

Partnership dynamics and entry into parenthood: Comparison of Finnish birth cohorts 1969–2000

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ABSTRACT

During the past decade, the stability of close-to-replacement-level fertility ended in all Nordic countries, with its decline to the lowest level in Finland. It is unclear whether and how partnership dynamics have changed, and whether they play a role in fertility developments. We focus on the patterns and associations between the formation and stability of co-residential partnerships and first birth among Finnish women and men, and on whether and how these associations have changed across birth cohorts. We utilise total population register data on persons born between 1969 and 2000 in Finland, and adopt the event history method. Our results indicate that half of the women formed their first co-residential partnerships by the age of 22 years. Cohorts born in the early 1990s were the first to delay the formation of non-marital first partnerships. In contrast, first births are increasingly postponed, and the proportion of women and men, who become parents, has declined across recent cohorts. Among men, we observe higher median ages for family formation events and higher likelihoods of not forming a family. As a result of fertility decline and increase in partnership instability, for the first time, the probability of separation is higher than that of first births among partnered women born in the 1990s. Our findings show that at a behavioural level, the once close link between partnership formation and parenthood has progressively eroded across consecutive birth cohorts. Together with the ongoing tendency to delay first births, decreasing partnership stability, and first indications of delaying partnership formation, the potential of witnessing a marked increase of fertility levels in the near future is delimited. Our study's results contribute to a better understanding of the demographic mechanisms behind the decline in fertility in Finland, over the recent decade.

1. Introduction

Demographically advanced populations have gone through major changes in family patterns since the 1960s and are experiencing fertility declines to below replacement levels (Lesthaeghe, 2020; Sobotka & Toulemon, 2008). While the postponement of parenthood to higher ages (Beaujouan, 2020; Sobotka, 2017a) has fuelled the fall in period fertility, its impact on complete cohort fertility is not always straightforward (Beaujouan & Toulemon, 2021). However, as the trend towards later parenthood continues, it will inevitably also shape levels of cohort fertility (Hellstrand et al., 2021; Frejka & Sardon, 2006). Lifetime childlessness, in particular, can push fertility to low levels (Hellstrand et al., 2020). So far, the declines in the ultimate number of children born

to consecutive cohorts have been witnessed to varying degrees in most advanced societies (Frejka, 2017; Frejka & Calot, 2001; Hellstrand et al., 2021; Myrskylä et al., 2013). In Nordic countries, fertility stayed close to replacement levels for several decades, but has declined markedly over the past decade (Hellstrand et al., 2021; Zeman et al., 2018). Finland stands out amongst the Nordic countries, with its higher rate of lifetime childlessness (Jalovaara et al., 2019), and a fall to the lowest (period) fertility levels, during the past decade.

Literature addressing the drivers of fertility change in advanced societies tackles a variety of factors that operate at individual and couple levels, and different societal (macro-level) antecedents of changes in fertility rates (Balbo et al., 2013). Changing partnership patterns, particularly increases in non-marital cohabitations and childbearing in

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cohabitations, together with declining marriage rates, and increases in separations and divorces, are considered characteristic of a low fertility regime (Lesthaeghe, 2020). Although ample scholarly attention has been paid to the changing meanings of cohabitation and marriage in connection to childbearing (Hiekel et al., 2014; Heuveline & Timberlake, 2004; Holland, 2017; Kiernan, 2004; Perelli-Harris et al., 2012), its link to low fertility is not straightforward. For instance, Billari and Kohler (2004) showed that higher aggregate levels of non-marital childbearing may relate to somewhat higher fertility. Despite the Nordic countries being the forerunners of changing partnership dynamics, particularly concerning shifts towards more flexible forms of partnerships and family structures, relatively little research has been conducted on the possible role of partnerships in the region's recent decline in fertility (Andersson, 2023; Hellstrand, Nisén, & Myrskylä, 2022; Saarela & Skirbekk, 2020).

Our study describes the patterns and associations between the formation and stability of co-residential partnerships and first births among women and men born between 1969 and 2000 in Finland. In addition, we reviewed studies addressing cohort trends in Finland and other countries in the Nordic region, to reflect, wherever possible, trends among preceding cohorts. Our empirical analysis relies on the event history method. We provided a descriptive account of the timing and incidence of family formation events, and investigated family dynamics within childless co-residential partnerships, treating first birth and dissolution as competing risks.

We complemented previous research in multiple ways. First, we argued that trends in partnership formation and dissolution on one hand, and timing of first births on the other hand, come together and produce shifts in previously strong links between partnership formation and parenthood. Second, we covered trends among cohorts born since the mid-20th century. Through empirical analysis, we compared family formation patterns among those born between the 1980s and 1990s—whose family and fertility behaviours exert an increasingly important influence on fertility trends during the 2020s—with those born in the 1970s. Third, we focused on Finland, a Nordic country, that is often considered a forerunner in changes in family dynamics, and a country where fertility has recently declined to even lower levels than in other Nordic countries (Hellstrand et al., 2021), and where levels of lifetime childlessness are remarkably high (Jalovaara et al., 2019). Last, our analysis is based on exceptionally rich register data, that enables a longitudinal, individual-level analysis of family dynamics, including entries into, and exits from, childless and non-marital cohabitations. Finland is a rare case, where observation of cohort trends in co-residential partnerships is possible within the total population across several decades. Our analysis focuses on women, but to gain an insight into how the extent of the timing of events varies by gender, we also reported the same information for men.

