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Descriptive Finding

Are there gender differences in family trajectories by education in Finland?

Marika Jalovaara

Anette Eva Fasang

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Are there gender differences in family trajectories by education in Finland?

Marika Jalovaara[1]

Anette Eva Fasang[2]

Abstract

BACKGROUND
Previous studies suggest that in some countries socioeconomic differences in family formation are highly gendered, whereas gender-neutral patterns are reported in other countries. Most previous studies focus on single events and therefore it is unclear how the gender differences and neutralities in family transitions combine into variation in longer family-formation trajectories.

OBJECTIVE
We explore how family trajectories vary by educational attainment and gender. The research asks whether there are gender differences in family trajectories by education. We focus on the trajectories of women and men in Finland between the ages of 18 and 39, and on the 1969 and 1970 birth cohorts. The trajectories consist of states entered via the formation and dissolution of cohabitation and marriage and the birth of the first child.

METHODS
We give a sequence representation of Finnish register data comprising monthly histories of union dynamics and childbearing. We focus on the number and order of family states.

RESULTS
We find notable differences in family trajectories by educational attainment; however, the gender differences in the trajectories within educational groups are negligible. For instance, the proportion of never-partnered and childless at age 39 is largest among those with low education, regardless of gender. Further, at age 39, highly educated women and men are most likely to live in the same union in which they became first-time parents.

[1] University of Turku, Finland. E-Mail: marika.jalovaara@utu.fi.
[2] Humboldt University of Berlin and WZB Berlin Social Science Center, Berlin, Germany.
E-Mail: anette.fasang@hu-berlin.de.

CONTRIBUTION
This study adds to previous literature by showing that in an egalitarian Nordic welfare state, longitudinal family-formation trajectories are highly stratified by education but remarkably gender-neutral.

1. Introduction

Previous research has reported socioeconomic differences in family structures and family formation dynamics. For instance, non-marital cohabitation, single parenthood, and living alone are more prevalent among those with low levels of education (McLanahan 2004; Härkönen and Dronkers 2006; Perelli-Harris et al. 2010). The general acceptance of family diversity has increased, but a 'standard' life course involving a long-lasting union and parenthood remains the ideal for most people (Thomson, Winkler-Dworak, and Kennedy 2013). Not following such standards may reflect not only an increased freedom of choice but also a lack of resources that promote family formation and stability.

Regarding the socioeconomic differences in family formation dynamics, one open question is whether they are gendered. In prevalent theory, a central assumption has been that women's careers and family life are at odds but that men's career success and family life go hand-in-hand (Becker, Landes, and Michael 1977; see Oppenheimer 1997). Previous research demonstrates highly gendered educational differences in family formation and stability in some countries but not in others, the latter often including the gender-egalitarian Nordic countries (e.g., Kreyenfeld 2004; Cooke et al. 2013; Jalovaara 2012, 2013; Jalovaara and Miettinen 2013).

These previous studies have usually focused on single events rather than longer trajectories. Recently a number of studies have adopted a more holistic life-course approach to examine change over time in family trajectories (e.g., Elzinga and Liefbroer 2007, Fasang 2014). However, few studies have focused on socioeconomic differences in longitudinal family trajectories and whether the trajectories are gendered across socioeconomic groups. The results concerning single events lead us to also expect variation in trajectories, but it is very difficult to infer exactly which forms these trajectories will take. With the simple method used in this paper, the longer family trajectories can be compared in a straightforward way.

In this study we examine the family trajectories of women and men in Finland between the ages of 18 and 39 by educational attainment. Our research asks whether there are gender differences in family trajectories by education. The trajectories consist of family states that are entered via the formation and dissolution of cohabitation and

marriage and via the birth of the first child. The comparatively long observation window allows us to assume that nearly all entry into parenthood that occurs is observed and ensures that we cover the most demographically dense phase in the adult life course. We thereby extend previous studies that often suffered from right censoring in the early to mid-thirties.

