Do partnerships last? Comparing marriage and cohabitation using longitudinal census data

Ben Wilson

Office for National Statistics

Rachel Stuchbury

Office for National Statistics and CeLSIUS (Centre for Longitudinal Study Information and User Support), London School of Hygiene & Tropical Medicine

Abstract

The stability of couple partnerships is of continual interest to policy makers and many users of official statistics. This research used a sample of adults (from the Office for National Statistics Longitudinal Study) who were in a partnership (married or cohabiting) in the 1991 Census of England and Wales, and then explored whether these individuals were living with the same partner in 2001.

Marital partnerships were found to be more stable, even when additional factors were taken into account. Of adults aged 16 to 54, around four in five adults (82 per cent) that were married in 1991 were living with the same partner in 2001. The equivalent figure for adults cohabiting in 1991 was around three in five (61 per cent), of whom around two-thirds (of those remaining with the same partner) had converted their cohabitation to a marriage by 2001. Long-running partnership stability was also found to vary according to the socio-demographic characteristics of individuals and their partners and a summary of these variations is discussed.

Contents

Abstract	37
Introduction	40
Previous research and different sources of data	41
Analysis	42
Results.....	45
Changes in partnership status: cohabitation	46
Comparing marriage and cohabitation	47
Factors associated with stability	47
The influence of multiple factors.....	49
Further modelling of partnership outcomes	53
Discussion	53
Key Findings.....	54
Acknowledgements	54
Appendix.....	55
References	59

List of figures

Figure 1	Changes in partnership status.....	40
----------	------------------------------------	----

List of tables

Table 1	Partnership status and legal marital status.....	43
Table 2	Partnership status by sex, percentage in each age group in 1991.....	43
Table 3	Partnership status in 2001 by age in 1991 (percentage in each age group).....	44
Table 4	Partnership status in 2001 by partnership status in 1991 (percentages)	45
Table 5	Partnership status in 2001 by partnership status and age in 1991 (percentages)	46
Table 6	Probability of having the same partner in 2001	48
Table A1	Whether enumerated in the 2001 Census by de facto status in 1991	55
Table A2	Whether enumerated in the 2001 Census by age in 1991	56
Table A3a	Partnership status by sex, percentage in each age group in 1991.....	57
Table A3b	Partnership status by sex, percentage in each age group in 1990/91.....	57
Table A4	Probability of being married to same partner in 2001 (if cohabiting in 1991)	58

Figure 1 **Changes in partnership status**

Introduction

There have been notable changes in UK partnership behaviour over the last 40 years. Divorce rates rose considerably during the 1970s¹, remained broadly stable after the mid-1980s, and more recently have fallen since 2004². At the same time, there has been a long-term fall in marriage rates since the beginning of the 1970s, and a steady increase in the proportion of adults cohabiting³. For unmarried men in Great Britain aged 16 to 59, the proportion cohabiting increased from 11 per cent in 1986 to 27 per cent in 2007. There was a similar change for equivalent unmarried women, from 13 per cent to 28 per cent^{4,5}.

This change in partnership behaviour is likely to persist. According to demographic projections, the long-term rise in cohabitation will continue, with the number of cohabiting couples in England and Wales projected to rise from 2.25 million in 2007 to 3.70 million in 2031⁶. The same figures show that the proportion of the adult population that is legally married is projected to fall from 49 per cent in 2007 to 41 per cent by 2031⁷. Official statistics provide considerable information on the estimated and projected population by partnership status. However, there is limited comparative information on the stability of different partnerships⁸. Furthermore, although the characteristics of married and cohabiting couples are available from various sources³, information on the factors associated with stability is also limited, largely due to a lack of suitable data (discussed later in this article).

Information about partnership stability is important for many different users of official statistics. For example, discussions about the legal rights of cohabiting couples might be informed by comparing the stability of marriage and cohabitation⁹. This comparison also has implications for policy areas concerning children in different family types. Knowledge of partnership stability therefore informs policy connected with fertility, education, poverty, and any aspect of child welfare (including maintenance and contact with parents). In addition, as the prevalence of cohabitation and divorce has increased at older ages¹⁰, it is of interest to consider the impact that changes in partnership stability might have on older people. The UK is an ageing society¹¹, and any changes in older people's partnership histories or those of their progeny may affect family networks, care arrangements, or retirement income. From a research perspective, it is of great interest to discover how far the predictive power of marital status (for morbidity, mortality, socio-economic wellbeing

and other outcomes) can also be attributed to cohabitation status (and for whom). For all of these topics, it is not just stability that is of interest, but also the extent to which cohabitation transitions differ from marital transitions.

Previous research and different sources of data

The study of partnership stability ideally requires data on partnership formation, dissolution, and transformation (from cohabitation to marriage). Cohabitation may end when two partners cease to live together (dissolution) or when two partners decide to marry (formation), but a marriage will only end when it dissolves (see **Figure 1**)¹². In this case, any analysis must take account of those who cohabit and then marry. Considering all this, two ways to gather information on stability (or partnership transitions) are by:

1. collecting retrospective partnership histories, and
2. using prospective longitudinal data¹³

It is also desirable that marriage can be reliably distinguished from cohabitation, and that the results should be valid for the whole population¹⁴.

The General Household Survey (GHS) has included annual questions on partnership history – including cohabitation – since 1979 (for women), and 1986 (for men)¹⁵. Research using this source shows that in Great Britain there have been long-run increases (since the 1950s) in the proportion of married women cohabiting before marriage¹⁶. Among those cohabiting in their first union, a majority will marry their partner, although this proportion declines for more recent first unions¹⁷. Current cohabitations, that is, those cohabiting at the time of the survey, tend to have begun more recently than current marriages (although this compares partnerships that are not yet completed)¹⁸. Nevertheless, it should be noted that the median duration of cohabitation increased between 1979 and 1995¹⁹.

There are issues with research (such as that quoted above) using partnership history data. Marriage and cohabitation histories from cross-sectional data (such as the GHS) have the disadvantage that it is only possible to examine the partners by their characteristics at one point in time. Also, retrospective history data can suffer from respondent recall problems, which are known to be more likely with informal events such as the start or end of a cohabiting relationship²⁰.

On the other hand, partnership stability can be researched using longitudinal birth cohort studies²¹, although it takes several decades before the subjects themselves have acquired sufficient experience of partnerships. It is possible to examine parental partnerships in birth cohort studies. For example, results from the Millennium Cohort Study (MCS) showed that children living with both their natural parents at nine months were more much likely to remain so at five years if the parents were married to each other at nine months rather than cohabiting²². Of course, this result does not consider partnerships where neither partner has children in the household, and like other birth cohort studies it is only valid for a single cohort of children born between 2000 and 2002.

Longitudinal data where the panel is continuously refreshed can offer a reliable sample for the whole population in any year. The British Household Panel Survey (BHPS) is one such source, and has the advantage that partnership histories have been collected from most respondents. Previous research has combined these histories with data from different waves of the survey to analyse partnership transitions. For example, it has been estimated that within 10 years about three-fifths of

first cohabitations turn into marriage, while just under a third dissolve²³. The BHPS has also been used to show that cohabiting couples are more likely than married couples to separate²⁴.