2. Theoretical perspectives

Theoretical literature has identified various drivers of fertility at societal, individual, and couple levels. At a societal level, the debate is whether and how, the drop of sub-replacement fertility to very low levels may be bypassed with social policies and a supporting welfare regime (Andersson, 2000; Neyer, 2013; Wesolowski & Ferrarini, 2018). A related discussion focuses on how a normative setting and policies that support gender equality, can promote fertility (Goldscheider et al., 2015; Esping-Andersen & Billari, 2015; Rindfuss et al., 2016). Further, to what extent fertility levels respond to economic cycles (Adsera, 2011; Comolli et al., 2021; Sobotka et al., 2011) or global uncertainty (Vignoli et al., 2020) are often addressed in the literature. Such structural factors have been conceptualised as 'indirect determinants' of fertility, whereas living in a stable sexual partnership and contraceptive behaviour within a partnership are regarded as 'proximate determinants' of fertility (Bongaarts, 1978). Although some children are born to unpartnered mothers, for most women, having a partner is a prerequisite for

childbearing. Therefore, entering and remaining in a partnership are crucial components of the debate on childlessness and low fertility (Keizer et al., 2008).

A prominent theoretical framework that addresses partnership dynamics, living arrangements, and childbearing in connection with demographic change, is known as the *second demographic transition* (SDT) theory. This concept was formulated in the 1980s (Lesthaeghe & Van de Kaa, 1986; Van de Kaa, 1987) and developed during subsequent decades (see Lesthaeghe [2010, 2020] for state-of-the-art summaries). The SDT framework builds on the observation, that after the mid-1960s, advanced industrialised societies experienced a major alteration in demographic patterns. The transformation was most explicit in the family domain, where a retreat from the pattern of almost universal marriages, trends towards later entry into parenthood, increase in non-marital cohabitations and childbearing in cohabitations, rising levels of separation and divorce, as well as repartnering after partnership breakups, were among the changes that presented a clear contrast with the family dynamics, which characterised the previous period (Lesthaeghe & Lopez-Gay, 2013; Lesthaeghe & Neels, 2002). The theory predicts that these changes in the domains of childbearing and partnership introduce a new regime of sustained sub-replacement fertility (Lesthaeghe, 2010; Sobotka, 2008, 2017a). This prediction differs from the (first) demographic transition framework (Kirk, 1996), which foresaw fertility fluctuating at a replacement level as a characteristic of the new reproductive regime.

Nordic countries are recognised as forerunners in the new reproductive regime where the two main dimensions of the SDT—the increasing flexibility of partnerships and family forms, and a tendency to postpone family formation—have evolved earlier than in other regions of the world (Lesthaeghe, 2010). Over thirty years of empirical observations in various country contexts have helped to distinguish regional features of family change showing that the two dimensions of the SDT might be more independent than originally thought (Puur et al., 2012; Sobotka, 2008). Currently, the simultaneous rise in non-marital cohabitations and fertility postponements are recognised as a specific feature of SDT in Nordic countries rather than a universal pattern (Lesthaeghe, 2020). A remarkably stable, close-to-replacement-level cohort fertility has been another characteristic feature of the Nordic region (Myrskylä et al., 2013) until recently (Hellstrand et al., 2021). The recent decline in fertility in Nordic countries cannot be easily explained by socioeconomic changes or other structural factors (Comolli et al., 2021). This inspires us to search for possible alternatives or complementary factors that may have contributed to fertility declines in Nordic countries.

Life-course approach is a theoretical framework that complements SDT, in that, it examines the links between demographic events by focusing specifically on the life histories of individuals. From this perspective, the question of whether persons have (biological) children or remain childless, is linked to various demographic events, such as partnership formation and dissolution, that occur during their reproductive years (Buchmann & Kriesi, 2011). This approach highlights the timing, incidence, and sequencing of such events. Similar to the SDT framework, the life course approach seeks to understand whether and how the patterns change over time or across cohorts, and to what extent the process varies between societies, social groups (Van Winkle, 2017), and gender (Schoon, 2015).

From a life course perspective, changes in partnership dynamics associated with SDT influence the way cohorts reaching adulthood in low fertility regime experience the processes of family formation (Billari & Liefbroer, 2010; Billari & Wilson, 2001; Brückner & Mayer, 2005; Hofäcker & Chaloupková, 2014; Kuijsten, 1996). On the one hand, life courses and family formation patterns, in particular, may become less similar, as the likelihood of experiencing various life course events, as well as variations in the age when events happen, and the duration of life stages, increase (Brückner & Mayer, 2005; Elzinga & Liefbroer, 2007). On the other hand, these variations might decrease once the shift away

from the former standard pattern of family formation turns into majority behaviour (Hofäcker & Chaloupková, 2014). Within the SDT framework, a shift away from a former standard is conceptualised as a temporary phase of divergence caused by a variation in the onset of the transformation of family patterns. Billari and Liefbroer (2010) hypothesised that the emerging behavioural standard in Europe will involve three features: family formation events will take place later in life, will be protracted in a sense of prolonged time span between events like partnership formation and parenthood, and complex family forms will prevail. Despite the observed divergence in Europe at the time of their study, relying on the SDT framework, they foresaw the convergence of family patterns in the future (ibid.). Indeed, the decreasing variation in family patterns among more recent generations, that has been witnessed in the Nordic context (Elzinga & Liefbroer, 2007; Hofäcker & Chaloupková, 2014; Van Winkle, 2020), possibly signals that these populations are approaching a new phase of behavioural convergence in the family domain. This possibility motivates us to monitor family formation patterns among subsequent birth cohorts in Finland, with the goal of clarifying features of the emerging behavioural standard.