In Finland, as in many other Western countries, men experience family transitions when they are, on average, two to three years older than women. As a result, a strong emphasis on the timing of family transitions for men and women might overstate the overall gender differences in family formation. This might obscure a strong similarity in the order and sequencing of family states for men and women. Therefore this study focuses on the number and order of family states.

2. Data and methods

We use data that were compiled at Statistics Finland (permission TK53-663-11) by linking data from a longitudinal population register and registers of employment, educational qualifications, and vital events, and other register sources. The extracted sample used in this study is taken from a random 11% sample of persons born between 1940 and 1995 who had been recorded in the population of Finland between 1970 and 2009. The data include full histories of co-residential partnerships for the sample persons until 2009 and histories of childbearing, education, and additional information until 2012.

From 1987 onwards the union histories cover not only marriage but also cohabitation. Finnish registers' information on place of residence includes the specific dwelling, thereby enabling the linkage of individuals of both sexes to co-residential couples, even when they are unmarried and childless. A cohabiting couple is defined as a man and a woman who are registered as domiciled in the same dwelling for over 90 days, who are not close relatives (siblings or a parent and a child, for example) or married to each other, and whose age difference is no more than 20 years (this rule does not apply if the couple has shared children). Limitations are that non-cohabiting or LAT (Living Apart Together) relationships remain unnoticed and that same-sex cohabitations cannot be inferred. The data do not allow us to distinguish cohabiting couples from roommates, such as students who share a living facility in order to reduce expenses. Non-romantic co-residence involving both sexes lowers the validity of our cohabitation data and should be kept in mind when interpreting the results.

In this study we focus on the birth cohorts from 1969 and 1970 because they have the longest complete union histories: the 1969 cohort is the oldest to have histories of

all co-residential unions from the year of their 18th birthday. For the first time, these data enable us to study full family-formation trajectories until the age of 39.

For childbearing, we focus on entry into parenthood, i.e., having at least one (registered) biological child. For 1.3% of the children in our data there is no father registered. If the parents of a child appeared to form a co-residential union only after the birth of the child, the date of union formation was moved to just before the childbirth. This ensures that the non-union childbearing included in the analyses covers only cases in which the child's parents did not form a union before or after the childbirth.

We chose a sequential representation of family trajectories from ages 18 to 39, which comprises 259 months for both cohorts and covers 6,911 women and 7,161 men: 14,072 persons in total. Data on those who died or emigrated between ages 18 and 39 were excluded. To ensure that our findings on gender differences for different educational groups are robust to different specifications of the family-formation sequences, we conduct analyses for three different specifications of the sequences. First, we focus on union histories only and distinguish between "never partnered" (NP), "currently partnered" (CP), and "previously partnered" (PP). Second, we add information on the legal status of the union and specify the categories "single" (S), which comprises the never and previously partnered, "cohabiting" (C), and "married" (M). Third, we combine information on union states (single or partnered) and parenthood status (childless or parent), which yields four distinct states: "single, childless" (SC), "single, parent" (SP), "partnered, childless" (PC) and "partnered, parent" (PP). For all sequence specifications, our main finding of negligible gender differences and large education differences remain robust.

The analyses are performed by gender and educational attainment. We present sequence index plots for same order similarity (Brzingsky-Fay, Kohler, and Luniak 2006). The graphs show the observed numbers and orders of states before age 40. The x-scale shows the number of states entered (1–5), and the y-scale shows the percentages of sequences covered by the respective order of family states.

To measure educational attainment we form a categorical variable for the highest level of education by age 40. We distinguish basic (ISCED97 1–2), secondary (ISCED97 3–4), and tertiary education (ISCED97 5–6). A greater proportion of women (51%) than men (34%) had completed a tertiary-level education. For men, it was more common to have completed a secondary-level education only (45% vs. 36%) or to have no educational degrees beyond the compulsory basic level (21% vs. 14%).