One problem with the BHPS is its relatively small sample size. This is the case particularly when looking at the cohabiting population (which is much smaller than the married population). An alternative source (used for the research reported in this article), is the Office for National Statistics (ONS) Longitudinal Study (LS). This has a much larger sample, one per cent of the population, and has been used in previous research to explore partnership stability²⁵. This research showed that adults in couples (either married or cohabiting in 1991) who had a dependent child in the household (in 1991) were more likely to be lone parents in 2001 compared with couples who had no dependent children in the household (in 1991). They were also less likely to be 'not in a family' (that is, not partnered or a lone parent). Other research using the LS has shown that only a fifth of cohabiting adults in 1991 were still cohabiting with the same partner in 2001 (although a further two-fifths had married their 1991 partner)²⁶. The research in this article follows on from this analysis to compare cohabiting and married partnerships, and to explore the factors associated with stability.

Unfortunately, apart from information on dissolutions due to widowhood, the LS only contains partnership information for respondents every 10 years (for more information on the LS see the section *Analysis* below). This means that it is not possible to know exactly when partnerships start or end, or to consider each individual's amount of exposure to the different partnership states. It also means that some partnerships can be missed altogether because they begin and end between two censuses. Of course, even when data are collected annually, changes within the year may be missed²⁷, and this should be considered when interpreting the results presented here and elsewhere. Thus the term 'stability' is used here to refer to long-term changes in partnership status, and the results only apply to a selected cohort of individuals (those enumerated at the 1991 and 2001 censuses of England and Wales).

Bearing these restrictions in mind, the questions addressed by this research are:

- What proportion of individuals remain with the same partner over a 10-year period?
- What are the differences between the stability of marriage and cohabitation?
- What are the characteristics associated with partnership stability?
- To what extent does cohabitation end in marriage, and what are the associated factors?

Analysis

This research uses the ONS Longitudinal Study (LS) to explore what happened to a cohort of individuals who were married or cohabiting in 1991. It examines their partnership status 10 years later in 2001, whether they are still living with the same partner, and what factors are associated with changes in partnership. As with all of the LS results in this article, the data are for England and Wales. The LS sample is selected by birthday, and continually replenished as new members with LS birthdays are born or migrate into England or Wales. Data comprise linked census records from 1971, 1981, 1991 and 2001 for sample members plus census records for those in their household at each census. Data from vital events are also added, including birth or death of a sample member, births and deaths of children to sample mothers and widowhoods to sample members. Vital event information on marriage and divorce registration cannot be included in the

Table 1 Partnership status and legal marital status

Longitudinal sample, England and Wales, All adults aged 16+ in 1991

Partnership status	1991	%	2001	%
Living with a partner	213,554		220,117	
Married and living with spouse	194,092	61	194,712	61
Cohabiting – single	12,343	4	14,251	4
Cohabiting – married (separated)	1,077	0	243	0
Cohabiting – divorced	5,653	2	10,166	3
Cohabiting – widowed	389	0	745	0
Not living with a partner	104,979		98,416	
Single	67,811	21	35,280	11
Married (separated)	6,302	2	2,832	1
Divorced	14,425	5	27,921	9
Widowed	16,441	5	32,383	10
Total	318,533	100	318,533	100

Note: These frequencies are for the same sample of individuals in 1991 and 2001

Source: ONS Longitudinal Study (authors' analysis)

LS, as date of birth, the key variable for matching data sources, is not asked on the registration forms. In addition, since cohabitation (formation or dissolution) is not registered in any way there is no corresponding way of including inter-censal information on cohabitation.

To begin with, a sub-sample of the LS was taken, giving over 435,000 adults (aged 16 and over) who were enumerated at the 1991 Census²⁸. After removing those living in communal establishments and visitors to private households in 1991, the sample was reduced to 417,000. It was further reduced by the selection of those who were also enumerated at the 2001 Census.

Table 2 Partnership status by sex, percentage in each age group in 1991

Longitudinal sample, England and Wales

	16–24	25–34	35–49	50–59	Total (16–59)
Women					
Lone	45	22	20	12	100
Cohabiting	33	40	23	5	100
Married ¹	5	27	46	23	100
Men					
Lone	49	25	18	8	100
Cohabiting	20	44	29	7	100
Married ¹	2	24	48	26	100

1 Married and living with spouse

Source: ONS Longitudinal Study (authors' analysis)

These numbered 318,533 and formed the sample for this study, referred to henceforth as the 'longitudinal sample'²⁹.

Table A1 in the Appendix shows the initial sub-sample by partnership status at 1991 and whether they were present at the 2001 Census. Over three-quarters of adults present in 1991 were also present in 2001, with 14 per cent having died or embarked between 1991 and 2001, and the remaining 11 per cent 'missing'. The latter represent all individuals unaccounted for in the 2001 Census. There are many possible reasons for this, but the most likely are non-response in the 2001 Census or migration to a location outside England and Wales (without notifying a General Practitioner)³⁰.

Compared with women, men were more likely to be missing in 2001. This was particularly the case for men who were cohabiting or not living with a partner in 1991. Compared with married women, married men were more likely to have died or embarked. Around 97 per cent of the 60,000 deaths and embarkations (of men and women) were deaths, so it is likely that this largely reflects the fact that a marriage is more likely to end by the death of the male partner rather than the female partner³¹. There are also variations in whether initial sub-sample members were 'missing in 2001' by age (see **Table A2** in the Appendix).

Partnership status variables for 1991 and 2001 were constructed for this analysis. It should be noted that they were intended to represent actual partnerships in the household, so adults were only classified as married if the spouse was present in the household at census, and the same of course applied to cohabitation. A few spouses and partners will not have been recorded by the census (in 1991 or 2001), and therefore both married and cohabiting adults will be slightly undercounted in favour of people not living with a partner. Since there was no direct question about cohabitation in the 1991 Census and no household relationship grid, partnership status was derived from information about relationships in the family and household (as explained below). This means that there will also be a slight tendency throughout this research to undercount those cohabiting³². Partnership status in 1991 was derived from the LS member's position in the family³³, the relationship of other household members to the LS member, and the sex, age and marital status of all household members. In 2001 it was derived from the same factors in 2001, as well

Table 3 Partnership status in 2001 by age in 1991 (percentage in each age group)

Longitudinal sample, England and Wales, All adults cohabiting in 1991

Partnership status in 2001	16–24	25–34	35–44	45–54	55–64	65+	Total (16+)
With the same partner	51	62	67	70	67	51	61
Cohabiting with the same partner	11	20	33	38	42	35	23
Married to the same partner	41	43	34	32	25	16	39
Partnership has ended	49	38	33	30	33	49	39
Cohabiting with a new partner	13	8	6	4	3	1	8
Married to a new partner	15	10	6	4	4	1	10
Not living with a partner	21	20	21	22	27	46	21
All individuals in age group	100	100	100	100	100	100	100

Source: ONS Longitudinal Study (authors' analysis)

as the LS member's partnership status in 1991, and the widowhood records in the LS for 1991 to 2001. Other people in an LS member's household are not linked from census to census, so there is no cross-census identifier for them. The sex, date of birth, marital status and relationship to LS member of the LS member's partner from 1991, were used to determine whether that person was still in the LS member's household 10 years later.