In terms of gender, literature provides consistent evidence of the age disparity in sexual relationships, and variations in the age norms of events, that mark the transition to adulthood (Schoon, 2015). Compared to women, men tend to be older when forming a family. However, as gender differences in many domains of life are dissolving (Goldscheider et al., 2015), it motivates us to monitor whether the age norms of family events among Finnish women and men will converge among the more recent cohorts.

3. Review of recent empirical evidence

3.1. Timing and incidence of events

As a general trend, events marking the stages of family formation have been postponed to later ages in Europe and other advanced societies, but not all events are postponed to the same extent (Billari & Liefbroer, 2010; Kohler et al., 2002; Sobotka & Toulemon, 2008; chap. 4). In this section, we shall review the main empirical findings covering cohort trends in entry into parenthood, partnership formation, and stability of co-residential partnerships, and identify research gaps. When relevant and feasible, we shall distinguish between marital and non-marital partnerships. The review distinguishes two aspects: the timing of an event and its prevalence among women and men in their reproductive years. The focus is on Finland and other Nordic countries.

3.1.1. Entry into parenthood

Postponement of first births is an ongoing trend in advanced societies (Billari, 2005; Frejka & Sardon, 2006; Kohler et al., 2002; Sobotka, 2017a), and one of the main characteristics of the SDT. In Nordic countries, the mean age at first births, which started to increase systematically during the second half of the 1970s, is currently approaching the age of 30 (The Human Fertility, 2021). Between 1975 and 2018, the increase ranged between five years in Sweden, and six years in Norway (ibid.). The drawback of such a period measure is, that during times of changing age patterns, a period view may not properly characterise the life course of consecutive birth cohorts. Andersson et al. (2009), who observed cohorts born between 1935 and 1969, argued, that despite the overall similarity of fertility regimes in Nordic countries, there were variations in the onset of fertility postponement. They showed that the postponement of first births was first manifested in Finland, where the median age at first birth—the age at which 50% of a birth cohort have become mothers—had already started to increase in women born between 1945 and 1949, whereas, in Norway, it started a decade later. Across all cohorts covered in their study, Finnish women had the highest median age at first birth, which reached the age of 28.8 among cohorts born between 1965 and 1969 (ibid.). Contrary to the expectation, that postponements might have reached a turning point (Myrskylä et al.,

2013; Andersson et al., 2009; Sobotka, 2017a), the age-specific fertility rates reported by Hellstrand et al. (2021) suggest, that in Nordic countries, postponements of first births continues in cohorts born after 1970.

3.1.2. Cumulative incidence of parenthood and ultimate childlessness

Postponement of parenthood may result in a decline in fertility, in which case, the biological reproductive window closes before (all) the intended children are born (Frejka & Sardon, 2006). At an individual level, biological, medical, or social factors increase the risk of remaining childless for those who delay childbearing to higher reproductive ages (De Kat & Broekmans, 2018). At a population level, higher proportions of those remaining childless do not necessarily correlate with delayed timing of first births (Beaujouan et al., 2017; Nicoletti & Tanturri, 2008; Rowland, 2007; Sobotka, 2017b; Zeman et al., 2018). A long view on family patterns in Western countries reveals, that high levels of ultimate childlessness may also characterise populations with earlier and higher reproductive schedules than the contemporary pattern (Kreyenfeld & Konietzka, 2017). For instance, among cohorts born during the first two decades of the 20th century, it was common that up to a quarter of women remained childless (Rowland, 2007). Finland, where 26% of women born between 1905 and 1909 remained childless, fits this pattern (ibid.). Cohorts born during the following three decades brought along a decline, and later a stabilisation of ultimate childlessness at levels close to 14% or less, in the Nordic countries (Sobotka, 2017b). Among post-war birth cohorts, the proportion of women who never bore children increased, but the overall pattern stayed remarkably stable, and, owing to the successful recuperation of childbearing at older ages, a marked increase in age at first birth discussed above did not bring about a similar increase in the level of ultimate childlessness (Andersson et al., 2009). Finland stands out in the Nordic comparison with higher levels of ultimate childlessness among post-war birth cohorts, and a continuous increase of levels among cohorts born in the 1960s and early 1970s, in contrast to the stability witnessed in other Nordic countries, at that time (Jalovaara et al., 2019; Sobotka, 2017b). Among these Finnish cohorts, ultimate childlessness was more characteristic in men and women with low levels of education, but also increased among those with medium levels of education (Jalovaara et al., 2022).

3.1.3. Entry into partnership

Trends in the timing of partnership are closely linked with an ongoing process, during which, a share of partnerships starting as non-marital cohabitation increase, whereas the share of direct marriages, traditionally a more regulated and socially controlled form of partnership, decrease. In Nordic countries, the timing of non-marital cohabitations and marriages have moved in opposite directions (Billari & Liefbroer, 2010). While in cohorts born between the 1930s and 1960s, the median age at first partnership formation and first marriages almost coincided at close to 23 years of age, among cohorts born in the 1970s, first marriages were already delayed to ages over 30 (i.e. nine years after entering their first partnership). Consequently, in a European comparison, women from the Nordic countries born in the 1970 s, were among the youngest to enter their first partnerships, and oldest to marry (ibid.). In European countries with lower incidences of cohabitation, the median age at first partnership increases more rapidly among cohorts born in the 1960 s and 1970 s, and diverges less from the mean age at first marriages (Billari & Liefbroer, 2010; Prioux, 2006; Sobotka & Toulemon, 2008). In France, which together with the Nordic countries has been classified as the forerunner of the SDT, the change in partnership patterns took place in two stages (Prioux, 2003). In the first stage, first marriages were postponed, whereas first partnerships were not. In the second stage, which starts with cohorts born at the end of the 1950s, first partnership formation itself is delayed (ibid.). Whether this two-stage pattern will eventually also emerge in the Nordic context, remains to be clarified.

