Demographic Trends and Educational Homogamy in Britain*

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August 7, 2004

Abstract

This paper considers how the rise of remarriage and premarital cohabitation affect the trends and patterns of educational homogamy in Britain. Using repeated cross-sectional data taken from the General Household Surveys, which cover a thirty years period, I show that the strength of educational homogamy has declined for remarriages and for marriages that began as cohabiting unions. The decline for remarriages is sustained and substantial, such that remarriages are now less homogamous than first marriages. As for marriages which began as cohabiting unions, the decline is more 'episodic'.

1 Introduction

The context of family formation has been changing very dramatically in Britain and other industrial societies. First, as divorce becomes more common, so does remarriage. An increasing proportion of recent marriages are second or even higher order marriages. Secondly, while premarital cohabitation was a relatively rare and deviant act just a generation ago, it has become the majority practice. Berrington and Diamond (2000), for example, estimate that during the late 1960s, about three per cent of British women marrying for the first time had cohabited with their future husband. By the early 1990s, this figure has risen to 70 per cent.

*I thank David Firth for statistical advice, and the British Academy for financial support, award number: OCG-38860.

This paper examines the impact of these trends in family demography on educational assortative mating. Is the association between husband's and wife's qualifications stronger in first marriages than in remarriages? Are marriages which began as cohabiting unions less homogamous than those which did not?

There are several reasons to expect trends in family demography to have some effects on educational homogamy. Of greatest relevance is Mare's (1991) conjecture that the strength of educational homogamy depends on the length of the time gap between leaving school and getting married. Mare argues that if people marry soon after leaving school, their spouses are likely to be former classmates, and people in the same school class, especially at the higher rungs of the educational ladder, often attain the same qualifications eventually. Put more generally, the longer a cohort of students has left school, the more likely they are to move in educationally diverse circles and, for this structural reason, the higher the chance of them marrying people with different educational qualifications.

People who are remarrying are on average older than those marrying for the first time, implying that for the former there is a longer time gap between school departure and marriage.[1] Mare's conjecture would therefore imply a lower level of educational homogamy among remarriages. And as remarriage becomes more common, this might to some extent account for the downward trend in educational assortative mating observed in many advanced industrial societies (Smits, Ultee and Lammers, 1998).

Premarital cohabitation, in contrast, means that the partnership actually began before the date of marriage, implying a shorter time gap since leaving school. This might lead to a higher level of educational homogamy. However, only some cohabiting unions turn into marriages, and the criteria people use in choosing cohabiting partners might be different to those they use in choosing spouses. For example, if people see cohabitation as a less permanent form of relationship, they might be more willing to experiment and cross social boundaries in forming cohabiting unions. This would weaken educational homogamy. Thus, the implication of the growth of premarital cohabitation on the overall level of educational homogamy is not obvious. It depends on whether cohabiting unions are less homogamous than marriages when they are formed, and also on whether assortative mating itself affects the probability of a cohabiting couple getting married eventually.

[1]The mean age of first marriage of our respondents is 23.0, and that of remarriages is 31.8. Both means are trending upwards over time, but their difference has remained roughly the same. Details are available from the author on request.

2 Data and method

I address these questions with repeated cross-sectional data taken from twenty-eight rounds of the UK General Household Survey (GHS). This series of surveys spans a period of thiry years (1972–2001) in which both cohabitation rate and divorce rate rose rapidly.[2] However, since I am analysing current marriages, there might be a bias arising from the possibility that heterogamous and homogamous marriages have different breakup rates. To minimise such bias, I follow a well established convention in homogamy research and restrict my analyses to marriages formed within five years of the relevant survey. This sample of the newly-weds is then organised by year of marriage, and marriages formed in neighbouring years are pooled together.[3] Thus, the raw data to be analysed are contingency tables of husband's and wife's educational attainment, tabulated separately by marriage-type and (combined) year of marriage.

Let me first report some descriptive results. Figure 1 shows how the context of family formation in Britain has changed over the past thirty years. The proportion of first marriage in the sample declines steadily from 94% in 1970 to 84% in 2000. Much more dramatically, the proportion of marriages which began as cohabiting unions rose from 17% in 1974 to 80% in 2000. At the beginning of our time series, premarital cohabitation was slightly less common among first marriages than among remarriages. But this gap has been narrowing over time, and has disappeared since the late 1990s.

The four panels of Figure 2 show the change of the marginals of the educational homogamy tables over time. Mirroring well-known trends of educational attainment, we see in our sample of the recently married an impressive upgrading in educational qualifications, and a narrowing of the gender gap. Thus, for example, for those who got married in 1967–69, 15% of men and 6% of women were university graduates. These rise to 46% (grooms) and 42% (brides) in 1998–2001. At the other end of the educational ladder, 50% of grooms and 66% of brides of 1967–69 had less than O-levels qualifications. These drop to 15% and 13% respectively in 1998–2001.

[2]See Appendix A for details of the GHS.