3. Results

3.1 The main features of union trajectories by gender

Table 1 summarises the main features of the union trajectories. At the last observation point, i.e., the age of 39, the majority (72%) were currently partnered. As many as 22 different orders of family-formation states were observed in the sequences of the entire sample, but most of them were very rare. The six most common sequence orders, as shown in Table 1, covered 96% of all sequences, which indicates an overall high standardisation of the family formation process. The sequence orders show that almost half of the women and men were, at age 39, in their first union.

Table 1: Main features of the union trajectories by age 39, by gender. States: never partnered, currently partnered, and previously partnered. Percentages of all sequences in the group

	Women	Men	All
Situation at age 39			
Never partnered	10	16	13
Currently partnered	74	70	72
Previously partnered	17	14	15
Six most common trajectories (96% coverage)			
In 1st union	48	47	47
In 2nd union	19	17	18
Never partnered	10	16	13
Previously partnered, 1 dissolved union	9	9	9
In 3rd union	5	5	5
Previously partnered, 2 dissolved unions	5	4	4
The number of unions formed between ages 18 and 39			
0	10	16	13
1	57	55	56
2	24	20	22
3	6	6	7
4+	3	2	2

The number of unions formed is not very high, even though childless cohabitations are included in this count. More than half had formed one union, over a fifth had formed two, and 9% had formed three or more unions before age 40. In this age range there is no gender difference in those having formed a high number of unions.

The only clear gender difference in the union trajectories is that the proportion of never partnered was higher for men (16%) than for women (10%). If the last two observation years are dropped for women to account for the fact that women tend to start union formation at a younger age than men, the proportion of never-partnered women increases by only one percentage point. This is consistent with previous research, which shows that the great majority of first unions are formed before age 30 (Jalovaara 2012).

3.2 Trajectories of cohabitation and marriage by gender and education

We now compare union trajectories distinguishing cohabitation and marriage and bringing in educational groups. The sequences show the orders of three states: single (never or previously partnered), cohabiting, and married. Figure 1 shows the order of family-formation states for the eight most common trajectories in each group. For example, the upper left panel in Figure 1 shows that the eight most common trajectories for all women cover 77% of the total sample of women. The eight most common trajectories all start with the state "single", depicted in green. Of the women, 10% experience only one state: single. About an equal proportion (11%) experience two family-formation states: being single, followed by being married between age 18 and 39, as shown by the green bar followed by the red bar. Additionally, 9% experience the two states of being single followed by cohabiting (green–blue). The largest group of women, 28%, experience three states: single–cohabiting–married (green–blue–red). Only 9% experience five family-formation states: single–married–single–cohabiting followed by another period of either being single or marriage.

Upon visual inspection of the trajectories of all women and all men, the main patterns are clear. With the exception of the slightly higher proportion of never partnered among men, there are no gender differences. Marriages are more likely to have lasted, whereas cohabitations tend to be transitory in that they lead to either marriage or union dissolution. Cohabitation is by far the majority route to marriage.

Figure 1: **Eight most common union-status trajectories (order of states) by gender and by gender and educational attainment. The Y-scale shows the percentages of sequences covered by the respective order of family states.**