Results

Table 1 provides a summary of partnership status for 1991 and 2001 respectively. In both years, around two thirds of adults are living with a partner. These may be different individuals in different years (the table does not show changes in individual partnership status). Nevertheless, the table indicates that partnership is more common than not living with a partner, and that the majority of partners are married. In 2001 there are larger proportions of divorced and widowed adults not living with a partner, but this is to be expected given the fact that the sample is older in 2001³⁴.

Before investigating changes in individual partnership status, it is worth looking more closely at the distribution of sample members by partnership status in 1991. **Table 2** shows that in 1991, cohabiting men and women tended to be younger than those who were married and living with their spouse. Lone adults (that is not in a partnership) tended to be younger still. The raw data from Table 2 was also compared with published GHS data for 1990/1991³⁵. **Tables A3a** and **A3b** (in the Appendix) provide a summary of the comparison, which shows that the adult population by partnership status has a similar age distribution for both sources (LS and GHS). It may therefore be assumed that the sample is broadly representative of the 1991 adult population (by age and partnership status), despite the fact that non-response will affect both sources, and non-response may be different for the GHS and the 1991 Census. (For information on adults not responding to the 2001 Census that were excluded from this sample, see Appendix Tables A1 and A2.) There are additional issues that may affect both sources, but the comparison provides verification that cohabiting adults were successfully identified from the 1991 Census.

Table 4 Partnership status in 2001 by partnership status in 1991 (percentages)

Longitudinal sample, England and Wales, All adults aged 16 to 54 in 1991

Partnership status in 2001	Cohabiting in 1991	Married in 1991	All partnerships in 1991
With the same partner	61	82	79
Cohabiting with the same partner	22	0	3
Married to the same partner	39	82	77
Partnership has ended	39	18	21
Cohabiting with a new partner	9	3	4
Married to a new partner	10	5	5
Not living with a partner	21	10	12
Total	100	100	100

Source: ONS Longitudinal Study (authors' analysis)

Table 5 Partnership status in 2001 by partnership status and age in 1991 (percentages)

Longitudinal sample, England and Wales, All adults aged 16 to 54 in 1991

Partnership status in 2001	16–24	25–34	35–44	45–54	Total (16–54)
Married in 1991					
With the same partner	64	77	84	87	82
With a new partner	19	12	7	4	8
Not with a partner	17	12	9	9	10
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>
Cohabiting in 1991					
With the same partner	51	62	67	70	61
With a new partner	27	18	12	8	18
Not with a partner	21	20	21	22	21
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

Source: ONS Longitudinal Study (authors' analysis)

Changes in partnership status: cohabitation

As indicated in Figure 1, cohabiting partnerships may end due to marriage, separation or death, whereas marriages end in separation (and/or divorce) or death. To consider this additional complexity, **Table 3** shows only the population that were cohabiting in 1991, and what their partnership status was in 2001. Of all cohabiting adults in 1991, 61 per cent were living with the same partner in 2001 – 23 per cent cohabiting and 39 per cent married. Another way to summarise this is that over the 10-year period, almost two in five cohabiting partners separated, and almost two in five married their partner, while the remainder were still cohabiting.

Table 3 also shows considerable variation by age. Cohabitants aged 45 to 54 years were most likely to remain with the same partner (compared with other age groups). The youngest cohabitants aged 16 to 24, and the oldest aged 65 and over were the most likely to have separated. However, although the youngest age group were the most likely to be living with a new partner (married or cohabiting), the oldest were the most likely not to be in a partnership. These differences no doubt reflect the influence of mortality at older ages. In addition, cohabitation among the young might be expected to be more transient, and this is reflected in both the high level of separation (cohabitation as a trial relationship) and the high level of cohabitants that marry (cohabitation as a precursor to marriage). At ages over 35, the higher proportions of cohabitants that remain in a cohabiting relationship with the same partner may be indicative of cohabitation as a substitute for marriage at these ages (although it is not possible to state this with certainty).

Further analysis was carried out looking at the differences between male and female cohabitants. Overall and at all ages female cohabitants were found to be more likely to have separated from their partner over the 10 years compared with male cohabitants. They were also more likely not to be living with a partner in 2001 (24 per cent, compared with 17 per cent for men), a fact that is partially explained by mortality differentials between the sexes, and the likelihood that a male partner will on average be older than the female partner³⁶.

Comparing marriage and cohabitation

Considering the above results, it is possible to compare the stability of couples who were cohabiting in 1991 with those who were married (**Table 4**). For this comparison the age group (in 1991) has been restricted to 16 to 54-years-olds. This restriction does not materially affect the distribution of partnership outcomes (as illustrated by comparing the total column in Table 3 with the cohabiting column in Table 4). However, it does allow widowhood to be largely discounted as a reason for partnership dissolution, which is important given the younger mean age of cohabiting adults compared with the married population.

Table 4 shows that adults aged 16 to 54 in 1991 were more likely to be living with the same partner in 2001 if they were married. Around four in five married adults (82 per cent) were living with the same partner in 2001, compared with around three in five cohabiting adults (61 per cent). Of those that were no longer living with the same partner (having been married or cohabiting), a little more than half were not living with any partner at all. The remainder were living with a new partner, with a slightly higher likelihood of being married rather than cohabiting.

Table 3 showed variations in the stability of cohabitations by age, and **Table 5** shows similar results for all partnerships in 1991. Previous research has shown that adults who marry at younger ages are more likely to divorce, and the results in Table 5 do not contradict this finding³⁷. However, it should be remembered that the duration of existing partnerships in 1991 is not known, either for marriage or for cohabitation. Importantly, the effects of age are similar for both marriage and cohabitation, with young adults in partnerships in 1991 more likely to be separated from their partner in 2001.

Despite the general finding that marriage is more stable than cohabitation, it is interesting to note that the youngest married adults (aged 16 to 24 in 1991) were less likely to be living with the same partner in 2001 compared with older cohabiting adults (aged 45 to 54). Despite this, marriages were more stable when comparing partnerships in each age band. As with those cohabiting adults that separated, married adults that separated were more likely to be living with a new partner if they were young (aged 16 to 24), and more likely to live without a partner if they were older (aged 35 to 54).

Factors associated with stability

Table 5 shows the influence of a single factor – age on partnership stability. However, it is likely that other socio-demographic factors will influence whether individuals remain with the same partner. These other factors may also explain the variation by age. For example, younger partnerships may be less stable, but this may be because young people are more likely to have other risk factors associated with instability.

