrants					
	Europe	1.25		1.25		Censoring at last interview, 30 years of cohabitation or age 60
	South Asia	1.40		2.11	*	
	Caribbean	1.45		1.13		
	Other	1.29	**	1.27	*	

Model 1: controlled for union duration and birth cohort
Model 2: additionally controlled for educational level, type of first union and age at second union
*** p<0.01, ** p<0.05, * p<0.1

Table 16. Relative risks of second cohabitation end as marriage for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Second Cohabitation End (marriage with separation censored)	Native	1		1		Individuals become under risk at time of second cohabitation
	Decendants of Immigrants					
	Europe	1.06		1.07		
	South Asia	0.91		0.84		
	Caribbean	0.80		0.85		
	Other	0.94		0.96		
	Immigrants					
	Europe	0.83		0.81		Censoring at last interview, 30 years of cohabitation or age 60
	South Asia	0.61		0.49		
	Caribbean	0.44	**	0.48	*	
	Other	0.97		0.95		

Model 1: controlled for union duration and birth cohort
Model 2: additionally controlled for educational level, type of first union and age at second union
*** p<0.01, ** p<0.05, * p<0.1

Table 17. Relative risks of second marriage dissolution for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Second Marriage dissolution	Native	1		1		Individuals become under risk at time of second marriage
	Decendants of Immigrants					
	Europe	1.20		1.19		
	South Asia	1.09		1.14		
	Caribbean	1.44		1.49		
	Other	1.62	**	1.57	**	
	Immigrants					
	Europe	0.91		0.93		Censoring at last interview, 30 years after second marriage, death of partner or age 60
	South Asia	0.52		0.60		
	Caribbean	1.76		1.67		
	Other	1.41	**	1.50	***	

Model 1: controlled for union duration and birth cohort
Model 2: additionally controlled for educational level, type of first union and age at second union
*** p<0.01, ** p<0.05, * p<0.1

Table 18. Relative risks of third union for women, UoS data.

	Women	Model 1		Model2		
		RR	p-value	RR	p-value	
Third Union (cohabitation or marriage)	Native	1		1		Individuals become under risk at time of end of second union
	Decendants of Immigrants					
	Europe	0.89		0.87		
	South Asia	0.48	*	0.46	**	
	Caribbean	0.64	**	0.63	**	
	Other	0.88		0.85		
	Immigrants					
	Europe	1.33	*	1.25		Censoring at last interview, 30 years after end of second union or age 60
	South Asia	1.00		1.03		
	Caribbean	0.23	**	0.29	*	
	Other	0.90		0.87		

Model 1: controlled for time since separation and birth cohort
Model 2: additionally controlled for educational level, type of first union and age at second union
*** p<0.01, ** p<0.05, * p<0.1

Table 19: Relative risks of Model 2 with and without weights, UoS data.

Women	**First Union** (coh. or marriage)				**First Union** (only cohabitation)			
	no weights		with weights		no weights		with weights	
	RR	p-value	RR	p-value	RR	p-value	RR	p-value
Native	1		1		1		1	
Decendants of Immigrants								
Europe	0.85	***	0.84	***	0.94	*	0.94	
South Asia	0.75	***	0.70	***	0.15	***	0.21	***
Caribbean	0.62	***	0.74	***	0.71	***	0.82	**
Other	0.69	***	0.77	***	0.75	***	0.91	
Immigrants								
Europe	0.85		0.87	***	0.90	*	0.93	
South Asia	1.10	***	0.98		0.06	***	0.08	***
Caribbean	0.50	***	0.53	***	0.80	**	0.87	
Other	0.67	***	0.75	***	0.43	***	0.54	***

Women	**First Union** (only marriage)				**Ever married**			
	no weights		with weights		no weights		with weights	
	RR	p-value	RR	p-value	RR	p-value	RR	p-value
Native	1		1		1		1	
Decendants of Immigrants								
Europe	0.79	***	0.76	***	0.79	***	0.77	***
South Asia	2.40	***	2.21	***	1.58	***	1.36	***
Caribbean	0.41	***	0.61	***	0.48	***	0.62	***
Other	0.54	***	0.57	***	0.59	***	0.67	***
Immigrants								
Europe	0.75	***	0.78	***	0.86	***	0.86	***
South Asia	2.57	***	2.19	***	2.02	***	1.70	***
Caribbean	0.36	***	0.38	***	0.45	***	0.45	***
Other	0.98		1.06		0.89	***	0.96	