[3]That is, marriages formed in 1970 and 1971 are pooled, and those formed in 1972 and 1973 are pooled, and so on. However, at the two ends of the observation period, sample size consideration means that data from three or more years are combined. Thus, marriages from 1967 to 1969 are combined, and those from 1998 to 2001 are combined.

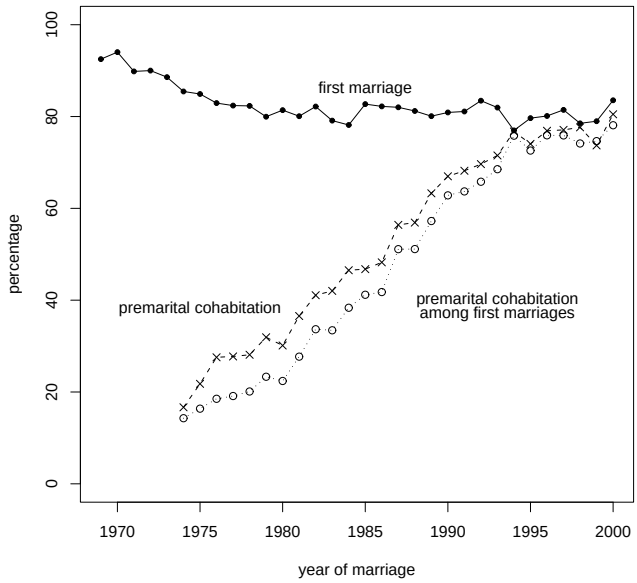


Figure 1: Proportion of first marriages, and proportion of marriages which began as cohabiting unions over time.

3 Results

3.1 General pattern of association

What is the general pattern of the association between husband's (H) and wife's (W) educational qualifications? I have fitted five loglinear models to the contingency tables, namely (1) the distance model, (2) the crossing model, (3) the quasi-symmetry model, (4) the unconstrained association model, and (5) the quasi-symmetry model with a hypergamy term. Briefly the first three models can be described as follows.

The distance model postulates that the difficulty of matching two persons n "steps" apart is the same, regardless of their *absolute* positions; it is the *relative* distance which counts. So, for example, under the distance model, net of the effect of the margins, the difficulty of marriage between categories 1 and 2 is the same as that between categories 2 and 3 (both being 1 "step" apart). Similarly, the difficulty of marriage between categories 1 and 3 is the same as that between categories 2 and 4 (both being 2 "steps" apart). However, the difficulty of marriage between categories 1 and 3 is not necessarily twice that between categories 1 and 2. Effectively, the association pattern is

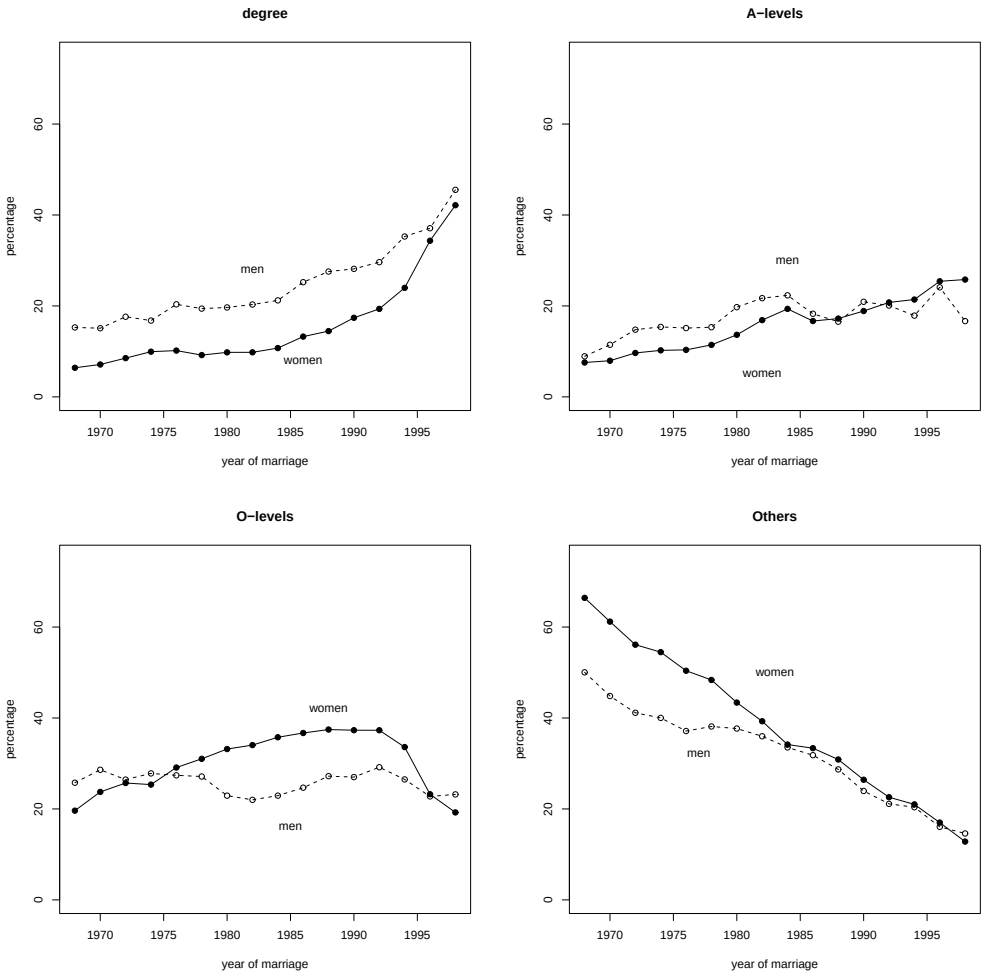
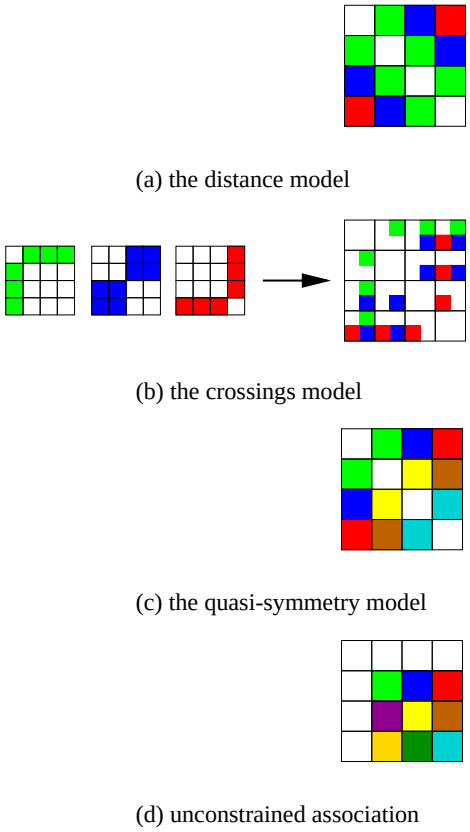