Reviewing the results of previous research, it is difficult to prepare an exhaustive list of potential factors, partly because factors vary over time and according to which population is being studied. In addition, much research focuses on marital stability (partly because of data constraints), and caution should be exercised when considering the similarity of marital and cohabiting stability. With this in mind, it is useful to mention a review published by the Lord Chancellor's Department, which stated that socio-demographic factors affecting marital stability may be placed in three groups: characteristics of the individual's parents, marital factors (demographic factors associated with the couples' partnership history and childbearing experience), and the individual's own socio-economic characteristics³⁸.

Table 6 Probability of having the same partner in 2001

Longitudinal sample, England and Wales, Adults aged 16–54 and in partnerships in 1991 (Model 3 & 4 are sub-samples)

Variable	MODEL 1: individual characteristics (n = 156,739)		MODEL 2: including partner cohabiting characteristics (n = 156,739)		MODEL 3: including partner cohabiting couples (in 1991) only (n = 18,501)		MODEL 4: women only (and if they had a baby) (n = 82,467)	
	Odds ratio ¹	Sig. level ²	Odds ratio ¹	Sig. level ²	Odds ratio ¹	Sig. level ²	Odds ratio ¹	Sig. level ²
Age in 1991	1.05	***	1.05	***	1.04	***	1.06	***
Age gap in absolute years (0 = man 2 years older)			0.95	***	0.97	***	0.96	***
Married in 1991								
Cohabiting (reference category)	1.00	n/a	1.00	n/a			1.00	n/a
Married	1.83	***	1.73	***			1.78	***
Sex								
Female (ref.)	1.00	n/a	1.00	n/a	1.00	n/a		
Male	1.11	***	1.11	***	1.13	***		
Dependent children in household in 1991								
No (ref.)	1.00	n/a	1.00	n/a	1.00	n/a	1.00	n/a
Yes	1.07	***	1.07	***	1.12	***	1.05	**
Has limiting long term illness in 1991								
Yes (ref.)	1.00	n/a	1.00	n/a	1.00	n/a	1.00	n/a
No	1.25	***	1.10	***	1.16	*	1.10	**
Previous dissolution (marital status in 1991)								
Single or widowed or married (ref.)	1.00	n/a	1.00	n/a	1.00	n/a	1.00	n/a
Remarried or divorced (or married if cohabiting)	0.62	***	0.73	***	0.79	***	0.72	***
Higher qualifications in 1991								
Degree or higher	1.38	***	1.21	***	1.18	**	1.12	**
Other professional or vocational qualification	1.21	***	1.13	***	1.14	*	1.15	***
No degree or professional qualification (ref.)	1.00	n/a	1.00	n/a	1.00	n/a	1.00	n/a
Social class (Registrar General's) in 1991								
One: professional	1.20	***	1.12	**	1.12		1.15	
Two: managerial or technical	1.05	***	0.98		0.97		0.95	*
Three: skilled non-manual	1.20	***	1.11	***	1.12	**	1.12	***
Three: skilled manual	1.14	***	1.09	***	1.11	**	1.01	
Four: part-skilled, unskilled, other (ref.)	1.00	n/a	1.00	n/a	1.00	n/a	1.00	n/a
Economic activity in 1991								
Unemployed (ref.)	1.00	n/a	1.00	n/a	1.00	n/a	1.00	n/a
Not economically active	1.31	***	1.25	***	1.14	*	1.25	***
Self-employed	1.33	***	1.21	***	1.20	**	1.22	***
Employed	1.38	***	1.24	***	1.26	***	1.16	***
Partner: previous dissolution (marital status in 1991)								
Single or widowed or married (ref.)			1.00	n/a	1.00	n/a	1.00	n/a
Remarried or divorced (or married if cohabiting)			0.90	***	1.04		0.92	***
Partner: has limiting long term illness in 1991								
Yes (ref.)			1.00	n/a	1.00	n/a	1.00	n/a
No			1.61	***	1.17	*	1.33	***

Table 6 Continued

Longitudinal sample, England and Wales, Adults aged 16–54 and in partnerships in 1991 (Model 3 & 4 are sub-samples)

Variable	MODEL 1: individual characteristics (n = 156,739)		MODEL 2: including partner cohabiting couples characteristics (n = 156,739)		MODEL 3: (in 1991) only (n = 18,501)		MODEL 4: women only (and if they had a baby) (n = 82,467)	
	Odds ratio ¹	Sig. level ²	Odds ratio ¹	Sig. level ²	Odds ratio ¹	Sig. level ²	Odds ratio ¹	Sig. level ²
Partner: highest qualification in 1991								
Degree or higher			1.23	***	1.12		1.32	***
Other professional or vocational qualification			1.16	***	1.33	***	1.17	***
No degree or professional qualification (ref.)			1.00	n/a	1.00	n/a	1.00	n/a
Partner: social class (Registrar General's) in 1991								
One: professional			1.19	***	1.19	*	1.22	***
Two: managerial or technical			1.09	***	1.08		1.20	***
Three: skilled non-manual			1.10	***	1.07		1.07	*
Three: skilled manual			1.09	***	1.02		1.15	***
Four: part-skilled, unskilled, other (ref.)			1.00	n/a	1.00	n/a	1.00	n/a
Partner: economic activity in 1991								
Unemployed (ref.)			1.00	n/a	1.00	n/a	1.00	n/a
Not economically active			1.35	***	1.33	***	0.84	***
Self-employed			1.35	***	1.55	***	1.43	***
Employed			1.43	***	1.56	***	1.57	***
Had a baby between 1991 and 2001								
No (ref.)							1.00	n/a
Yes							1.28	***

Note: For Registrar General's social class, other includes armed forces and missing

1 Reference categories are shown with an odds ratio of 1.00

2 * significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level

n/a = reference category (significance is not applicable)

Source: ONS Longitudinal Study (authors' analysis)

In the case of this research, the limits of the LS data mean that it is not possible to explore either parental characteristics or some of the marital factors, such as age at marriage³⁹. The same can be said for psychological factors, such as behavioural and emotional problems, or wider social factors (such as the effects of legislation on divorce and the rights of cohabiting couples). A final restriction relates to unavailable socio-economic characteristics that would ideally be of interest, such as income and religious belief⁴⁰.

The influence of multiple factors

The next stage of this research uses logistic regression to create four models. Each of these models explores the influence of multiple factors on a single outcome. that is whether an individual who is partnered in 1991 remains with the same partner in 2001⁴¹ (for an example of logistic regression using the LS, see the online training module⁴²).

The first model explores the effect of individual characteristics; the second extends this to include the characteristics of their partner; the third looks at 1991 cohabiting adults in isolation (that is the model excludes those who were married in 1991); and the fourth looks at women only – both married and cohabiting in 1991. It was decided to use 1991 data for all explanatory variables so that circumstances prior to the outcome were being investigated.

