A register-based account of period trends in union prevalence, entries, and exits by educational level for men and women in Finland

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# Contents

1  Introduction 374  
2  Data and methods 375  
   2.1  Data 375  
   2.2  Measures 376  
3  Results 376  
4  Conclusions 381  
5  Acknowledgments 382  
   References 384
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Abstract

BACKGROUND
The decline in marriage and increases in cohabiting unions during childbearing ages represent a major change in family structures and family dynamics. Yet no comprehensive description has covered period trends in the prevalence of marital and nonmarital unions or partnership entry and exit rates across educational levels.

OBJECTIVE
We describe period trends in the proportion of individuals in union and the flow of union formation and dissolution at ages 18–49 across educational levels for men and women in 1989–2019 in Finland.

METHODS
We use register data with full histories of coresidential unions regardless of marital status. We calculate the age-specific yearly prevalence of marriages, cohabitations, and all coresidential unions, and rates of union formation and separation.

RESULTS
The prevalence of marriage declined across educational groups. Increases in the prevalence of nonmarital cohabitation are slightly smaller than declines in marriage; as a result, the total union prevalence declined, especially among low-educated men and women. Union formation rates have declined since around 2010, and separation rates have increased notably, especially among the lower educated and in age groups below 35.

CONCLUSIONS
The increase in nonmarital cohabitation has not fully covered the decline in the stock of marriages. The increases in union instability are notable. All observed trends and educational gradients are remarkably similar among men and women.

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CONTRIBUTION
We provide the first comprehensive population-level estimates of trends and patterns of the union stock and the flow of marital and nonmarital unions by education for both men and women of childbearing ages.

1. Introduction

Trends in union formation and dissolution form a core part of demographic knowledge (Smock and Schwartz 2020). Marital and increasingly nonmarital unions affect the boundaries and demands of state functions, including social policy, taxation, and housing (Cherlin 2016). Partnership dynamics are also linked with other demographic processes – fertility in particular – and the structure of households in which children grow up (Thomson et al. 2012). The role of partnership dynamics is particularly poignant against the backdrop of the recent Finnish fertility decline (Hellstrand, Nisén, and Myrskylä 2022).

Much research has documented socioeconomic differentials in partnership dynamics. In contemporary European societies, singlehood, nonmarital cohabitation, and union instability are typically more common among lower-educated individuals (Perelli-Harris and Lyons-Amos 2016; Kalmijn 2013; Härkönen and Dronkers 2006; Wood; Neels, and Kil 2014). A long-standing argument holds that the socioeconomic differentials in partnership dynamics are gendered (Stevenson and Wolfers 2007). Presumably, greater economic resources promote union formation and stability for men but have the reverse effect for women, owing to the higher opportunity costs of family formation for women. The empirical evidence is mixed, however (Kalmijn 2011).

Among the major fundamental shifts in family dynamics of the past decades are the decline in marriage and the increase in nonmarital cohabitation and union instability (Lesthaeghe 2010). Simultaneously, levels of union stability and fertility remain substantially higher within marriages than in cohabitations (Thomson 2021; Jalovaara and Kulu 2018). The study of the changing nature of partnerships and the interlinkages with socioeconomic status and gender preoccupy entire subfields of demography and sociology (Schmock and Schwartz 2020). One important task in this literature is to provide reliable empirical descriptions of union trends over time and differences across socioeconomic status and sex. Such stylized facts help policy actors, the general public, and scholars make informed inferences about the world and therefore constitute a core task of demographic research.

Data-driven bottlenecks slow down this progress, however. While the growing significance of nonmarital partnerships is recognized (Sassler and Lichter 2020), the
sources that contain long-term cohabitation histories and information on educational levels for men and women (e.g., Andersson, Thomson, and Duntava 2017) are limited in sample sizes. Consequently, knowledge of trends in union prevalence and rates remains largely based on marriage statistics (e.g., Eickmeyer 2022). In particular, we know of no analyses of period trends in unions that distinguish between changes in marital and nonmarital cohabitation for different educational groups and sexes. It remains unclear whether the rise in cohabitation has compensated for the decrease in the stock of marriages and whether such trends differ by educational level for men and women.