Figure 2: Trends of educational attainment of men and women.

assumed to be banded along the minor diagonals and symmetric. There is an additional assumption that difficulty rises with n, though this constraint is not imposed by the model. Panel (a) of Figure 3 shows the arrangement of the parameters, where a distinct parameter applies to cells of each colour.



(a) the distance model

(b) the crossings model

(c) the quasi-symmetry model

(d) unconstrained association

Figure 3: Different ways of modelling association.

The crossings model is parameterised in terms of barriers rather than distance. For n categories, there are $n-1$ barriers. For a distant match there are more barriers to cross than for a near one, but the barriers you have to cross now depend on your own category. That is, if W is at category 4 and H is at category 2, the two barriers crossed are $b_{4\to3}$ and $b_{3\to2}$, while a match between W_3 and H_1 crosses $b_{3\to2}$ and $b_{2\to1}$. The crossings model is fitted using a dummy variable for each barrier or crossing, which partitions the table into cells which involve crossing that barrier and cells which don't. Panel (b) of Figure 3 demonstrates this in the 4-category case.

The quasi-symmetry model postulates that, controlling for marginal distributions, the tendency for matches between W_i and H_j is equal to that

for matches between W_j and H_i. That is, the association has a symmetrical pattern insofar as the margins allow (see panel (c) of Figure 3). The quasi-symmetry model is less restrictive (thus less parsimonious) than either of the foregoing, and they can be considered as constrained forms of it. These three models, together with the model of unconstrained HW association, and the quasi-symmetry model with hypergamy, can be represented as follows:

$$\begin{aligned} \text{distance:} \quad & [WY][HY][\delta] && (1)\\ \text{crossings:} \quad & [WY][HY][\lambda] && (2)\\ \text{quasi-symmetry:} \quad & [WY][HY][\sigma] && (3)\\ \text{unconstrained association:} \quad & [WY][HY][HW] && (4)\\ \text{quasi-symmetry with hypergamy:} \quad & [WY][HY][\sigma][\pi] && (5) \end{aligned}$$

where $\delta = |i - j|$ is a variable marking the absolute difference between W_i and H_j, λ represents the crossings parameters, σ the symmetry parameters, and π the hypergamy parameter.

Panel A of Table 1 reports how the five models fit the data when all marriages are considered together. Consistent with the results reported by Halpin and Chan (2003),[4] we see that the quasi-symmetry model (model 3) provides a better fit with the data than both the distance model (model 1) and the crossing model (model 2). Furthermore, the model of unconstrained HW association (model 4) does not improve on model 3, and there is no evidence of hypergamy over and above that which arises from the marginals (model 5). Largely the same results are obtained when we consider first marriages, remarriages, marriages which began as cohabiting unions, and those which did not separately (Panels B to E of Table 1).[5] Note also that using the conventional criterion of 5% Type I error, models 3, 4 and 5 actually fit the data satisfactorily when the various types of marriages are considered separately.[6]

3.2 Trends

Having determined the basic pattern of educational homogamy in the UK, let us now consider the question of change over time. Here I use the uni-

[4]Halpin and Chan (2003) compare the trend of educational homogamy in Ireland and Britain. But for each country they have data at three time points only.