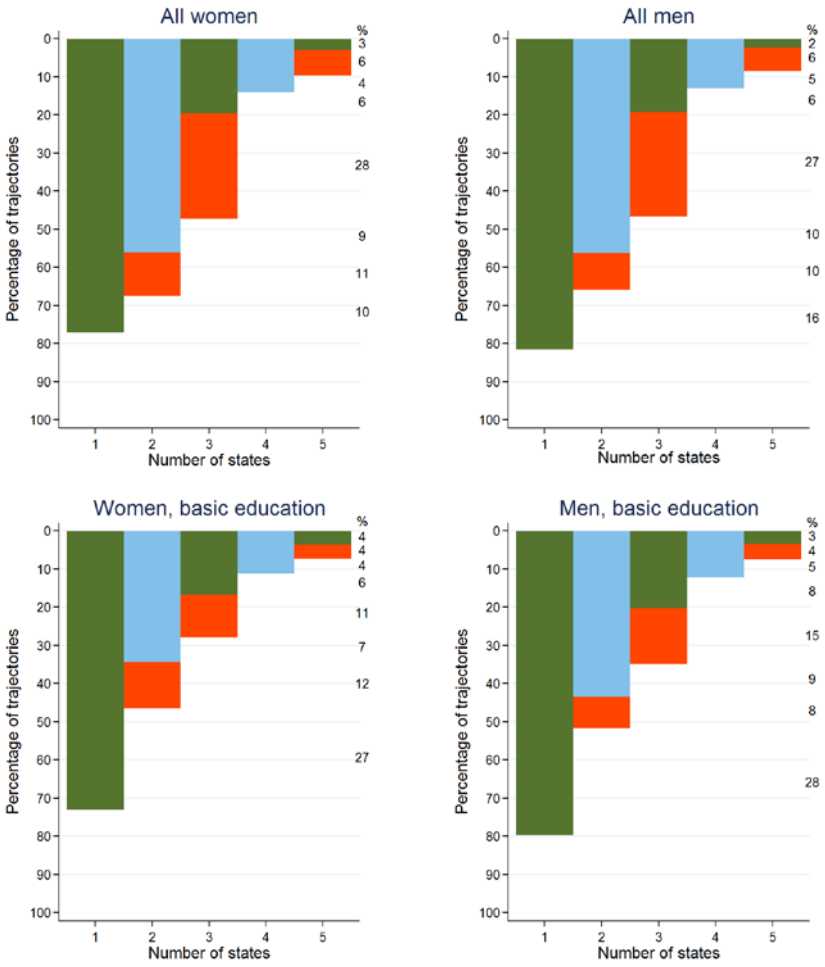
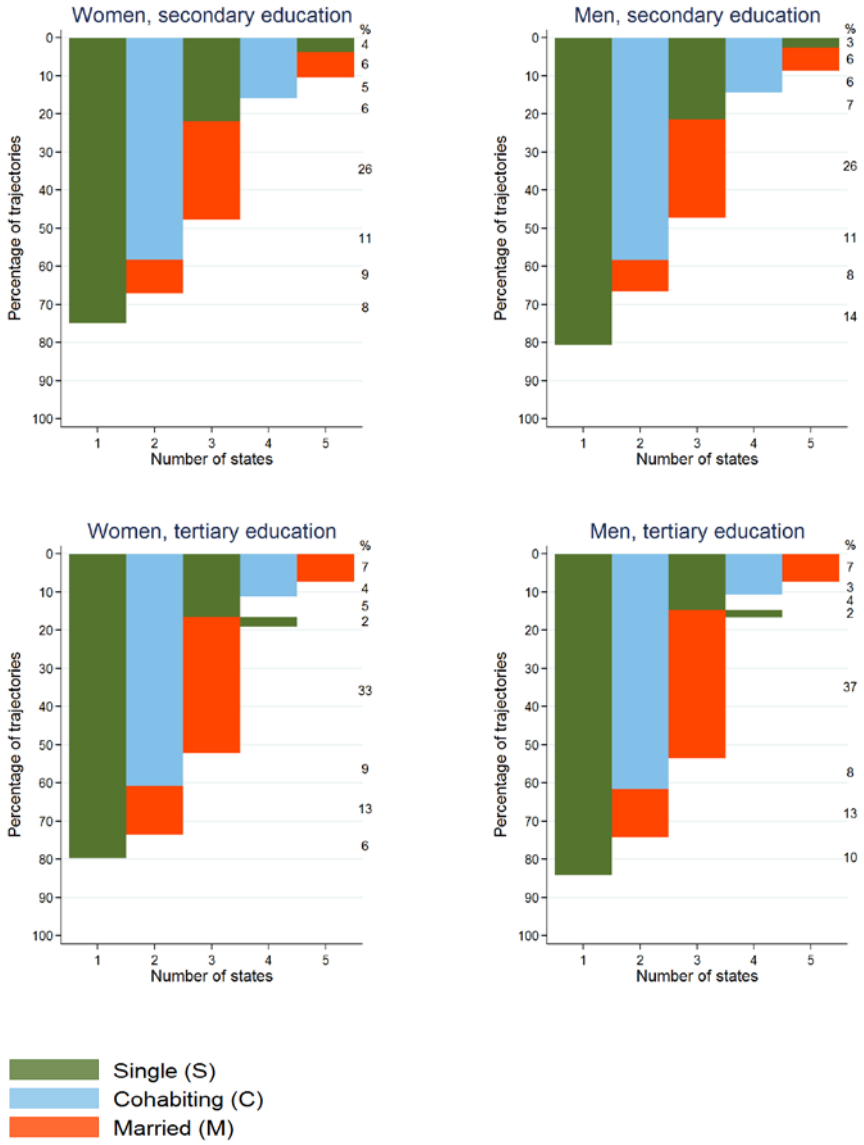