Using 1991 data, the following individual factors were investigated:

- age – which indicates birth cohort and will be correlated with length of partnership up to 1991
- whether married or cohabiting – one of the main factors of interest
- whether dependent children were in the household. In 1991 a dependent child was a child aged under 16 years, or a never married, economically inactive, full-time student aged under 19 years
- limiting long-term illness – to measure health
- marital status – indicating previous marital dissolution
- highest qualification – to measure socio-economic potential⁴³,
- social class – to measure socio-economic circumstances, and
- employment status – to measure economic circumstances

Partner characteristics included the same variables used to measure individual factors. Age of partner was not included because this was measured by looking at absolute age difference between partners⁴⁴. Sex of the LS member was also included for all models except the fourth, which looked at women only⁴⁵. To investigate the influence of childbirth on stability in the fourth model, a variable was added showing the effect of whether women gave birth to a living child between 1991 and 2001. This was the only factor using data from between the two censuses, and was made possible because annual birth registrations are linked to individual data in the LS.

The results of all four models are shown in **Table 6**, which compares the influence of multiple factors on stability. Table 6 also shows the effect of a single factor, for example age, when other factors are held constant, that is, net of other factors⁴⁶. In all the models, a reference category is chosen for each categorical variable. The other categories of this factor are then interpreted in comparison to the reference category. Therefore the reference category itself has an odds ratio of one. For example, in Model 1 the odds ratio for adults with no limiting long-term illness in 1991 is 1.24. This means that the odds of remaining with the same partner in 2001 are 1.24 times higher for those without a limiting long-term illness (compared with those who do have a limiting long-term illness), all other factors being equal⁴⁷. For the two continuous variables, age and age difference, an odds ratio shows the effect of a change in one unit, that is one year⁴⁸.

Model 1

Model 1 shows the likelihood of an individual remaining with the same partner in 2001 according to individual factors. The model includes both men and women, aged 16 to 54 in 1991, who were either married or cohabiting in 1991. Notable results are as follows:

- Marriage remains more stable than cohabitation after controlling for individual factors. Those who were married were more likely to remain with the same partner (the odds of remaining with the same partner if you were married in 1991 were 1.83 times the odds if you were cohabiting).

- Adults were less likely to remain with the same partner if, in 1991, they were:
 - younger
 - cohabiting
 - had no dependent children living in the household
 - had a limiting long-term illness
 - had previous experience of partnership dissolution
 - had no higher qualifications
 - had a low social class, or
 - unemployed
- The fact that there is a significant difference between men and women suggests that the sample may be affected by attrition. That is, given that there were equal numbers of men and women in the population of opposite-sex residential partnerships in 1991, there should be no sex differences. According to the model, men have more stable partnerships, but they are also more likely to be missing from the sample (see Appendix Table A1). This suggests that men in less stable partnerships may be more likely to be missing from the sample⁴⁹.

Two points are worth mentioning when interpreting these results. The first is that possible selection effects should be considered. For example, those adults who are more likely to have stable relationships may also be more likely to marry (rather than cohabit). The married and cohabiting populations have different characteristics, and it may be these different characteristics, rather than the partnership arrangements themselves, that result in the differences in stability. Without a more refined model, it is not possible to be certain about the impact of selection effects on these results.

The second point worth mentioning is that all of the factors in the model are significant at the 1 per cent level. However, in some respects this is unsurprising given the very large sample size (almost 157,000 adults).

Model 2

Model 2 is the same as Model 1, but also includes characteristics of each individual's partner in 1991. Notable results are as follows:

- The inclusion of partner's characteristics does not materially affect the difference in stability between married and cohabiting partnerships
- Most of the individual factors remain broadly the same (in magnitude and direction). However, the effect of limiting long-term illness is reduced, and the effect of social class becomes less clear⁵⁰
- A larger age difference between partners reduces the likelihood of remaining with the same partner in 2001
- Partner's characteristics are all significant and are similar in direction to individual factors. Adults were less likely to remain with a partner who in 1991 had:
 - a limiting long-term illness
 - previous experience of marital dissolution

- no higher qualifications
- a low social class, or
- was unemployed

It is worth considering that there will be some correlation between an individual's socio-demographic characteristics and their partner's. As such, the effect of some of these factors may be overstated and would be reduced by the inclusion of interaction effects.

Model 3

Model 3 is the same as Model 2, but excludes all adults who were married in 1991. In other words, it includes only those who were cohabiting in 1991. Notable results are as follows:

- Individual factors that remain highly significant and increase the likelihood of stability are:
 - being older
 - the presence of dependent children
 - no experience of previous marital dissolution
 - economic activity also remains fairly significant with a relatively strong effect – being employed increases the likelihood of stability.
- For partner's characteristics, age difference and partner's socio-economic activity remain highly significant. That is to say, being employed or self-employed, and having a smaller age difference increase the likelihood of stability.
- Partly due to the smaller sample size, many of the factors reduce in magnitude and become far less significant (or insignificant). There is a large fall in the effect of whether a partner has a limiting long-term illness, as well as a reduction in significance. Previous marital status and social class of partner also cease to be significant.

Model 3 aims to show which factors are associated with cohabitation stability, in isolation from marriage. A model for married adults only is not shown because it is very similar to Model 2. This is partly due to the far larger number of married adults in the Model 2 sample. This means that data for cohabitants has a smaller influence on Model 2. Apart from the overall reduction in significance for many of the variables, the odds ratios for cohabiting adults (Model 3) are not very different from those in Model 2. This suggests that the factors influencing cohabitation stability are somewhat similar to those influencing marital stability, particularly those that remain significant in Model 3.

Model 4

Model 4 is the same as Model 2, but excludes men. In other words, it includes only women who were married or cohabiting in 1991. Notable results are as follows:

- Compared with women who did not have a baby between 1991 and 2001, those that did have a baby were more likely to remain with the same partner in 2001
- Despite the introduction of this new childbirth factor, and a slight fall in the significance of some factors, the model for women only is very similar to the model for both men and women – Model 2. As with the model for both sexes, women who were not economically active were more likely than either working women or unemployed women to be with the same partner in 2001

- Apart from a considerable reduction in the effect of partner's limiting long-term illness, the main difference is for partner's economic activity. Women whose partners were not economically active were less likely to remain with the same partner, compared with those whose partners were unemployed.

Further modelling of partnership outcomes

There is limited space in this article to discuss further modelling that was undertaken. However, one additional question is: 'what are the characteristics of cohabiting adults that go on to marry their partners?'. Table A4 (in the Appendix) shows the results of an additional model with the outcome: 'Was the cohabiting adult in 1991 married to the same partner in 2001?' The sample for this model was the same as Model 3 – all cohabiting adults in 1991. A preliminary model was run for this new outcome, with all the factors in Model 3 used as covariates. Categories that were not significant were then either removed, or combined with other categories in the same variable. The results are shown in Table A4.

It is interesting to note the different factors that are associated with whether cohabiting adults marry their partner (between 1991 and 2001). They are more likely to marry if they or their partner have experienced previous marital dissolution. They are less likely to marry if they or their partner are unemployed, or if dependent children are present in the household in 1991. In addition, limiting long-term illness is not significant for either an individual or their partner.