[5]The quasi-symmetry parameters are reported in Table 5 in Appendix B.

[6]The dimension of the contingency tables, and hence the degree of freedom of corresponding models in Panels A to E, are slightly different because the GHS does not allow us to distinguish between first and remarriages before 1974, and between marriages that began as cohabiting unions and those which did not before 1979. See Appendix A for details.

Table 1: Modelling the pattern of educational homogamy in the UK.

Model	G^2	df	p	model comparison	ΔG^2	Δdf	p
Panel A: all marriages ($N = 21472$)							
1 $[HY][WY][\delta]$	301.133	141	.00	1–3	124.313	3	.00
2 $[HY][WY][\lambda]$	321.824	141	.00	2–3	145.004	3	.00
3 $[HY][WY][\sigma]$	176.820	138	.01				
4 $[HY][WY][HW]$	175.545	135	.01	3–4	1.275	3	.74
5 $[HY][WY][\sigma][\pi]$	175.847	137	.01	3–5	0.973	1	.32
6 $[HY][WY][\sigma\phi^Y]$	150.227	123	.05	3–6	26.593	15	.03
Panel B: first marriages ($N = 15664$)							
1 $[HY][WY][\delta]$	270.569	132	.00	1–3	117.675	3	.00
2 $[HY][WY][\lambda]$	244.197	132	.00	2–3	91.303	3	.00
3 $[HY][WY][\sigma]$	152.894	129	.07				
4 $[HY][WY][HW]$	149.707	126	.07	3–4	3.187	3	.36
5 $[HY][WY][\sigma][\pi]$	152.687	128	.07	3–5	0.207	1	.65
6 $[HY][WY][\sigma\phi^Y]$	132.572	115	.13	3–6	20.322	14	.12
Panel C: remarriages ($N = 3197$)							
1 $[HY][WY][\delta]$	150.385	132	.13	1–3	8.643	3	.03
2 $[HY][WY][\lambda]$	181.469	132	.00	2–3	39.727	3	.00
3 $[HY][WY][\sigma]$	141.742	129	.21				
4 $[HY][WY][HW]$	135.079	126	.27	3–4	6.663	3	.08
5 $[HY][WY][\sigma][\pi]$	140.743	128	.21	3–5	0.999	1	.32
6 $[HY][WY][\sigma\phi^Y]$	121.178	115	.33	3–6	20.564	14	.11
Panel D: marriages began as cohabitation unions ($N = 6650$)							
1 $[HY][WY][\delta]$	186.507	105	.00	1–3	68.977	3	.00
2 $[HY][WY][\lambda]$	161.767	105	.00	2–3	44.237	3	.00
3 $[HY][WY][\sigma]$	117.530	102	.14				
4 $[HY][WY][HW]$	116.316	99	.11	3–4	1.214	3	.75
5 $[HY][WY][\sigma][\pi]$	116.624	101	.14	3–5	0.906	1	.34
6 $[HY][WY][\sigma\phi^Y]$	94.809	91	.37	3–6	22.721	11	.02
Panel E: marriages not preceded by cohabitation ($N = 6315$)							
1 $[HY][WY][\delta]$	147.203	105	.00	1–3	28.076	3	.00
2 $[HY][WY][\lambda]$	149.736	105	.00	2–3	30.609	3	.00
3 $[HY][WY][\sigma]$	119.127	102	.12				
4 $[HY][WY][HW]$	115.973	99	.12	3–4	3.154	3	.37
5 $[HY][WY][\sigma][\pi]$	118.415	101	.11	3–5	0.712	1	.40
6 $[HY][WY][\sigma\phi^Y]$	105.531	91	.14	3–6	13.596	11	.26

Note: H: husband's qualifications, W: wife's qualifications, Y: year of marriage, δ: distance parameters, λ: crossing parameters, σ: quasi-symmetry parameters, π: hypergamy parameter, ϕ^Y: uniform difference parameters.

form difference model (also called the log-multiplicative layer effect model, see Erikson and Goldthorpe, 1992; Xie, 1992), which postulates a *common* pattern of quasi-symmetric association across all tables, but it also allows the strength of that association to differ in a uniform manner between tables. It thus provides a parsimonious one degree-of-freedom test of the strength of homogamy between any year and an arbitarily chosen reference year (1980–81).[7] This model can be presented as follows:

$$\text{uniform difference:} \qquad [WY][HY][\sigma\phi^{Y}] \tag{6}$$

where ϕ^{Y} is the multiplicative uniform difference parameter.