3.1.4. Cumulative incidence of partnership formation and ultimate singlehood

Several authors have characterised the change in partnership patterns as a retreat from marriage (Gibson-Davis et al., 2005; Sobotka & Toulemon, 2008). It refers to a situation, where first marriage rates decline because entering marriage is postponed. Besides this change in timing, which represents a tempo effect on the marriage rates, it has become increasingly common to forego marriage, making a stronger case for a retreat from marriage. Based on Swedish register data, Holland (2013) demonstrated both tempo and quantum changes in marriage patterns among cohorts born between 1950 and 1977. Among younger cohorts, less than one-third of women had married by the age of 30; among older cohorts, more than half had married by the same age, and less than a quarter did not marry at all (ibid.). Insights based on internationally comparative surveys confirm that the proportion of people who marry is also declining in other countries, although at different rates (Holland, 2017; Prioux, 2006). According to current knowledge, in countries where the flexibility of partnerships and family forms has increased to a significant extent, the retreat from marriage has not led to a retreat from partnership formation. For instance, in France, the proportion of women who never formed any union continued to fluctuate between 5% and 7% in cohorts born from the 1930s to 1970s (Prioux, 2003). Whether the long-term shifts in partnership formation have any impact on the share of those who never partnered in Nordic countries, especially among more recent birth cohorts, needs to be clarified.

3.1.5. Stability of partnerships

The declining prevalence of marriages and partnerships might also occur, when partnerships dissolve at a higher rate through separations and divorces. In a historical overview of the changing institutional context of marriage, Sandström and Garðarsdóttir (2018) demonstrated that in the Nordic countries, the shift from low to high divorce rates occurred in two distinct stages. The divorce rate per thousand married women reached its first peak just after the Second World War, and stabilised in the 1950s and early 1960s. The actual retreat from marriages, relates to a second more rapid increase in divorces, which occurred in the 1960s and 1970s (ibid.). While divorce continues to be a common life course experience in the Nordic countries (Sandström & Garðarsdóttir, 2018; Eurostat, 2021), the share of those who experience a dissolution of co-residential partnership is much larger. As non-marital cohabitations tend to dissolve at a much higher rate than marriages (Jalovaara, 2013; Jalovaara & Kulu, 2018; Kailaheimo-Lönnqvist et al., 2021; Kiernan, 2001; Liefbroer & Dourleijn, 2006; Morosow et al., 2021; Perelli-Harris & Lyons-Amos, 2015), the high share of non-marital partnerships also boosts the rate of partnership dissolution. In Nordic countries, one-third of partnerships had already dissolved within five years of initiation among cohorts born in the 1960s (Liefbroer & Dourleijn, 2006). Partnerships started as cohabitation were driving the trend towards higher levels of union dissolution (Andersson, 2003; Andersson & Philippov, 2002; Andersson et al., 2017). A more detailed investigation reported particularly high separation risks during the first years of cohabitation, followed by a significant decline in partnership duration, whereas break-up of marriages appeared less dependent on duration (Jalovaara & Kulu, 2018).

3.2. Association between partnership status and first births

So far, we have discussed changes in the timing and incidence of events related to family formation separately. From a life course perspective, it is also important to consider how the shifts in partnership formation, partnership stability, and entry into parenthood come together and transform the linkages between partnership and childbearing (Johnson et al., 2018; Perelli-Harris & Lyons-Amos, 2015; Winkler-Dworak et al., 2021).

3.2.1. Partnership formation and parenthood

Having a partner is a strong predictor of entering parenthood (Baizán et al., 2003; Brien et al., 1999), while never partnering and partnership instability are associated with ultimate childlessness (Jalovaara & Fasang, 2017). Studies from Nordic countries and beyond, have shown that partnership histories of childless men and women tend to be specific: a majority of them either never form a partnership, or if they do, then, for short episode(s) of cohabitation(s), rather than marriage (Hart, 2019; Jalovaara & Fasang, 2017; Keizer, Dykstra, & Jansen, 2008; Raab & Struffolino, 2020; Saarela & Skirbekk, 2020).

Over time, changes in the timing and prevailing types of partnership have created shifts in the pathways to parenthood (Guzzo & Hayford, 2020; Eickmeyer et al., 2017; Holland, 2013, 2017; Kiernan, 2004). For instance, the tendency that an increasing share of first births occur outside marriage is widely reported in European and American contexts (Baizán et al., 2003; Billari & Liefbroer, 2010; Kiernan, 2004; Klüsener et al., 2013). This pattern is well advanced in Nordic countries, particularly in Sweden, where one-fourth of women in cohorts born during the 1940s became mothers without being married, while the share increased close to 60% in cohorts born in the 1970s (Billari & Liefbroer, 2010). In Finland, this pattern emerged somewhat later than in Sweden, but there also, the proportion was already approaching 50% among cohorts born in the 1970s (ibid.). However, a comparative study covering eleven countries in Europe during the period from the 1970s to early 2000s showed, that a majority of non-marital births occurred within cohabitations, and the majority of women did marry at some point around the birth of their first child (Perelli-Harris et al., 2012). Thus, even if marriage has been losing its role as a prerequisite for bearing children, it has maintained its role as a predominant context for rearing children, and continues to be closely linked to initiating childbearing in many country contexts (Festy, 1980; Holland, 2017; Rutigliano & Esping-Andersen, 2018).