Compared with the previous models, this suggests that the presence of dependent children increases the likelihood of remaining with the same partner, but reduces the likelihood of cohabiting couples becoming married (between 1991 and 2001). Experience of previous marital dissolution has the opposite effect, reducing the likelihood of remaining with the same partner, but increasing the likelihood of cohabiting couples becoming married (between 1991 and 2001). This suggests that factors may act in different directions when considering different types of change in partnership status (for example. formation versus dissolution). In this case, and for this cohort, couples who have children and have not experienced marital dissolution may be more likely to be cohabiting as a substitute for marriage. There may of course be other reasons for this difference, and it should also be noted that cohabiting couples with children are different from married couples with children⁵¹.

Discussion

This research provides an overview of long-term partnership stability between 1991 and 2001. It shows that marriage was more stable than cohabitation, even when controlling for a variety of factors. Despite this difference, the majority (61 per cent) of cohabiting adults aged 16 to 54 were living with the same partner in 2001. Of those 1991 cohabitants that were living with the same partner, two thirds had married this partner by 2001. This suggests, at least for those cohabiting in 1991, that cohabitation may be (or rather, may have been), more likely to be a precursor to marriage, rather than a substitute. However, this conclusion might change if those that cohabit as a substitute to marriage are (or were) less likely to remain with the same partner.

Although the exact timing and order of events are beyond the scope of this study, the stability of partnerships between 1991 and 2001 is shown to be associated with both the presence of children in the household and the birth of a child. In addition, looking at cohabiting adults in isolation, it

appears that social factors which are known to be associated with marital stability (for example age, economic activity and previous experience of partnership dissolution) are also associated with cohabitation stability. Further research is required to elaborate these conclusions, in particular to measure partnership transitions that occur both within and beyond a ten year period⁵².

Key Findings

- Of adults aged between 16 and 54 in 1991, around four in five married adults (82 per cent) were still living with the same partner in 2001, compared with around three in five cohabiting adults (61 per cent).
- Marital partnerships were found to be more stable than cohabitations, even when additional factors were taken into account. After controlling for the characteristics of both individuals and their partners, married adults were more likely than cohabiting adults to remain with the same partner between 1991 and 2001.
- Adults were less likely to remain with the same partner if, in 1991, they were younger, had no dependent children living in the household, had a limiting long-term illness, had previous experience of partnership dissolution, had no higher qualifications, or were unemployed.
- Partner's characteristics also have an impact upon partnership stability. Adults were less likely to remain with the same partner in 2001 if, in 1991, their partner had a limiting long-term illness, had previous experience of partnership dissolution, had no higher qualifications, had a low social class, or was unemployed.
- Compared with women who did not have a baby between 1991 and 2001, those that did have a baby were more likely to remain with the same partner in 2001.

Acknowledgements

The authors would like to thank all those who commented on this article and all members of the LS team who provided assistance with this project.

Appendix

Table A1 Whether enumerated in the 2001 Census by de facto status in 1991

All adults (aged 16+) enumerated in the 1991 Census, England and Wales

Partnership status in 1991	Count			Percentages		
	In the LS sample in 2001	Dead or embarked ¹	Missing in 2001	In the LS sample in 2001	Dead or embarked ¹	Missing in 2001
Males						
Married and living with spouse	93,373	17,859	9,917	77	15	8
Cohabiting	9,344	521	1,989	79	4	17
Not living with a partner	46,088	8,399	12,010	69	13	18
In a communal establishment	1,192	1,087	734	40	36	24
Visitor	3,481	707	1,076	66	13	20
All males	153,478	28,573	25,726	74	14	12
Females						
Married and living with spouse	100,719	10,297	9,470	84	9	8
Cohabiting	10,118	326	1,312	86	3	11
Not living with a partner	58,891	16,846	9,419	69	20	11
In a communal establishment	1,047	2,992	503	23	66	11
Visitor	3,807	994	730	69	18	13
All females	174,582	31,455	21,434	77	14	9
All men and women	328,060	60,028	47,160	75	14	11

1 This category combines those who died between 1991 and 2001 and those who migrated (out of England Wales). It should be noted that only known migrants are in the embarked category. Some in the "missing in 2001" category will be undeclared migrants.

Source: ONS Longitudinal Study (authors' analysis)

Table A2 Whether enumerated in the 2001 Census by age in 1991

All adults (aged 16+) enumerated in the 1991 Census, England and Wales

Partnership status in 1991	Count			Percentages		
	In the LS sample in 2001	Dead or embarked ¹	Missing in 2001	In the LS sample in 2001	Dead or embarked ¹	Missing in 2001
16–34						
Married and living with spouse	45,084	655	6,197	87	1	12
Cohabiting	13,025	213	2,316	84	1	15
Not living with a partner	60,543	1,150	14,756	79	2	19
In a communal establishment	1,160	64	745	59	3	38
Visitor	4,591	108	1,365	76	2	23
All adults aged 16–34	124,403	2,190	25,379	82	1	17
35–59						
Married and living with spouse	111,292	5,822	9,979	88	5	8
Cohabiting	5,892	283	894	83	4	13
Not living with a partner	24,951	2,283	4,022	80	7	13
In a communal establishment	655	147	275	61	14	26
Visitor	1,534	166	281	77	8	14
All adults aged 35–59	144,324	8,701	15,451	86	5	9
60+						
Married and living with spouse	37,716	21,679	3,211	60	35	5
Cohabiting	545	351	91	55	36	9
Not living with a partner	19,485	21,812	2,651	44	50	6
In a communal establishment	424	3,868	217	9	86	5
Visitor	1,163	1,427	160	42	52	6
All adults aged 60+	59,333	49,137	6,330	52	43	6
All adults 16+	328,060	60,028	47,160	75	14	11

1 This category combines those who died between 1991 and 2001 and those who migrated (out of England Wales). It should be noted that only known migrants are in the embarked category. Some in the “missing in 2001” category will be undeclared migrants.

Source: ONS Longitudinal Study (authors' analysis)

Table A3a Partnership status by sex, percentage in each age group in 1991

Longitudinal sample, England and Wales

	16–24	25–34	35–49	50–59	Total (16–59)
Women					
Lone	73	27	18	21	32
Cohabiting	12	11	5	2	7
Married ¹	14	62	77	77	60
<i>All women</i>	100	100	100	100	100
Men					
Lone	86	33	16	14	33
Cohabiting	8	12	6	3	7
Married ¹	7	55	78	83	59
<i>All men</i>	100	100	100	100	100

1 Married and living with spouse.

Source: ONS Longitudinal Study (authors' analysis)

Table A3b Partnership status by sex, percentage in each age group in 1990/91

Cross-sectional sample, Great Britain

	16–24	25–34	35–49	50–59	Total (16–59)
Women					
Lone	70	26	18	21	31
Cohabiting	14	10	5	2	7
Married ¹	16	64	77	77	62
<i>All women</i>	100	100	100	100	100
Men					
Lone	86	30	16	16	33
Cohabiting	7	12	5	2	7
Married ¹	7	58	79	82	60
<i>All men</i>	100	100	100	100	100