It can be seen from Table 1 that the uniform difference model fits the data well. But using the criterion of 5% type I error in a likelihood ratio test, it improves on Model 3 only when all marriage-types are considered together (Panel A of Table 1) or when we focus on marriages that began as cohabitation (Panel D). So there is only rather patchy evidence of change.[8] Nonetheless, it is still instructive to inspect the uniform difference parameters in Figure 4, where I have also added a nonparametric regression line to each panel of the plot (Cleveland, 1979).[9]

When all marriages are considered together (Panel A of Figure 4), the strength of the association between husband's and wife's qualifications declined in an almost linear fashion between the late 1960s and the mid-1980s. But it has since stabilised at a lower level. To be more concrete, compared with the reference year of 1980–81, the strength of homogamy in 1970–71 is estimated to be 4% stronger ($\hat{\phi}^{Y} = 1.04$) while that in 1998–2001 is 7% weaker ($\hat{\phi}^{Y} = 0.93$).

Because of the numerical dominance of first marriages in our sample, the overall shape of the plot for first marriages (Panel B) is quite similar to that for all marriages. But there are subtle differences. The beginning part of the time series for first marriages is flatter, and there seems to be a sharper rebound towards the end. Thus, it seems more accurate to say that the strength of homogamy of first marriages has not changed very much, except for a period in the late 1980s when the association was weaker.

More interesting is the plot for remarriages (Panel C). Although the data points in this plot are much more dispersed around the regression line (probably related to the relatively small number of remarriages), their general trend

[7]The uniform difference models were fitted with the Llama program (Firth, 1998).

[8]However, the uniform difference model generally compares favourably to the full interaction model which allows the quasi-symmetry parameters to vary freely over time. Details are available from the author.

[9]The parameter estimates and the corresponding standard errors are reported in Table 6 in Appendix B.

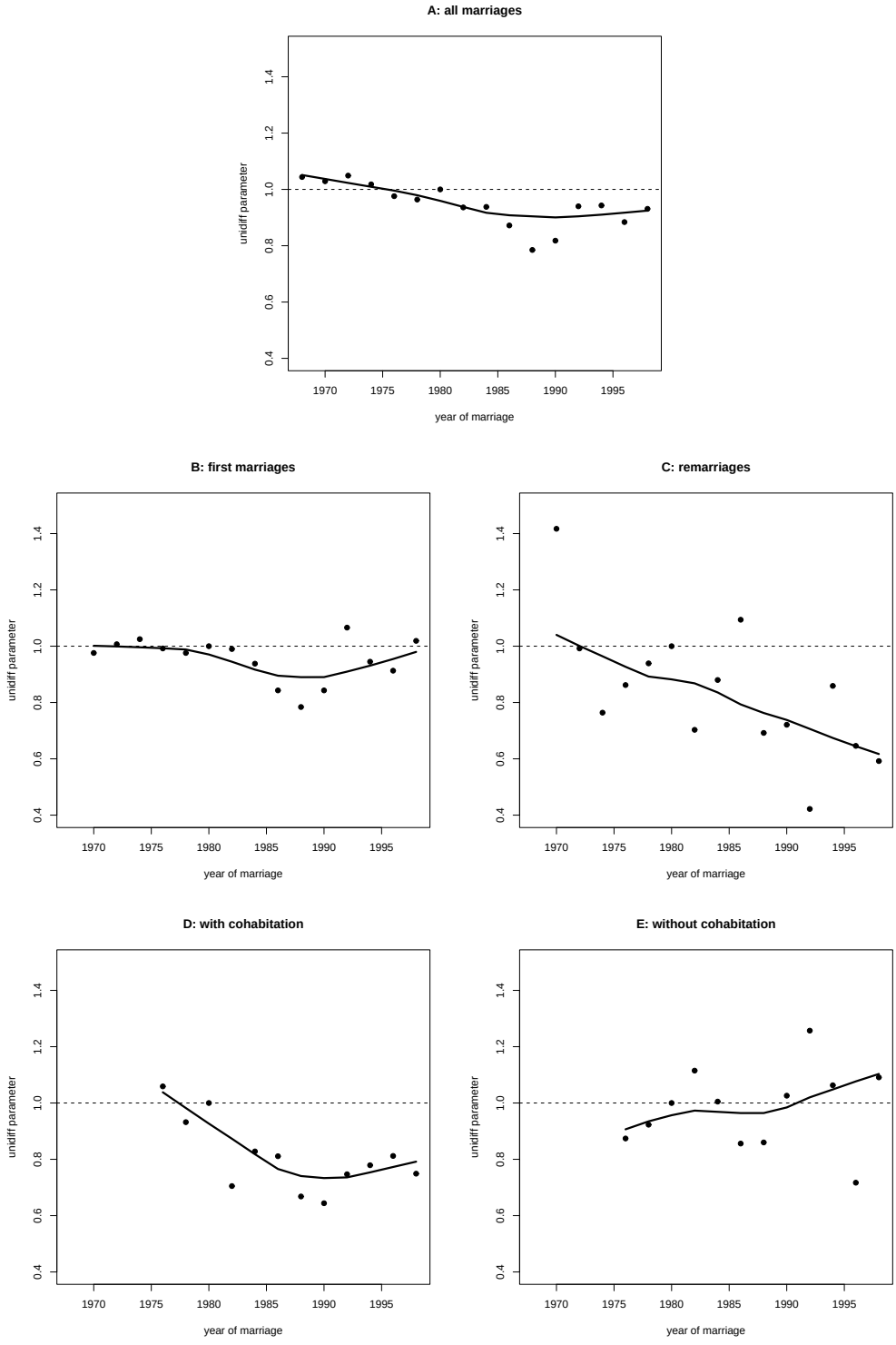


Figure 4: Uniform difference parameters by marriage types and year of marriage.