Figure 1: (Continued)



Although gender differences in family-formation trajectories are negligible across all educational groups, there are pronounced differences between educational groups. Never having partnered is most common among women and men with only basic education – the percentages are almost the same for women (27%) and men (28%). Further, the higher-educated are more likely to have ever married and are much more likely to be in their first union at the age of 39. The trajectory that is the most common by far among the highly educated is that of having married a first cohabiting partner and still being in that marriage at age 39. Over one third of the tertiary-educated and 13% of the lowest educated have followed this trajectory.

3.3 Trajectories of unions and entry into parenthood by gender and education

We continue by examining trajectories combining union dynamics and entry into parenthood. Figure 2 shows the eight most common trajectories of union and parenthood states by gender and by gender and educational attainment. The eight trajectories account for 83% of all trajectories observed. The trajectories are also shown in Table 2.

Nearing age 40, half of the individuals were in what we call "stable childbearing unions" – in either their first (41%) or second (8%) union in which they became first-time parents. Again, the only gender difference was that the trajectory of non-occurrence was more common among men. The findings by education further substantiate pronounced differences across educational groups but negligible gender differences in family formation within educational groups. Among the lowest educated, one-fourth had never partnered or had children, whereas this proportion was 5% for women and 10% for men with tertiary-level education. Although 28% of women and men with the lowest education were in a stable childbearing union, for women and men with tertiary education the proportion was more than double. Half of the women and men with tertiary-level education were, at age 39, in their first union in which they had their first child. Another tenth of the tertiary-educated were in their second union in which they had become first-time parents. Such a postponement of childbearing to the second union was much less common for women (3%) and men (4%) who had basic-level education only.

The one pattern that was clearly gendered was non-union childbearing, which barely exists for men, regardless of education level, and is concentrated among women with the lowest education. Whereas only 2% of the tertiary-educated women had become mothers without living with the child's father before or after childbirth, 11% of women with the lowest education level had done so.

Figure 2: Eight most common union-status and parenthood trajectories (order of states) by gender and by gender and educational attainment. The Y-scale shows the percentage of sequences covered by the respective order of family states.

