

THE IMPACT OF SOCIAL STATUS AND MIGRATION ON FEMALE AGE AT MARRIAGE IN AN HISTORICAL POPULATION IN NORTH-WEST GERMANY

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Summary. It has been suggested that parish-based reconstitution studies may underestimate the true age at marriage because they do not normally include data for emigrants who may be expected to behave differently from individuals who remain in their natal parishes. This study uses data from C18–19th parish registers of north-west Germany to estimate the difference in age at marriage between leavers and stayers. The difference is not significant for males; although that for females is significant, it is small and the consequence of failing to include migrants is likely to be negligible for most studies. However, it is shown that there is also an independent effect on age at marriage that is due to the woman's natal social (economic) status; historical demographic studies that ignore this dimension may risk confounding two different effects.

Introduction

It is widely recognised that parish-based family reconstitution studies suffer from the fact that, due to migration, only a proportion of the population under study can be completely reconstituted. The majority of people who appear in the church registers do not contribute much information to the data pool because they are lost through migration. Results from family reconstitution studies therefore typically refer only to the reconstitutable fraction of a parish population and are thus largely bound to reflect the behaviour of those people who—for whatever reasons—stayed their whole life within the same parish. The obvious question is whether these people are representative of the entire population they belong to.

Migration can cause biases in historical demography for two different reasons. Firstly, it could be that 'stayers' and 'leavers' differ systematically in some aspects of their personalities that might covary with their demographic behaviour (e.g. marriage age, number of offspring, age at death). This possibility is widely acknowledged in migration research (Lewis, 1982), but has so far failed to attract much attention in historical studies. The second kind of bias has a purely statistical origin. Migration

alters the statistical probability of demographic events. For example, calculation of life tables requires that it be possible to specify not only dates of death precisely but also the dates when emigrating people disappear from the population (i.e. when they can no longer be dealt with as survivors, even though they did not die).

There has been considerable recent discussion on whether the estimation of average age at marriage might also be affected by migration (Ruggles, 1992; Wrigley, 1994; Desjardins, 1995). The argument is plausible: late marriages occur after the typical age for migration and they therefore tend to be excluded from analysis. The mean marriage age for stayers therefore will be lower than that for leavers. Parish-based family reconstitution studies can thus be expected to systematically underestimate the true mean marriage age. By modelling some demographic scenarios, Ruggles (1992) was able to show that this effect could indeed be rather significant: underestimates of mean age at marriage as great as 2.9 years for women and 2.3 years for men were likely to occur.

On the other hand, Wrigley (1994) has argued that, due to return migration and other factors, the actual differences between estimated marriage age, as determined only from stayers, and true marriage age (the bias he called the 'Ruggles Effect') is very probably less significant and might even be minute in the factual reality of English population history. Wrigley expresses the optimistic claim 'that ages at marriage obtained in the course of reconstitution in which English parish registers were used, though necessarily based on those who were married in their parish of birth, were broadly representative of all marriages' (Wrigley, 1994, p. 97).

Although Wrigley's conclusion is undoubtedly reasonable, some uncertainty still remains over the magnitude of the Ruggles Effect. The simplest way to measure it is to compare the mean ages of marriages for stayers and leavers. This empirical test was not carried out by Wrigley; indeed, it may not even be possible with the English data base since the Cambridge Group reconstitutions are parish-based and hence do not allow for such a test. However, some support for Wrigley's position comes from Desjardin's (1995) analysis of historical data from Quebec where movements between neighbouring parishes could be traced: he concluded that the Ruggles Effect is minimal, even in a population characterised by high inter-parish migration.

However, as Desjardin (1995) notes, there is no guarantee that all populations will behave in a similar way: the Quebec population may exhibit local cultural or economic peculiarities that are not typical of, say, European populations during the same period. The present study therefore estimates the magnitude of Ruggles Effect in another population which experienced significant migration, focusing on the family reconstitution of the Krummhörn region, a north-west German coastal area. This set of data allows for a direct measurement of differences in marriage age, since it is based on a regional reconstitution involving the biographical and genealogical integration of church register entries from thirteen neighbouring parishes, albeit rather small ones. From this data base, it is possible to identify both stayers and (short distance) leavers.