is clearly and quite substantially downwards over the entire observation period. For example, the strengh of homogamy in 1998–2001 is only about 60% of that in 1980–81 ($\hat{\phi}^Y = 0.59$).

As a result of this trend, a significant difference between first marriages and remarriages is emerging (see Panels A to C of Table 2). Model 7 postulates that the σ parameters are strictly the same for first marriages and remarriages, model 8 allows these parameters to differ between marriage-types, and model 9 is the uniform difference model where the layer variable is the contrast between first marriage and remarriage. We see that both models 8 and 9 improve on model 7 for marriages formed in the 1990s (Panel C), but not for those formed in the 1970s and 1980s (Panels A and B). Inspection of the relevant parameters suggests that in the 1990s the quasi-symmetric association is, as expected, weaker for remarriages. For example, $\hat{\phi}^O_{1990s} = 0.69$. That is, in the 1990s, when compared with first marriages, the quasi-symmetric association for remarriages is almost one third weaker.

Returning to Figure 4, we see a clear decline, between the mid-1970s and the mid-1980s, in the strength of homogamy for marriages which began as cohabiting unions, but the decline has since levelled out (Panel D). It would seem that Atkinson's description of 'trend' of income inequality applies here, 'such change might be better described as "episodic" rather than as a long-run "trend"' (1997, p.300). In any case, in 1998–2001 the association between husband's and wife's qualifications is 25% weaker than that in 1980–81 ($\hat{\phi}^Y = 0.75$). In contrast, there is no consistent trend for marriages that are not preceded by cohabitation, and the disperson of the data points around the regression line seems to have increased over time (Panel E). Panels D to E of Table 2 suggests that there is no statistically significant difference between the σ parameters of marriages which began as cohabiting unions and those which did not.

3.3 Assortative matching and cohabition

Let us now consider more directly how cohabitation might affect educational homogamy. How do we account for the observed time path in Panel D of Figure 4? It is important to bear in mind that not all cohabiting unions turn into marriages. Thus, if we see a downward trend in the level of homogamy among marriages which began as cohabiting unions, it might be due to declining assortative matching of cohabiting unions when they are formed. Alternatively, it is possible that cohabiting unions have not become less homogamous over time, but some selection process makes less 'homogamous' cohabiting couples *more* likely to marry. Similarly, the flat part of the observed trend in Panel D of Figure 4 could be explained by a combination

Table 2: Comparing education homogamy across marriage-type.

Model	G^2	df	p	model comparison	ΔG^2	Δdf	p
Panel A: first marriages v remarriages, 1970–79 ($N = 7869$)							
7 $[HO][WO][\sigma]$	12.184	12	.43				
8 $[HO][WO][\sigma O]$	3.921	6	.69	7–8	8.263	6	.22
9 $[HO][WO][\sigma\phi^O]$	12.152	11	.35	7–9	0.032	1	.86
Panel B: first marriages v remarriages, 1980–89 ($N = 7267$)							
7 $[HO][WO][\sigma]$	22.141	12	.04				
8 $[HO][WO][\sigma O]$	17.740	6	.01	7–8	4.401	6	.62
9 $[HO][WO][\sigma\phi^O]$	22.140	11	.02	7–9	0.001	1	.97
Panel C: first marriages v remarriages, 1990–2002 ($N = 3725$)							
7 $[HO][WO][\sigma]$	21.669	12	.04				
8 $[HO][WO][\sigma O]$	4.272	6	.64	7–8	17.397	6	.01
9 $[HO][WO][\sigma\phi^O]$	7.961	11	.72	7–9	13.708	1	.00
Panel D: with cohabitation v without cohabitation, 1976–87 ($N = 7858$)							
7 $[HC][WC][\sigma]$	14.771	12	.25				
8 $[HC][WC][\sigma C]$	8.528	6	.20	7–8	6.243	6	.40
9 $[HC][WC][\sigma\phi^C]$	13.594	11	.26	7–9	1.177	1	.28
Panel E: with cohabitation v without cohabitation, 1988–2002 ($N = 5107$)							
7 $[HC][WC][\sigma]$	12.398	12	.41				
8 $[HC][WC][\sigma C]$	8.882	6	.18	7–8	3.516	6	.74
9 $[HC][WC][\sigma\phi^C]$	10.981	11	.44	7–9	1.417	1	.23

Note: H: husband's qualifications, W: wife's qualifications, Y: year of marriage, O order, i.e. first marriages v remarriages, C: premarital cohabitation (yes v no), σ: quasi-symmetry parameters, ϕ^O: uniform difference parameter for marriage order, ϕ^C: uniform difference parameter for cohabitation.

of quite complex selection and matching mechanisms.