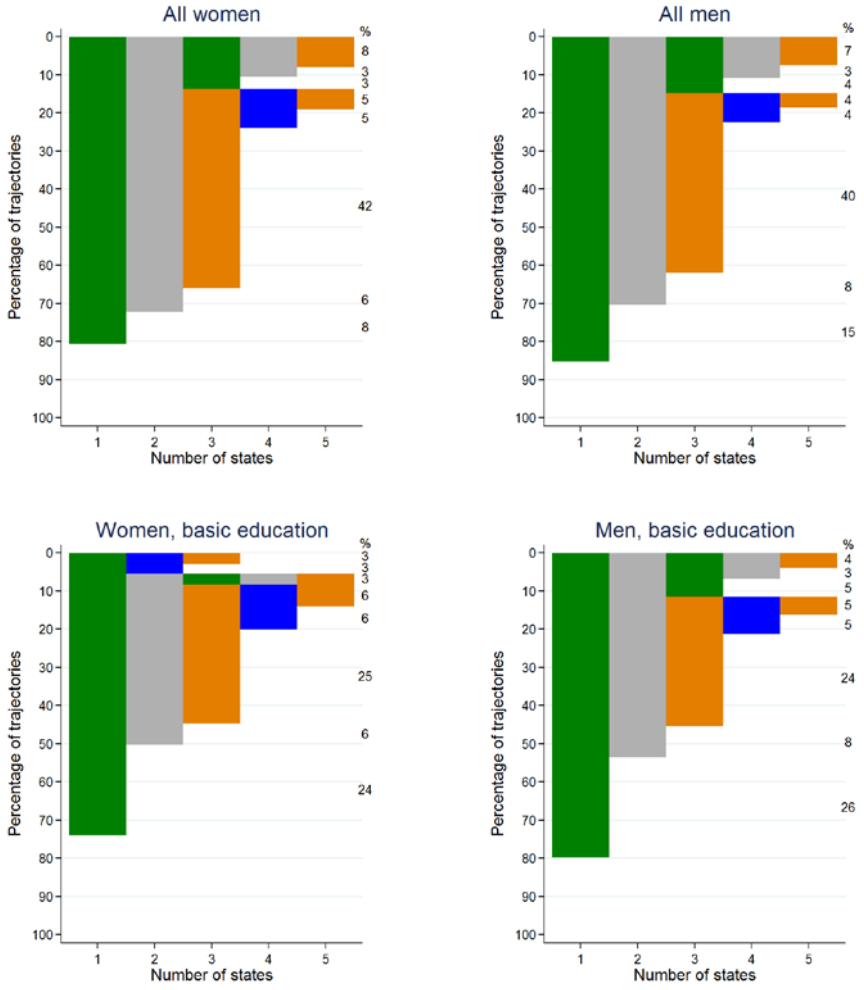


Figure 2: (Continued)