Subjects and methods

The Krummhörn (Ostfriesland) comprises an area of 153 km² with a nearly stable cross-sectional population size of approximately 14,000 individuals during the 18th and 19th centuries. Because of its geographical situation (surrounded by the North Sea and

Table 1. Mean age at marriage (and standard deviation) for stayers and leavers, Krummhörn, Ostfriesland, Germany, 1720–1874

	Stayers	Leavers	t	df	p
Men	28.56 (5.39)	28.62 (5.30)	0.24	2535	0.808
N	1506	1031			
Women	25.80 (5.09)	26.74 (4.91)	4.72	2933	<0.000
N	2025	910			

by inhospitable moorlands), the population was neither able to expand its geographical area nor its population size.

The entries in the church registers of thirteen of the 32 Krummhörn parishes were assigned to family lineages. By and large, the registration data are complete and sufficiently reliable from 1720 onwards. Family reconstitution was carried out up to 1874, when the registration of vital events became the responsibility of the civil authorities. The data were organised with the KLEIO databank system and analysed by SPSS-x routines. To date, 16,320 family sheets have been entered on to the computer data base, although the vast majority—as is common in family reconstitution—do not meet Henry's (1970) criteria for completeness.

In addition to church books, local tax lists are utilised. These contain entries on land ownership, making possible a reconstruction of the social structure of the population according to objective criteria. A summary of previous research with this body of data is given by Voland (1995) and further research is in progress.

To examine the Ruggles Effect, those individuals were selected (i) who married (first marriages only) between 1720 and 1874, (ii) whose dates of birth as well as dates of marriage are known exactly, and (iii) who were born in one of the 32 Krummhörn parishes. For these purposes, entries on banns were not used to estimate dates of marriages even though these can be a useful substitute for missing dates of marriages solemnised in other parishes. Stayers were distinguished from leavers on the basis of whether or not individuals married in their natal parish. These labels are used for the sake of simplicity only, since stayers may have experienced some migration before marriage (in the course of maid service or farmhand service, for example) and leavers may actually be stayers who merely celebrated their weddings at the birth place of their spouse.

Results and discussion

While there is virtually no difference between stayers and leavers in the age of marriage for men, women leavers marry approximately one year later than stayers on average, a difference that is statistically significant (Table 1). Thus the Ruggles Effect matters in the Krummhörn population, though only for women. Its magnitude however, is much below what might have been expected according to Ruggles (1992) and is well within the range of Wrigley's estimate for the English case.

Table 2. Analysis of variance of women's age at marriage, Krummhörn, Ostfriesland, Germany, 1720–1874

	Mean square	df	F	<i>p</i>
Main effects	147.523	5	5.926	<0.000
Migration	302.027	1	12.133	0.001
Social status				
Bridegroom's	100.060	2	4.020	0.018
Father's	4.872	2	0.196	0.822
Residual variance	24.893	641		

In the Krummhörn, as in England, marriage often took place in the bride's natal parish, so female stayers outnumber leavers (Table 1). Since the population mean age at marriage is made up from more stayers than leavers, the overall mean age at marriage is 26.09 (SD: 5.05, $n=2935$). The difference from the stayers' mean of 25.80 is thus only 0.29 years. Hence, the bias due to estimating women's average age at marriage from the data for stayers alone is just a bit more than a quarter of a year—a level of bias that can probably be tolerated for most purposes in historical demography. Wrigley's optimistic view would thus seem to be vindicated by the Krummhörn data.