Given these considerations, I address two questions here: (1) are cohabiting unions becoming less homogamous over time, and (2) are cohabiting partnership more (or less) homogamous than marriages (that is, marriages which began as cohabiting unions) formed in the same period? We have partial data to address these questions. The GHS began to collect data on *currently* cohabiting couples from 1986.[10] The timing is very unfortunate, since the decline in homogamy has already levelled out by the mid-1980s. But within the limit of the data, I match cohabiting couples in the sampled households and construct for them 'educational homogamy' tables in the same way as married couples. Since the median duration of cohabitation spells in the UK is only about two years (Berrington and Diamond, 2000), the following analysis is restricted to cohabiting partnerships formed within two years of each survey. This means that there are fewer cases for analysis. To reduce sampling noise, these partnerships are grouped into three rather broad cohorts, according to the year in which they were formed: 1984–89, 1990–94 and 1995–2001.

Table 3: Trend of cohabiting unions over time.

Model	G^2	df	p	model comparison	ΔG^2	Δdf	p
Panel A: all cohabiting unions ($N = 2670$)							
10 $[HC][WC][\sigma]$	29.280	21	0.11				
11 $[HC][WC][\sigma C]$	12.932	9	0.17	10–11	16.348	12	0.18
12 $[HC][WC][\sigma\phi^C]$	29.202	19	0.06	10–12	0.078	2	0.96
Panel B: cohabiting unions among the never married ($N = 2021$)							
10 $[HC][WC][\sigma]$	22.316	21	0.38				
11 $[HC][WC][\sigma C]$	8.513	9	0.48	10–11	13.803	12	0.31
12 $[HC][WC][\sigma\phi^C]$	21.171	19	0.33	10–12	1.145	2	0.56

Note: H: man's qualifications, W: woman's qualifications, C: cohort, σ: quasi-symmetry parameters, ϕ^P: uniform difference parameters.

Comparing cohabiting unions across cohorts, is there a weakening of the association between men's and women's educational attainment? Panel A of Table 3 shows that there is no evidence of such trend. The model which postulates a strictly constant quasi-symmetric association (model 10) fits the data well, and neither the model which allows the σ parameters to vary freely across cohorts (model 11) nor the uniform difference model (model 12) fits

[10] Before 1986, the GHS collected data on cohabitation from women only.

the data better. The same result is obtained when I restrict the analysis to those cohabiting couples who have never been married (Panel B of Table 3). Thus, just as there was no change in the level of homogamy for marriages which began as cohabiting union since the mid-1980s, there was no change in the level of assortative matching among cohabiting couples in the same period.

Table 4: Comparing cohabiting unions with marriages which began as cohabiting unions.

Model	G^2	df	p	model comparison	ΔG^2	Δdf	p
Panel A: all ($N = 3857$)							
13 $[HT][WT][\sigma]$	8.700	12	0.73				
14 $[HT][WT][\sigma T]$	5.829	6	0.44	13–14	2.871	6	0.82
15 $[HT][WT][\sigma\phi^T]$	8.050	11	0.71	13–15	0.650	1	0.42
Panel B: those who had never been married before ($N = 2856$)							
13 $[HT][WT][\sigma]$	11.882	12	0.46				
14 $[HT][WT][\sigma T]$	5.119	6	0.53	13–14	6.763	6	0.34
15 $[HT][WT][\sigma\phi^T]$	11.774	11	0.38	13–15	0.108	1	0.74

Note: H: man's qualifications, W: woman's qualifications, T: currently cohabiting couples v married couples who cohabited before marriage, σ: quasi-symmetry parameters, ϕ^T: uniform difference parameter.

If there are selective mechanisms which would, for example, raise the likelihood of marriage among cohabiting couples with similar qualifications, then we would see a higher level of educational homogamy among marriages (which began as cohabiting unions) than among currently cohabiting couples. To make sure that we are comparing partnerships and marriages that were formed in the same period, I have selected those married couples who began living together as a couple within two years of each survey.

Table 4 shows that there is no evidence that the strength of assortative matching is different between these two types of unions. The model which postulates that the σ parameters are strictly the same across the two types of unions (model 13) fits the data well, and models 14 and 15, which allow these parameters to vary, do not fit the data significantly better. Together, the results of Tables 3 and 4 suggest that premarital cohabitation plays little role in determining the level of educational homogamy of married couples, at least since the mid-1980s. Cohabiting couples seem to be matched, assortatively by education, much to the same degree and pattern, as married couples.

There is no evidence of the selective mechanism discussed above.