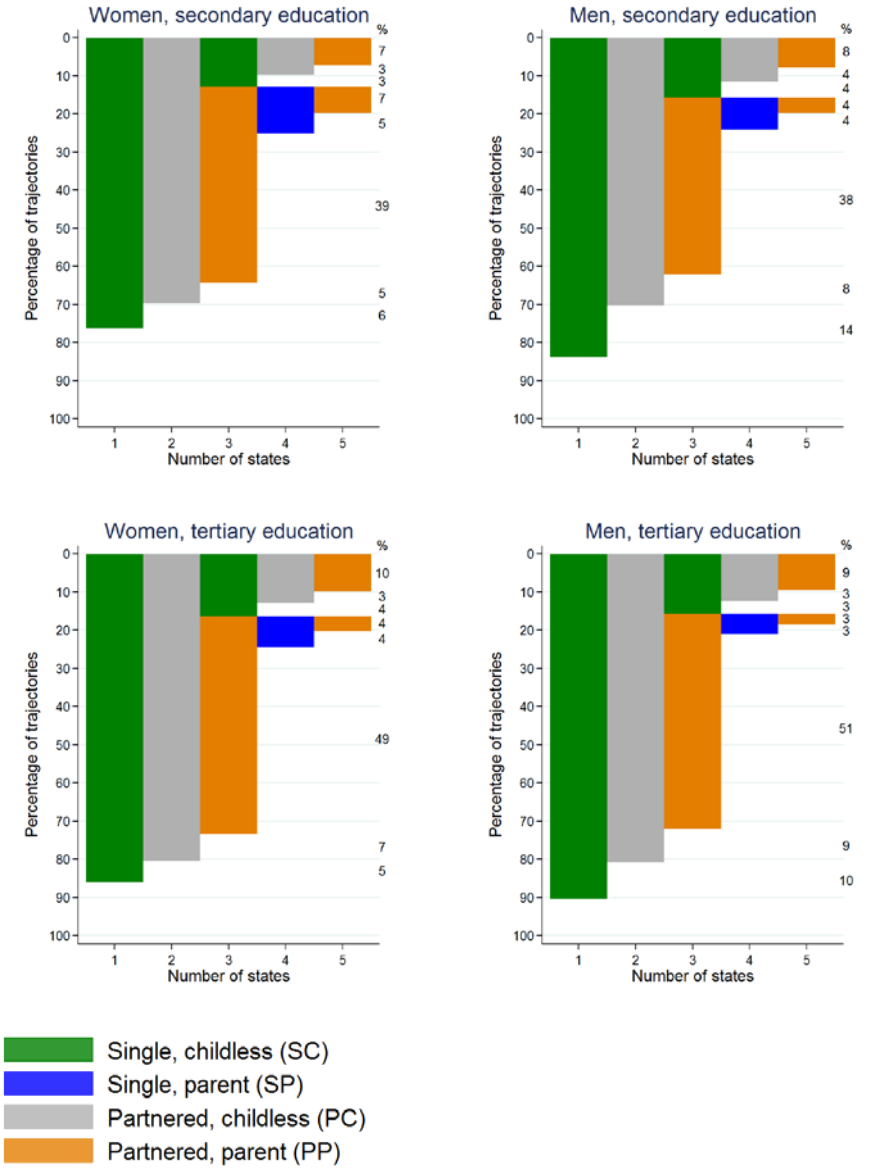


Table 2: Eight most common union-status and parenthood trajectories (order of states) by age 39, by gender and educational attainment; percentages of all sequences in the group

Women	**Education**				
Trajectory	Basic	Secon-dary	Terti-ary	All	Trajectory states[a]
In 1st union in which entered parenthood	25	39	49	42	SC PC PP
Never partnered, childless	24	6	5	8	SC
In 2nd union in which entered parenthood	3	7	10	8	SC PC SC PC PP
In 1st union, childless	6	5	7	6	SC PC
In 2nd union; entered parenthood in 1st union	6	7	4	5	SC PC PP SP PP
Single after 1st union in which entered parenthood	6	5	4	5	SC PC PP SP
Single after 1st union, childless	2	3	4	3	SC PC SC
In 2nd union, childless	2	3	3	3	SC PC SC PC
Total	72	76	86	81	

Men	**Education**				
Trajectory	Basic	Secon-dary	Terti-ary	All	Trajectory states[a]
In 1st union in which entered parenthood	24	38	51	40	SC PC PP
Never partnered, childless	26	14	10	15	SC
In 1st union, childless	8	8	9	8	SC PC
In 2nd union in which entered parenthood	4	8	9	7	SC PC SC PC PP
Single after 1st union, childless	5	4	3	4	SC PC SC
Single after 1st union in which entered parenthood	5	4	3	4	SC PC PP SP
In 2nd union; entered parenthood in 1st union	5	4	3	4	SC PC PP SP PP
In 2nd union, childless	3	4	3	3	SC PC SC PC
Total	80	84	90	85	

Notes: [a] States in trajectories: SC: Single, childless, SP: Single, parent, PC: Partnered, childless, PP: Partnered, parent.

4. Conclusions

The findings presented in this paper are in line with previous research highlighting pronounced differences in family formation across educational groups. We extend previous literature by showing that there are only negligible gender differences in longitudinal family formation trajectories within educational groups in terms of the order of family formation states in Finland. Overall, the findings suggest a strong link between socioeconomic resources and family formation in the relatively egalitarian Finnish welfare state. However, in contrast to the findings from conservative and liberal welfare states, there are no notable gender differences in family formation in Finland. Exceptions include a higher prevalence of non-union childbearing among lower-educated women than lower-educated men and a somewhat higher proportion of the never partnered and childless among men.

Note, however, that the patterns may vary even between the egalitarian Nordic welfare states. For instance, in the latest cohorts in Finland and Sweden the proportions of women remaining childless have been highest among women with low education, while in many other European countries, including Norway, opposite patterns have been reported (Andersson et al. 2009; Miettinen et al. 2015). The new patterns of childlessness clearly deserve attention in future research.

5. Acknowledgements

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