Women	**Cohabitation End** (sep. and mar.)				**Cohabitation End** (only separation)			
	no weights		with weights		no weights		with weights	
	RR	p-value	RR	p-value	RR	p-value	RR	p-value
Native	1		1		1		1	
Decendants of Immigrants								
Europe	0.94		0.94		1.17	*	1.17	*
South Asia	1.02		0.88		1.25		1.06	
Caribbean	0.93		0.98		1.44	***	1.41	***
Other	0.95		1.04		1.35	***	1.41	***
Immigrants								
Europe	1.20	***	1.17	**	1.37	***	1.37	***
South Asia	1.50	**	1.30		0.68		0.52	
Caribbean	1.11		1.07		1.52	**	1.52	***
Other	1.18	***	1.19	***	1.16	**	1.19	*

Women	**Cohabitation End** (only marriage)				**First Marriage Dissolution**			
	no weights		with weights		no weights		with weights	
	RR	p-value	RR	p-value	RR	p-value	RR	p-value
Native	1		1		1		1	
Decendants of Immigrants								
Europe	0.81	***	0.81	***	1.08		1.10	
South Asia	0.87		0.78		0.59	***	0.53	***
Caribbean	0.67	***	0.77	**	1.42	***	1.39	**
Other	0.71	***	0.82	*	1.35	**	1.39	**
Immigrants								
Europe	1.10		1.07		0.89		0.99	
South Asia	1.92	***	1.81	*	0.26	***	0.27	***
Caribbean	0.95		0.90		1.89	***	1.93	***
Other	1.19	***	1.20	***	0.86	**	0.92	

Model control variables correspond to Model 2 of previously shown models
*** p<0.01, ** p<0.05, * p<0.1

Table 19: Relative risks of Model 2 with and without weights, UoS data. (continuation from page 36)

Women	**Second Union** (coh. and marriage)				**Second Union** (cohabitation)			
	no weights		with weights		no weights		with weights	
	RR	p-value	RR	p-value	RR	p-value	RR	p-value
Native	1		1		1		1	
Decendants of Immigrants								
Europe	0.88	*	0.90		0.88	*	0.90	
South Asia	0.69	***	0.93		0.40	***	0.70	**
Caribbean	0.55	***	0.64	***	0.53	***	0.60	***
Other	0.66	***	0.77	**	0.65	***	0.78	**
Immigrants								
Europe	1.00		0.99		1.00		1.00	
South Asia	0.46	***	0.62	**	0.18	***	0.34	***
Caribbean	0.41	***	0.42	***	0.32	***	0.33	***
Other	0.63	***	0.80	***	0.55	***	0.75	***

Women	**Second Union** (only marriage)				**Second Coh. End** (sep. or marriage)			
	no weights		with weights		no weights		with weights	
	RR	p-value	RR	p-value	RR	p-value	RR	p-value
Native	1		1		1		1	
Decendants of Immigrants								
Europe	0.89		0.90		1.04		1.02	
South Asia	3.14	***	3.25	***	1.21		1.32	
Caribbean	0.88		1.14		1.10		1.08	
Other	0.78		0.77		1.00		1.02	
Immigrants								
Europe	0.96		0.87		0.96		0.89	
South Asia	1.84	***	1.96	**	0.80		0.79	
Caribbean	0.90		0.93		0.70		0.69	
Other	1.21		1.24		1.06		1.06	

Women	**Second Coh. End** (only separation)				**Second Coh. End** (only marriage)			
	no weights		with weights		no weights		with weights	
	RR	p-value	RR	p-value	RR	p-value	RR	p-value
Native	1		1		1		1	
Decendants of Immigrants								
Europe	0.99		1.01		1.07		1.03	
South Asia	1.94	**	2.15	***	0.84		0.95	
Caribbean	1.50	**	1.29		0.85		0.98	
Other	1.07		0.89		0.96		1.12	
Immigrants								
Europe	1.25		1.25		0.81		0.69	**
South Asia	2.11	*	1.82		0.49		0.57	*
Caribbean	1.13		1.09		0.48	*	0.45	*
Other	1.27	*	1.46	**	0.95		0.86	

Women	**Second Marriage Dissolution**				**Third Union (coh. or marriage)**			
	no weights		with weights		no weights		with weights	
	RR	p-value	RR	p-value	RR	p-value	RR	p-value
Native	1		1		1		1	
Decendants of Immigrants								
Europe	1.19		1.21		0.87		0.89	
South Asia	1.14		0.90		0.46	**	0.65	
Caribbean	1.49		1.41		0.63	**	0.83	
Other	1.57	**	1.55	*	0.85		0.94	
Immigrants								
Europe	0.93		1.10		1.25		1.12	
South Asia	0.60		0.69		1.03		0.78	
Caribbean	1.67		1.76		0.29	*	0.31	
Other	1.50	***	1.26		0.87		0.94	

Model control variables correspond to Model 2 of previously shown models
*** p<0.01, ** p<0.05, * p<0.1