The linkage between cohabitation and parenthood remains more ambiguous. This is primarily because cohabitation can mean different things in different countries, at different times, and for various sub-populations (Di Giulio et al., 2019; Heuveline & Timberlake, 2004; Hiekel & Liefbroer, & Poortman, 2014; Hiekel & Castro-Martín, 2014; Kiernan, 2001; Koops et al., 2021; Vitali et al., 2015). Even in countries where cohabitation and childbearing within cohabitation are common, like in the Nordic countries, cohabitators still remain a heterogeneous group in terms of commitment and relationship satisfaction (Hiekel & Castro-Martín, 2014; Hoem et al., 2013; Wiik et al., 2009). The heterogeneity of cohabitators, and the fact that some proceed to marriage shortly before entering parenthood, affects the link between cohabitation and entering parenthood, compared to the same association for marriage. Still, both marital and non-marital cohabitation are informative, when distinguishing those who do and do not share a home with a partner. Thus, in countries where the dominant type of partnership has changed to non-marital cohabitation, it is increasingly relevant to address all co-residential partnerships, regardless of marital status, when investigating family formation.

3.2.2. Partnerships without children

While only a small fraction of couples remain childless voluntarily, without ever planning to have a child (McAllister & Clarke, 2000; Miettinen, 2010; Toulemon, 1996), couples do postpone parenthood for various reasons (Duvander et al., 2020). Thus, childlessness within a partnership may be understood as a stage in the reproductive life course, while both partners may still have a positive intention to eventually have a child (Berrington, 2017). Failure to realise fertility intentions, however, leads to involuntary childlessness. In the Nordic countries, men and women tend to spend more time in childless partnerships compared to other Western countries (Andersson & Philippov, 2002). An increase in childlessness within partnerships is also reported in the Finnish context (Rotkirch & Miettinen, 2017). A recent comparative study demonstrated, that the extent to which childlessness within

cohabiting partnerships results from intended childlessness, or relates to involuntary childlessness, that couples experience when they excessively postpone childbearing, could vary across country contexts (Fiori et al., 2017).

Research on childlessness increasingly recognises, that remaining childless is a process embedded into the life course (Jalovaara & Fasang, 2017; Keizer et al., 2008; Mynarska et al., 2015). Among other life course events, separations or divorces increasingly interfere with reproductive careers. A steady increase in divorce risks, particularly among childless women, has been observed in Sweden since 1971 (Andersson & Kolk, 2015). Similarly, a Finnish study has reported the highest risks of separation among women with no children (Jalovaara, 2013). The same study also showed, that the younger the partners were during partnership formation, the higher the separation risks. Although a younger age at separation might smoothen the possible disruptive effects of separations on parenthood prospects, given that, there is more time to find a new partner, studies addressing serial cohabitators demonstrate that multiple partnerships during the early life course do not lead to successful reproductive careers (Andersson et al., 2022; Eickmeyer & Manning, 2018; Jalovaara & Fasang, 2017).

3.3. Research aims and hypotheses

Firstly, our empirical analysis aims to provide a descriptive account of timing and incidence of three family formation events for women and men born between 1969 and 2000 in Finland. Secondly, we examined whether the behavioural links between partnership formation and first birth were changing across birth cohorts. Drawing from SDT and life course frameworks, and based on previous empirical findings, we formulated the following hypotheses regarding cohort trends in Finland:

Hypothesis H1. – *Timing and incidence:* Compared to the levels observed among cohorts born in the 1970 s, more recent cohorts delayed family formation and have experienced family formation events less often by the age of late twenties. There is variation across events:

- a) A delay or fluctuation in the timing of first co-residential partnerships, but no variations in the levels of incidence;
- b) A slight delay in the timing of first marriages, but no considerable decline in incidence levels;
- c) A delay in the timing of first births accompanied by declining levels of incidence.

Hypothesis H2. – *Asynchronous age schedules:* The typical age for forming first co-residential partnerships, first marriages, and first births differ markedly. The following differences persist across cohorts:

- a) Entry into first co-residential partnerships occurs at a younger age than first marriages and first births;
- b) During the reproductive life course, marriage is the least common, whereas forming co-residential partnerships is the most common family formation event;
- c) First birth schedules in terms of timing and incidence do not coincide with either type of partnerships, but are more similar to marriage.

Hypothesis H3. – *Variation by gender:* Compared to women, men experience family formation events at a somewhat higher age and will

exhibit lower levels of incidence by the age of late twenties. The cohort trends described in hypotheses H1 and H2 do not differ for men and women.

Hypothesis H4. – *Family dynamics within first and second childless partnerships:* The behavioural link between partnership formation and first birth is eroding across birth cohorts.³ The following tendencies contribute to this:

- a) The interval between partnership formation and first birth increases; as a result, more time is spent in non-reproductive partnership in young adulthood;
- b) Separation risks of childless partnerships are higher among more recent cohorts; as a result the share of first partnerships remaining non-reproductive increases across cohorts; this counteracts the previous assumption about prolonged time spent in non-reproductive partnerships;
- c) The delay of first births within partnerships and higher separation risks are mainly characteristic of first co-residential childless partnerships, but if similar tendencies occur within second co-residential childless partnerships, it further supports hypothesis H4.