Nevertheless, the difference between the mean values for stayers and leavers is statistically significant and the reason should be sought. It could be that women's migration and age at marriage are causally linked, or, since migration is known to be social status dependent, the results from Table 1 could be due to a confounded relationship, rendering the correlation between migration and age at marriage an epiphenomenon of an underlying causal link between migration and wealth.

To test for this second possibility, those women were selected for whom the tax lists provide data on both their own (normally, their husband's) social standing in terms of land ownership and that of their fathers. (Land ownership here refers to ownership rights, not necessarily actual possession.) This reduced the selected sample size to $n=647$, and this was divided into the landless, the smallholders and the farmers. The landless are defined as those individuals who, according to the tax lists, definitely own no land of their own. Smallholders are those who own 1–74 Grasen of land (1 Gras = approx. 0.37 ha), while farmers are those who own more than 75 Grasen. Although separating smallholders from farmers at the 75-Grasen mark is somewhat arbitrary, this has proved to be quite useful in other studies of these data (Voland, 1995). An analysis of variance was then carried out with age at marriage as the dependent variable and social status of bridegroom and social status of father as the independent variables (Table 2).

Table 2 confirms the existence of a Ruggles Effect in the Krummhörn population, in that migration makes an independent contribution to the variability of women's age at marriage. In addition, social status of the spouse has a significant influence: farmers' wives married at a significantly younger age than the wives of the other two groups. In contrast, natal social status has no effect on women's age at marriage. Thus, even though social status acts as a confounding variable on age at marriage in this population, there is also a significant main effect due to migration *per se*.

The fact that women who married farmers did so at an earlier age than those who married other less wealthy men can be attributed to the advantages that access to wealth demonstrably offered for personal lifetime reproductive success in this and other European populations (Hughes, 1986; Low, 1994; Roskaft, Wara & Viken, 1992; Voland, 1989, 1995). This adaptive explanation is in sharp contrast to the explanations offered by historians. It has been known for a long time that the local elite men married the youngest brides (Schlumbohm, 1991) and historians conventionally offer one of three possible explanations for this.

One is that farmers (but not labourers) could afford to marry young women because they were not dependent on the wife's dowry. It is assumed that poor wives (or their families) needed to work for several additional years in order to accumulate a dowry large enough to marry. If this interpretation were right, natal social status should have an impact on age at marriage. The fact that it does not (Table 2) clearly rules out this hypothesis.

A second suggestion has been that 'the poorer sort of men might have preferred older brides for the very reason that they were likely to have smaller numbers of children' (Schlumbohm, 1991). However, the Krummhörn data show that tolerating avoidable infant deaths was more common as a mechanism of birth control among farmers' families than among labourers' families (Voland, 1989). So if family planning really was a motive for choosing older brides, then one would expect the farmers to marry the oldest women. Table 2 shows that this was not the case.

The third suggestion is that farmers might have preferred younger brides because a young wife might have fitted better into the authority structure of the farming household in so far as control would have been easier to establish over younger women (Schlumbohm, 1991). While this is always a possibility in patriarchal societies, such an explanation underlines a common fault in historians' attempts to explain the past, namely that their explanations invariably focus exclusively on the male's point of view and wholly ignore the women's perspective. There is considerable circumstantial evidence (e.g. Voland & Engel, 1990) to suggest that women took an active role in their own marriage and reproductive decisions. Thus, the influence of social status on marriage age is as likely to reflect the women's preferences as those of their prospective husbands.

Perhaps the most important conclusion that should be stressed is that, when estimating women's age at marriage and explaining its variability in historical demography, researchers should consider not only the impact of migration, but also social status. Family reconstitution studies that lack objective information on social status risk overlooking the subgroup heterogeneity that can be expected in many demographic parameters. Moreover, if wealth and migration are highly interrelated, things can become even more complicated. The reconstitutable minority of stayers is then not only distinguished from the leavers by their migration habits, but also by their basic opportunities in life. In the Krummhörn, this actually seems to be the case (Voland & Dunbar, 1995) and might possibly also be true for the English situation.

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