1 Married and living with spouse.

Source: General Household Survey (GHS); 1990 and 1991 combined

**Table A4 Probability of being married to same partner in 2001
(if cohabiting in 1991)**

Longitudinal sample, England and Wales, All cohabiting adults (aged 16–54) in 1991

Variable	Odds ratio ¹	Significance level ²
Age in 1991	0.98	***
Age gap in absolute years	0.97	***
Sex		
Female (ref.)	1.00	n/a
Male	1.18	***
Dependent children in household in 1991		
No (ref.)	1.00	n/a
Yes	0.84	***
Previous dissolution (marital status in 1991)		
Single or widowed or married (ref.)	1.00	n/a
Remarried or divorced (or married if cohabiting)	1.14	***
Qualifications after age 18 (in 1991)		
No qualifications after age 18 (ref.)	1.00	n/a
Has qualifications after age 18	1.14	***
Social class (Registrar General's) in 1991		
Professional, managerial, technical or skilled non-manual	1.18	***
Skilled manual, part-skilled, unskilled, other (ref.)	1.00	n/a
Economic activity in 1991		
Unemployed (ref.)	1.00	n/a
Not economically active	1.19	**
Self-employed	1.28	***
Employed	1.43	***
Partner: previous dissolution (marital status in 1991)		
Single or widowed or married (ref.)	1.00	n/a
Remarried or divorced (or married if cohabiting)	1.15	***
Partner: qualifications after age 18 (in 1991)		
No qualifications after age 18 (ref.)	1.00	n/a
Has qualifications after age 18	1.17	***
Partner: social class (Registrar General's) in 1991		
Professional, managerial, technical or skilled non-manual	1.17	***
Skilled manual, part-skilled, unskilled, other (ref.)	1.00	n/a
Partner: economic activity in 1991		
Unemployed (ref.)	1.00	n/a
Not economically active	1.40	***
Self-employed	1.58	***
Employed	1.74	***

Note: For Registrar General's social class, other includes armed forces and missing.

1 Reference categories are shown with an odds ratio of 1.00.

2 * significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

n/a = reference category (significance is not applicable).

Source: ONS Longitudinal Study (authors' analysis)

References

- 1 This rise is often attributed to changing legislation (the Divorce Reform Act 1969 and Matrimonial Causes Act 1973) and changing attitudes in society. Considering the long-term trend, and ignoring minor fluctuations, this increase can be seen as a step-change. For more information see: Smallwood S & Wilson B (2008) 'The proportion of marriages ending in divorce', *Population Trends* 131, pp. 28–36. Available at: www.statistics.gov.uk/downloads/theme_population/Population_Trends_131_web.pdf
- 2 In 2007 the provisional divorce rate in England and Wales fell to 11.9 divorcing people per 1,000 married population, compared with the 2006 figure of 12.2. The divorce rate is at its lowest level since 1981. See also: www.statistics.gov.uk/cci/nugget.asp?id=170
- 3 For example see: Smallwood S & Wilson B (2007) 'Understanding recent trends in marriage'. *Population Trends* 128, pp. 24–32. Available at: www.statistics.gov.uk/downloads/theme_population/PopulationTrends128.pdf and Wilson B (2009) 'Estimating the cohabiting population'. *Population Trends* 136, pp. 21–27. Available at: www.statistics.gov.uk/downloads/theme_population/Popular-Trends136.pdf
- 4 Both figures are from the GHS. For 1986 results see: OPCS (1989) General Household Survey 1986 (Series GHS no.16), London: HMSO. For 2007 results, see: Results from the General Household Survey (GHS), 2007 (Table 5) available at: www.statistics.gov.uk/StatBase/Product.asp?vlnk=5756&Pos=&ColRank=1&Rank=256
- 5 In addition there has been a long-term increase in adults living alone, and an increase in lone parent families. For more information see Social Trends 39: Chapter 2 Households and families, available at: www.statistics.gov.uk/downloads/theme_social/Social_Trends39/ST39_Ch02.pdf
- 6 Office for National Statistics (2007) 2006-based marital status projections. Available at: www.statistics.gov.uk/pdfdir/marr0309.pdf
- 7 The proportion of adults who have never married is projected to rise from 34 per cent to 42 per cent. It should be noted that some of these will be cohabiting. Therefore there is an overlap with the projected numbers of cohabitants.
- 8 Although there is good information on marriage and divorce, statistics on the formation and dissolution of cohabiting partnerships are not collected routinely. In order to consider partnership stability adequately, it is desirable to have comparative information on partnership transitions. These transitions are important because they go beyond stock estimates at a given time point, to suggest how (and why) partnership estimates change over time. In some respects, this can be considered equivalent to the importance of births, deaths and migration when considering changes in the population. (Of course, mortality and migration may also change an individual's partnership status.)
- 9 For example, see the report published to Parliament by the Law Commission on 31 July 2007. Available at: www.lawcom.gov.uk/cohabitation.htm
- 10 Wilson B (2009) 'Estimating the cohabiting population'. *Population Trends* 136, pp. 21–27. Available at: www.statistics.gov.uk/downloads/theme_population/Popular-Trends136.pdf

- 11 Dunnell K (2008) 'Ageing and Mortality in the UK – National Statistician's Annual Article on the Population'. *Population Trends* 134, pp. 6–23. Available at: [www.statistics.gov.uk/downloads/ theme_population/Population-Trends-134.pdf](http://www.statistics.gov.uk/downloads/theme_population/Population-Trends-134.pdf)
- 12 As far as legal status is concerned, a marriage ends in either death or divorce, however it is also important to note that couples often separate prior to divorce (that is there is a residential dissolution prior to the legal decree). Separated individuals may therefore begin to cohabit with a new partner prior to divorce (which is one of several explanations why a married couple might not be living together).
- 13 Although marriage and divorce statistics have been collected by the registration system (and the courts) for over a century, there is currently no requirement for cohabiting couples to register the formation or dissolution of their partnerships. As such, there are limited sources of information on partnership transitions. It is not possible to use simple cross-sectional surveys because we need to explore changes in individual partnerships over time.
- 14 It is also important that cohabitation can be distinguished from simply sharing accommodation. In addition, any attempt to identify cohabitants can be affected by misreporting. For example, prevailing social attitudes have (at least in the past) attached a stigma to cohabitation.
- 15 The coverage of topics has been developed and extended over the years: initially in 1971 a few questions were addressed to women aged between 18 and 44; additional subjects – including cohabitation – were introduced in 1979; and the age range was extended, firstly going up to age 49, and then from 16 to 59 in 1986, when men were first asked questions on cohabitation. For more information (and the source of the previous sentence) see: Haskey J (2001) 'Cohabitation in Great Britain: past, present and future trends – and attitudes', *Population Trends* 103, pp. 4–25.
- 16 Haskey J (2001) 'Cohabitation in Great Britain: past, present and future trends – and attitudes'. *Population Trends* 103, TSO London, pp. 4–25.
- 17 Haskey J (1999) 'Cohabital and marital histories of adults in Great Britain'. *Population Trends* 96, TSO London, pp. 13–24.
- 18 Haskey J (2001) 'Cohabiting couples in Great Britain: accommodation sharing, tenure and property ownership'. *Population Trends* 103, TSO London, pp. 26–36.
- 19 Murphy M (2000) 'The evolution of cohabitation in Britain, 1960–95'. *Population Studies* 54(1), pp. 43–56.
- 20 Lilly R (2000) 'Developing questions on cohabitation histories for the General Household Survey'. *Survey Methodology Bulletin* 46 (January), ONS, pp. 15–22. Available at: www.statistics.gov.uk/ssd/ssmb/smb_46.pdf
- 21 Berrington A and Diamond I (2000) 'Marriage or cohabitation: a competing risks analysis of first-partnership formation among the 1958 British birth cohort'. *Journal of the Royal Statistical Society: Series A* (Statistics in Society) 163(2), pp. 127–151.
- 22 Calderwood L (2008) Chapter Three: Family Demographics. *Millennium Cohort Study Third Survey: A User's Guide to Initial Findings*, by Hansen K & Joshi H (eds.), Centre for Longitudinal Studies, Institute of Education, University of London, pp. 22–50.