4. Data and methods

4.1. Data

We use high-quality longitudinal population register data covering the total population of Finland since 1970, compiled at Statistics Finland (Permission no. TK-53-731-16). The individual-level data include childbearing and partnership histories at monthly precision levels. Finnish register data are exceptional, in that, they include (since 1987) information not only on marital, but also non-marital partnerships. Our study population consists of women and men born in Finland between the years 1969 and 2000, and who are observed from 1988 through 2018. We excluded data on those born outside Finland. By focusing on native-born individuals, our study follows the logic of a true birth cohort analysis; that is, the idea that cohorts of individuals born in a certain region are followed throughout their adult lives. The exact number of persons varies by the events addressed (see the numbers of persons disaggregated by gender, cohort, and event from [Supplementary material Table S1](#)).

We address four different family events: first birth, first marriage, first co-residential partnership, and dissolution of childless co-residential partnership. The definition of first birth is based on the date of a first live birth; first marriage is defined based on the marriage date, regardless of whether the co-residence started before or after marriage, or which was the order of the partnership. Relying on a strategy applied in Statistics Finland, a co-residential 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, such as siblings, or a parent and child, and whose age difference is no more than 20 years, or who have shared children. Non-cohabiting partnerships or same-sex unions cannot be captured. This definition includes co-residing opposite-sex individuals, who are not in a romantic relationship, but based on sensitivity checks, it should be rare. For more details on inferences of co-residential partnerships, see the work of [Jalovaara and Kulu \(2018\)](#).

In terms of partnership dissolutions, we considered cohabiting

³ Note that the hypothesis H4 challenges a link between co-residential partnerships and first births. The type of partnership (non-marital cohabitation or marriage) is not distinguished. Although we acknowledge that the link between marriage and first birth is also changing, we reckon this as a separate research question, which should be tackled elsewhere. Here, we prioritised a definition of partnership that incorporates all childless co-residential couples.

Table 1
Definition of populations-at-risk and outline of analytical approaches for transitions addressed in this study.

Beginning of the observation period for the different populations-at-risk	Event(s)	Censoring	Analytical approach
First part: Family formation events			
Childless at age 17	First birth (single decrement)	For all transitions beginning at age 17, time is censored at age 42, year 2018, emigration or death whichever came first.	Cumulative incidences based on one minus Kaplan-Meier estimator and non-standardized age-specific rates. Women and men separately.
Never married at age 17	First marriage (single decrement)		
Never partnered at age 17	First co-residential partnership (single decrement)		
Never partnered at age 17	Direct marriage or cohabitation (competing pathways)	Additional censoring at competing event.	Cumulative incidences based on one minus Kaplan-Meier estimator. Only women.
Second part: Family dynamics within partnerships			
Formation of first partnership, childless women	First birth or separation (competing pathways)	For all transitions beginning at partnership formation, time is censored after 15 years since partnership, at competing event, year 2018, emigration or death whichever came first. Only partnerships that were formed between ages 18–28.	Cumulative incidences based on one minus Kaplan-Meier estimator and cumulative incidences of competing risks modelled jointly. Partnerships.
Formation of second partnership, childless women	First birth or separation (competing pathways)		

Note: Our observation period was from 1988 to 2018. Thus, exceptionally, those born in the 1969 and 1970 were observed since age 19 and 18 respectively.

couples as being separated from the date of moving apart, and married couples as being separated from the date of moving apart or judicial divorce, whichever occurred first. In cases where co-residential couples experience short breaks, when partners do not appear to live at the same address in the register, but continue living together afterwards (without living with another partner in-between), we considered such partnerships to be continuous, despite this ‘technical’ break.

4.2. Method and analytical approach

We employ event history analysis, wherein individuals were followed from the time they become at risk of experiencing an event of interest until the event occurs, or censoring. In our case, the unit of time is year. First, we study the formation of first co-residential partnerships, entering into first marriages and first births, separately among women and men. To observe changes in the timing and incidence of each event of interest, we examine simple descriptive statistics in the form of cumulative incidence functions, based on one minus Kaplan–Meier estimator, which gives the probability that an individual survives at the end of a time interval, on the condition that the individual was present at the start of the time interval. As a next step, we compare non-standardised age-specific rates of the events to see to what extent the age patterns differs across events.

The second part of our analysis focuses on family dynamics within childless partnerships. We conceptualise family dynamics within partnerships as a situation with the presence of competing risks, that is, a situation with several pathways out of the original state (Coviello & Boggess, 2004). In our case, the state of childless partnership ends when a child is born or when a partnership itself dissolves. In neither case, it is possible to turn back to the original state. For those, who were still childless when forming a second co-residential partnership, we study second partnerships in a similar way. We first examine cumulative incidence functions, based on one minus Kaplan–Meier estimator, additionally censoring at competing event. In the last section, we calculate the cumulative incidences of first births and separations jointly, using the Stata module *stcompet* (Coviello & Boggess, 2004). Joint analysis allows us to compare the risks of first births and separations directly, to have a better understanding of how the risks of either event change relative to each other (Wolbers et al., 2014). We do not use

any other variables in these calculations. The calculations are done separately for cohorts of interest. In Table 1, we summarise the definition of risk time, and outline the applied analytical approach for all transitions of interest.

The core of our analysis throughout this study is a comparison of trends across cohorts. We distinguish five-year birth cohorts, except for the first and last cohorts, which are six-year cohorts: 1969–1974, 1975–1979, 1980–1984, 1985–1989, 1990–1994, and 1995–2000. In the supplementary materials (Table S1), the number of persons, exposure time and number of events are disaggregated for birth cohorts, and presented for both women and men.