4 Summary

We have seen that the pattern of educational homogamy in Britain is quasi-symmetric in nature, and that there is no hypergamy over and above that which arises from the marginals of the homogamy tables. When all marriages are considered together, there was an almost linear decline in the strength of educational homogamy between the late 1960s and the mid-1980s, and then it stablised at a lower level. But when the various marriage-types are considered separately, quite diverse trends become apparent.

Decline in the strength of homogamy is observed for the two types of marriages that are increasing in number: remarriages and marriages that began as cohabiting unions. In the case of remarriages, the decline is sustained and substantial, such that remarriages has become less homogamous than first marriages since the 1990s.

As for marriages which began as cohabitation, we observe a decline in the level of homogamy between the mid-1970s and the mid-1980s. In contrast, there is no consistent trend for marriages that were not preceded by cohabitation. Despite the different time paths of these two types of marriages, the overall difference in their strength of homogamy is not statistically significant. This conclusion is reinforced when currently cohabiting couples are compared to cohabitors who eventually got married. The pattern and strength of assortative matching of these two groups is essentially the same. Thus, it would seem that the criteria people use to choose cohabiting partners are the same as those used in choosing spouse.

A General Household Survey

The General Household Survey is a continuous national survey of people living in private households. It is conducted on an annual basis by the UK Office for National Statistics. Each year, approximately 9,000 households are sampled, and all individuals aged 16 or above are interviewed on a face-to-face basis.

The GHS began in 1971. Although the 1971 data set is available, it is in ASCII format and it has not been set up properly for analysis. So this paper uses GHS data from 1972 onwards. Between 1972 and 1978, GHS questions on the family were put to women respondents aged 44 or under. The upper age limit was raised to 49 in 1979, and then further to 59 in 1986. (Also,

starting from 1986, questions on the family were put to men.) To maintain backward compatibility, I have restricted the analyses to women aged 44 or under in all surveys used.

The number of questions on the family included in the GHS has increased gradually over time. This means that for certain analyses our time series is shorter than the full thirty years of 1972–2002. For example, respondents were *not* asked whether their current marriage is their first marriage in 1972 and 1973. And questions on whether the respondents lived with their husband as a couple before marriage (premarital cohabitation) were first included in 1979, omitted in 1980, and then included again from 1981 onwards.

B Further tables

Table 5: Quasi-symmetry parameters estimated under model 3.

Panel A: all marriages				
	degree	A-levels	O-levels	others
degree		-0.708	-1.077	-2.047
A-levels			-0.275	-0.917
O-levels				-0.417
others				
Panel B: first marriages (above diagonal) remarriages (below diagonal)				
	degree	A-levels	O-levels	others
degree		-0.717	-1.128	-2.028
A-levels	-0.577		-0.269	-0.897
O-levels	-0.812	-0.226		-0.410
others	-1.932	-0.750	-0.367	
Panel B: with cohabitation (above diagonal) without cohabitation (below diagonal)				
	degree	A-levels	O-levels	others
degree		-0.674	-1.097	-1.921
A-levels	-0.641		-0.205	-0.790
O-levels	-1.094	-0.318		-0.345
others	-1.923	-0.867	-0.391	

Table 6: Uniform difference parameters estimated under model 6.

	all marriages		first marriages		remarriages		with cohabitation		without cohabitation	
	ϕ^Y	*s.e.*	ϕ^Y	*s.e.*	ϕ^Y	*s.e.*	ϕ^Y	*s.e.*	ϕ^Y	*s.e.*
1968–69	1.044	0.093	—	—	—	—	—	—	—	—
1970–71	1.029	0.081	0.976	0.104	1.417	0.472	—	—	—	—
1972–73	1.049	0.080	1.007	0.088	0.992	0.274	—	—	—	—
1974–75	1.018	0.078	1.025	0.085	0.764	0.188	—	—	—	—
1976–77	0.976	0.077	0.992	0.085	0.862	0.187	1.059	0.176	0.874	0.115
1978–79	0.964	0.078	0.976	0.086	0.939	0.188	0.932	0.135	0.923	0.108
1980–81	1	—	1	—	1	—	1	—	1	—
1982–83	0.936	0.080	0.990	0.092	0.703	0.156	0.705	0.100	1.115	0.123
1984–85	0.938	0.078	0.938	0.086	0.880	0.186	0.828	0.105	1.005	0.118
1986–87	0.872	0.075	0.843	0.080	1.094	0.219	0.811	0.102	0.856	0.109
1988–89	0.785	0.070	0.784	0.077	0.692	0.160	0.668	0.087	0.860	0.116
1990–91	0.818	0.075	0.843	0.085	0.721	0.165	0.644	0.085	1.026	0.144
1992–93	0.940	0.091	1.066	0.107	0.422	0.154	0.747	0.102	1.257	0.186
1994–95	0.943	0.098	0.945	0.109	0.859	0.218	0.779	0.109	1.063	0.201
1996–97	0.884	0.100	0.913	0.112	0.646	0.213	0.812	0.117	0.717	0.184
1998+	0.931	0.099	1.019	0.117	0.592	0.173	0.749	0.107	1.091	0.208

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