- 23 Ermisch J and Francesconi M (2000) 'Cohabitation in Great Britain: Not for Long, but Here to Stay'. *Journal of the Royal Statistical Society: Series A* (Statistics in Society) 163(2), pp. 153–171.
- 24 Buck N and Ermisch J (1995) 'Cohabitation in Britain', in *Changing Britain: Newsletter of the ESRC Population and Household Change Research Programme* 3, pp. 3–5, October 1995.
- 25 Clarke L and Buxton J (2006) 'Cohabitation: Changes over the 1990s and longitudinal evidence on transitions in status'. Presentation at 2006 BSPS Annual Conference.
- 26 CeLSIUS (2008) Downloadable tables from the ONS Longitudinal Study. Available at: www.celsius.lshtm.ac.uk/download/wt020400.html
- 27 Wolf DA and Gill TM (2009) 'Modelling transition rates using panel current-status data: How serious is the bias?' *Demography* 46(2), May 2009: pp. 371–386.
- 28 Essentially, this was all adults in the LS that were both present in 1991, and aged 16 or over in 1991.
- 29 The date of extraction for the sample was June 2009 (LSLOAD62).
- 30 Embarkation is only flagged when an individual notifies their GP.
- 31 For deaths by marital status see DR Table 4 (ONS), available at: [www.statistics.gov.uk/downloads/ theme_health/DR2007/DR_07_2007.pdf](http://www.statistics.gov.uk/downloads/theme_health/DR2007/DR_07_2007.pdf)
- 32 No direct question was asked about cohabitation in the 1991 Census, although marital status was asked. This means that a cohabiting partnership involving an LS member must be identified using the relationship questions on the census form. Because only relationship to the head of household was collected in 1991, in complex households or where the LS member is not the head of household some partnerships are likely to have been missed. Moreover, for people who were enumerated at an address which was not their usual place of residence, marital status will be known but whether they were cohabiting will not be known.
- 33 Strictly speaking, the Minimal Household Unit (MHU), which is a subdivision of the Census category 'family'. A MHU comprises either an unmarried individual, or a lone parent with his/her dependent children, or a couple (married or cohabiting) with their dependent children.
- 34 Being an adult present at both censuses is the criterion for inclusion in the sample. As such, there will be no sample members in 2001 aged between 16 and 25 (since they are under 16 in 1991).
- 35 OPCS (1993) General Household Survey 1991 (Series GHS no. 22), HMSO London.
- 36 For a distribution of age differences at marriage see: Wilson B and Smallwood S (2008) 'Age differences at marriage and divorce'. *Population Trends* 132, pp.17–25, available at: www.statistics.gov.uk/downloads/theme_population/Population_trends_132.pdf
- 37 For an example with recent results see: Smallwood S and Wilson B (2008) 'The proportion of marriages ending in divorce'. *Population Trends* 131, pp. 28–34, available at: www.statistics.gov.uk/downloads/theme_population/Population_Trends_131_web.pdf
- 38 Clarke L and Berrington A (1999) 'Socio-demographic predictors of divorce'. Published in: Simons J (ed.) *High divorce rates: The state of the evidence on reasons and remedies: Reviews of the evidence on the causes of marital breakdown and the effectiveness of policies*

and services intended to reduce its incidence. (Lord Chancellor's Department Research Series, 1 2/99) London.

- 39 As the initial LS sample ages, it will be increasingly possible to explore the influence of parental characteristics.
- 40 Although the LS contains information on religion, it was decided not to include this because information was only available in 2001 and even then the question was not compulsory.
- 41 Many models were created to test partnership stability, but the four most important are shown in this article.
- 42 See: Online training module for users of the ONS Longitudinal Study. The logistic regression example starts at the below link. Follow links at the bottom of the page to continue the example. Use: www.celsius.lshtm.ac.uk/modules/analysis/an030200.html
- 43 It is worth noting that in 1991, only information on degree and professional qualifications was collected, not information on school qualifications.
- 44 Adjusted for 'normal' age difference so that zero represents a man two years older than his female partner.
- 45 The LS is not a household based sample, which means that non-response is at the individual, rather than the household level. It was therefore deemed important to consider differences by sex, which might link to any non-response issues.
- 46 Table 5 (which looks at a gross relationship) does not hold any other factors constant when considering stability and age. In fact, Table 5 does not consider the influence of any factors other than age. When interpreting both statistics, it is important to remember that neither one is more accurate, but that they each offer a different perspective on the same results. For more information see: Murphy M (1985) 'Demographic and socio-economic influences on recent British marital breakdown patterns'. *Population Studies* 39, 441–460 as cited in Clarke L and Berrington A (1999).
- 47 Alternatively, those without a limiting long-term illness in 1991 are 24 per cent more likely to remain with the same partner between 1991 and 2001 compared with those who have a limiting long-term illness in 1991, all other factors being equal. The last part of this statement (all other factors being equal) means that the effect of limiting long-term illness on partnership stability (for this sample) has been shown controlling for all the other factors in the model (age, qualifications etc). It is important to note that any factors not in the model are not considered. As such, any variations in stability by limiting long-term illness may be explained by these (exogenous) excluded factors.
- 48 For example, in Model 1 the odds ratio for age difference is 0.95. This means that for every additional year of absolute age difference between partners, the odds of remaining with the same partner between 1991 and 2001 are 0.95 (or 5 per cent lower). Absolute age difference is the total age difference irrespective of which partner is older.
- 49 Some of the difference between men and women will reflect the typical partnership age gap where the man is on average 2 to 3 years older than the woman. Some older men will therefore fall above the 16–54 age range when women in an equivalent partnership will not. However, the effect of age difference was investigated and found to explain only a minority of the difference between men and women.

- 50 In particular, the odds ratio for the managerial or technical class ceases to be either material or significant.
- 51 A number of selection effects might be considered here, and further research would be required in order to draw more definitive conclusions.
- 52 For example, further research is needed to explore the effect of partners that separate and then reform their partnership with the same person (including those that are married and not living together at any given point).