The comparability of birth cohorts deserves separate attention. During our observation period, which was 1988–2018, those born in the 1970s were very near to the end of their reproductive life course; whereas the youngest cohorts born in the 1990s, were still at the beginning of their reproductive course. Thus, an early adult life course until the age of 28 is comparable for all cohorts, whereas mid and higher reproductive ages are comparable only for the older cohorts.

If first partnerships formed at early reproductive ages are qualitatively different from first partnerships, that are formed later in life, the results of the second analytical step—where we addressed dynamics within partnerships—might still be affected by right censoring. This is plausible because childless couples who start cohabiting in their early twenties can postpone parenthood by several years, without exceeding the prevailing age norms for first births, whereas couples who start partnerships after the age of 30 may have less time to make reproductive decisions. Previous studies have also reported negative associations between age at partnership formation and partnership stability (Lutz et al., 1991; Lehrer, 2008; Lyngstad & Jalovaara, 2010).

To account for the fact that for the more recent cohorts only partnerships formed at younger ages can be observed, we limit our comparative analyses of family dynamics within partnerships, to only those partnerships, that were formed before the age of 28. Thus, our main analytical focus is on family dynamics during early adulthood. We performed additional robustness checks for earlier cohorts, by including all first partnerships, despite the age at partnership formation.⁴ As a

⁴ The results are available on request from the authors.

result, the levels of incidence changed slightly, but results in terms of cohort trends remained unaltered. This is because the majority of first partnerships had already started by the age of mid-twenties. Nevertheless, for cohorts born after 1995 the results of the family dynamics within partnerships should be dealt with some caution. As their observation window closes already at early twenties (see [Table S2](#), panel 'a'), the incidences of births within partnerships might be slightly underestimated, whereas partnership dissolutions might be overestimated, compared to older cohorts.

5. Results

5.1. Timing and incidence of the family formation events

Figure 1⁵ visualises the trends across 5-year birth cohorts among women and men, who had experienced each family formation event by a certain age. All observed shifts across cohorts are in the expected direction (hypothesis H1). Among cohorts born more recently, family formation is delayed, and the share of those who have experienced first co-residential partnerships, first marriages, and first births by the age of late twenties declines, but the levels vary by the event of interest. As the first co-residential partnership is the least explored of the three events, we shall discuss its results first and in finer detail.

We observed considerable stability in partnership formation among Finnish women born in the 1970s and 1980s ([Fig. 1](#), panel 'a', women). The lines for these cohorts are clustered and follow a similar pattern. By the age of 22–23, half of the women in these cohorts had already entered their first co-residential partnership. Thus, forming co-residential partnerships clearly belongs to the early life course. It is also a universal experience, as more than 90% of women, who had reached or were approaching the end of their reproductive ages, had formed co-residential partnerships.

Against this background, women born in the 1990s present a somewhat different pattern. The 1990–1994 birth cohort is the first cohort that lags behind its predecessors in the progression to first partnerships. This lag relative to their peers born in the late 1980s becomes visible around age 23 and increases with each year. The changes are small, but they deserve attention, as they suggest that women born after 1990 might be new trendsetters, who have started to delay partnership formation.

Cohort trends in the cumulative incidence of first marriages are markedly different from those of first partnerships ([Fig. 1](#), panel 'b', women). The incidence of marriages has continued to decline throughout, with no sign of an emerging stabilisation. On the contrary, the decrease seems to have accelerated among women born after the mid-1980s. In cohorts born during the 1970s, approximately half of the women had married by the age of 30. Among women born in the early 1990s, who were observed until the age of 28 in our data, less than a quarter had married.

Under the surface of a relatively stable pattern of partnership formation described above, birth cohorts experienced a continuous shift from direct marriages (marrying without living together first) to cohabitations, with a decrease in the incidence of direct marriages being compensated by a parallel increase in the incidence of non-marital cohabitations (see [Fig. S1](#) in the [supplementary material](#)). However, women born after 1990 were the first ones, who also delayed non-marital cohabitations at the age of early to mid-twenties.

Cohort trends in the cumulative incidence of first births bear a resemblance to first marriages, particularly in younger age groups ([Fig. 1](#), panel 'c', women). Although Finnish women born in the 1970s already had relatively late first birth schedules, the incidence of first births continued to decline among preceding cohorts. The proportion of those who had become mothers by the age of 30 decreased from 56%

among those born in the early 1970s to 47% among women born between 1985 and 1989. The most recent cohorts introduced a further decline between the ages of 20–28. From a life course perspective, this tendency implies, that in contrast to partnership formation, it is increasingly less common to start a reproductive career at the age of twenties.

[Fig. 2](#) (panel 'a') visualises how the intensity of each event of interest varies by age among Finnish women. Confirming our expectation stated in the second hypothesis (H2), the asynchronicity of age patterns of first partnership formation on the one hand, and first marriages and first births on the other hand, is clearly visible in all birth cohorts, even if the most recent cohorts are only at the beginning of their reproductive careers. Finnish women form their first co-residential partnerships at a high rate throughout their twenties, with a peak in their early or mid-twenties. In contrast, the intensity of first birth peaks close to age thirty, is more dispersed, and stays at lower levels compared to the formation of first partnerships. Age schedules of first marriages and first births are more similar, particularly at younger ages; after the age of around 25 years, marriage rates appear systematically lower compared to first birth rates. This reflects the practice of non-marital childbearing and child-rearing in these age groups.