This paper provides a comprehensive and granular description of period trends in coresidential unions for all men and women of childbearing ages born in Finland, across educational levels. Using Finnish register data, which encompasses the longest-running population-wide source on nonmarital cohabitation in the world, we study trends in the stock and flow of unions. Specifically, we analyze the age-specific prevalence of marital, cohabiting, and all coresidential unions between 1989 and 2019 in Finland and rates of union formation and dissolution, across educational levels, for men and women of childbearing ages.

As a forerunner in changes in partnership dynamics associated with the second demographic transition, Finland provides a useful case for the present investigation. Finland is characterized by gender-egalitarian norms and institutions, high employment rates for women, and a universalistic welfare state. These factors are often thought to weaken the socioeconomic and gendered gradients of partnership dynamics (Goldscheider, Bernhardt, and Lappegård 2015). The magnitude of the socioeconomic and gendered gradients in the Finnish study may be expected to be lower than the average in a comparative perspective. Moreover, trends in unions during childbearing ages are relevant for understanding the recent Nordic fertility decline.

2. Data and methods

2.1 Data

We use individual-level data from Finnish population registers and focus on Finnish-born men and women aged 18–49. Using anonymized personal identification numbers, we link individuals’ basic demographics to histories of marital and nonmarital coresidential unions and completed educational degrees. Data on foreign-born individuals are excluded (5.3%) due to the scarcity of information (on education completed abroad, for example). We analyze the period 1989–2019 because information on nonmarital cohabitation exists for this period. An individual is defined as being in a coresidential union if he or she is domiciled with a different-sex individual for more than 90 days, the two persons are not
close relatives, and their age difference is no more than 20 years (or they have a shared child). Same-sex cohabitations cannot be inferred. For more information on the inference of couples, see Jalovaara and Kulu 2018.

2.2 Measures

Our prevalence measures are the proportion of the population married, cohabiting, and in a coresidential union (either married or cohabiting). To describe the flow into unions, we calculate the rates of entry into cohabiting or marital unions. Note that in contrast to most rates of marriage or union formation, we are able to specify the denominator as the population currently not cohabiting or married. To describe the flow out of unions, we calculate rates of union dissolution (moving apart or divorce). Here, the denominator is the population currently cohabiting or married. All results are presented by sex, educational level, and five-year age group. We use the term “gender” in discussions pertaining to gender and we use the term “sex” in reference to our empirical material because this term best represents our data source (officially registered sex). Because we do not know union histories before 1987, we are not able to distinguish between first and higher-order unions. For parsimony, we present absolute levels of yearly prevalence and rates. The full processed data are available for further exploration using, for example, log scaling (Jalovaara and Andersson 2022). Educational level is to the highest level achieved by the end of the five-year age range and is grouped into basic, medium, and higher education, following ISCED categories 0–2, 3–4, and 5–8 (UNESCO 2012). The share of persons with only basic education has shrunk drastically due to educational expansion: the share decreased from 30% to 9% between 1990 and 2019 in total and from 50% to 8% among women aged 40–45 (See Jalovaara, Andersson, and Miettinen 2022).

3. Results

Figure 1 shows the total prevalence of coresiding unions, as captured by the proportion of the population in either cohabiting or married unions. For the total population, we see a rather stable union prevalence across the studied time period. Union prevalence declined by a few percentage points (e.g., from 72% to 68% in the oldest age group for men). The declines are marginal and are strongest in the prime childbearing ages (25–34). There is a slight decline among the medium-educated group and no substantial trend among the highly educated. There is a marked decline (in some age groups by more than 20 percentage points) among men and women with no education beyond the basic level.
We now consider the prevalence of marital unions. Figure 2 shows that the proportion married has declined notably for all age groups, for all educational levels, and for men and women. This decline plateaus around 2005 for the oldest age groups but continues throughout the observation period for younger age groups. Again, a remarkable decline in marriage prevalence is found for the two oldest age groups with basic education; it declined from roughly 70% in 1989 to 34% in 2019. The smallest decline is found among the highly educated, where the proportion married declined by more than 10 percentage points at all ages above 25 and by as much as 20 percentage points (for men) for the oldest age group. Nevertheless, the overall positive educational gradient is fairly stable across the observation period.
Figure 2: Proportion (%) of the population married by level of education, men and women, Finland in 1989–2019.

Figure 3 shows that cohabitation increased in prevalence across the study period for men and women in all age groups and for all educational levels. Starting at very low levels in 1989 (3%–15% across age groups), cohabitation prevalence reached 16%–40% in 2019. The prevalence and trend thereof are particularly marked in the age group 25–29 and particularly so for the highly educated; more than two-fifths of this group lived in a cohabiting union in 2019. The increase is less pronounced in younger age groups of those with only basic education. Thus the lower educated have both a stronger decline in marriage prevalence and a weaker increase in cohabitation than the other educational groups.
Figure 3: Proportion (%) of the population in a cohabiting union by level of education, men and women, Finland in 1989–2019

Figure 4 shows the yearly inflow into unions. Total rates of entry into a union (either marriage or cohabitation) initially increased for all age groups, but the trend plateaued around 2005 and decreased somewhat from 2010 onward. While we cannot infer the causes of this decline, it is noteworthy that it coincides with the decline in fertility (Hellstrand, Nisén, and Myrskylä 2022). We see a positive educational gradient in union entry across the study period and a notable slump among those with only basic education after the turn of the millennium. Again, trends and differences across educational groups are similar for men and women.
Figure 4: Rates of union (marriage or cohabitation) formation by level of education, men and women, Finland in 1989–2019

Finally, Figure 5 shows the yearly outflow from unions. A clear trend toward higher separation rates is pervasive across the time periods and for all age groups. It is particularly salient among the lowest educated but also for the medium-educated group. There is an increase from 20 to 40 separations per thousand persons in a union among the oldest group and from 60 to 100 per thousand among the age group 25–29. Separation rates are lowest (and also most stable across time) among highly educated men and women. Separation rates are highest and increase the most, in absolute terms, in the young age groups.
Figure 5: Rates of separation (marriages and cohabitations) by level of education, men and women, Finland in 1989–2019

4. Conclusions

Period trends in marriage and cohabitation, particularly during childbearing ages, at the intersection of socioeconomic status and gender, are often used as empirical foundations for theoretical frameworks on partnership behavior, social stratification, gender relations, and fertility (Goldscheider, Bernhardt, and Lappegård 2015). Yet quality statistics on long-term trends in union prevalence across sex and education are sparse.

This study has described trends in union prevalence from age 18 to 49 during the past three decades in Finland. We show, for the first time, trends in the proportion of married, cohabiting, and in any union (married or cohabiting) across education and sex. Marital decline is universal across educational groups (Cherlin 2016). The positive educational gradient therein was present and prevailed across the study period. Partially contradicting prevailing narratives on gendered socioeconomic gradients in partnering
(see Kalmijn 2011), the increase in cohabitation and decline in marriage are universal across education and sex in Finland. Also, in contrast to much common knowledge (e.g., Illouz 2013), we conclude that the proportion of individuals at childbearing ages who are in a union is fairly stable across the past three decades, declining by at most 6 percentage points. Rather, the composition has shifted toward more cohabiting unions.

Where previous studies have analyzed either cohabiting or marital stability, we have analyzed entry into and exit from either union form. We conclude that union instability has increased across age groups and educational levels. Entry into unions has also become more frequent, at least from age 30. Again, trends and patterns are, on average, similar for men and women. The trend to higher union instability is remarkable among the lowest educated.

From a bird’s-eye perspective, our description suggests that the most palpable trend in partnering patterns is not a strong decline in the share of the population in couple unions – we find this decline to be moderate. Neither is the defining feature a rapid growth of disparities between educational groups or between men and women. Notable educational differences existed already in the late 1980s, and they were exacerbated by union instability among the lowest educated.

It is noticeable that all period trends are superimposed on men and women of all educational levels. Critically, a characteristic feature of partnering during the past 30 years is the decline of marriage and the increase in union instability for both men and women at childbearing ages across all educational groups. We note, however, that the lower educated stand out in this respect, and we speculate that individuals with only basic education have become increasingly marginalized in the labor market across the study period, which also influences union and family formation. We hope that the rudimentary stylized facts presented here will aid a balanced narrative on partnering trends. We have limited this brief report to a selection of estimates that cover some of the demographic aspects of partnering trends. For parsimony, trends in some relevant union properties, such as their rank order, are not analyzed here. Cohabitation has different meanings across the life course; it might be a precursor to marriage, for example, or a union with lower levels of commitment (Cherlin 2016). To address this, future analyses may differentiate between unions using, for example, union-duration-specific rates. We encourage further exploration to provide alternative perspectives on trends in partnering.

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