Resonating with our third hypothesis (H3), compared to women, men's median ages were higher at first partnership formation and first births ([Fig. 1](#), panels 'a' and 'c', men). The difference between ages at first marriages increases by up to six years in cohorts born between 1980 and 1984 (age 38 for men and 32 for women) ([Fig. 1](#), panel 'b', men). In addition, men have a slightly higher chance of not forming a family. For instance, among older cohorts, the share of men, who by the age of 42, have never formed a partnership is 14%, while the share of those who are childless is 30%, whereas, in the case of women, the share is 8% and 22%, respectively. Despite these differences, asynchronous age patterns of forming first partnerships and becoming biological parents for the first time are observable in both men ([Fig. 2](#), panel 'b') and women ([Fig. 2](#), panel 'a'). In terms of cohort trends, we also observed similar delays in first marriages and first parenthood in more recent cohorts, starting from men born in the 1980s, but unlike women, no clear-cut cohort trends emerged for the timing of first partnership formation among men.

5.2. Family dynamics within partnerships

This section tackles the fourth hypothesis (H4), which predicts the weakening of a behavioural link between partnership formation and first birth among more recent cohorts. We present results of partnerships that were formed before the age of 28, as in our data only partnerships formed at younger ages could be observed comparatively across all cohorts.⁶

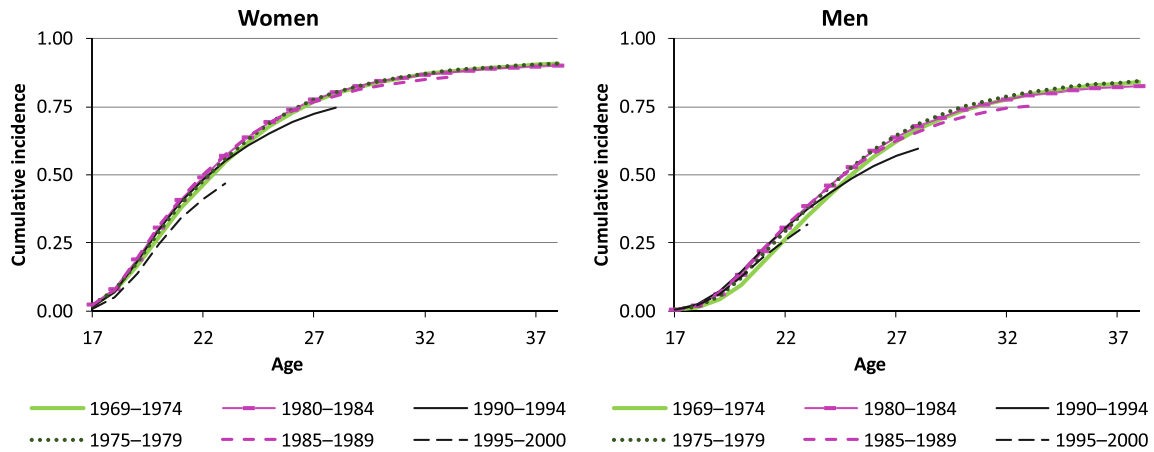
5.2.1. First births within partnerships

Couples increasingly delay parenthood within their first partnerships ([Fig. 3](#)). This tendency, albeit relatively moderate, is already observable among cohorts born in the 1970s and 1980s, whereas it accelerates among cohorts born in the 1990s. Among the latter cohorts, only one-third had become parents after five years of cohabitation, compared to 75% in a reference cohort. However, this result must be interpreted with caution, as for cohorts born in the 1990s the level of incidence of first

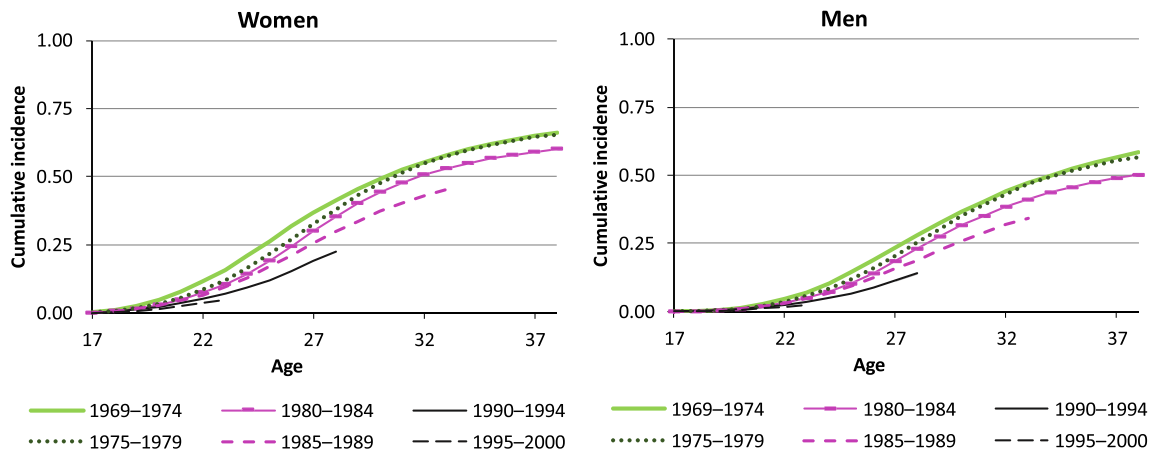
⁶ Among cohorts born in the 1970s and 1980s, about 75% of partnerships were formed before the age of 28 ([Fig. 1](#), panel 'a'). The age schedules of partnership formation are quite similar between cohorts born in the 1970s, 1980s and 1990s, which facilitates the comparison.

⁵ See [Supplementary Table S2](#) for numeric data on [Fig. 1](#).

a) First co-residential partnerships



b) First marriages



c) First births

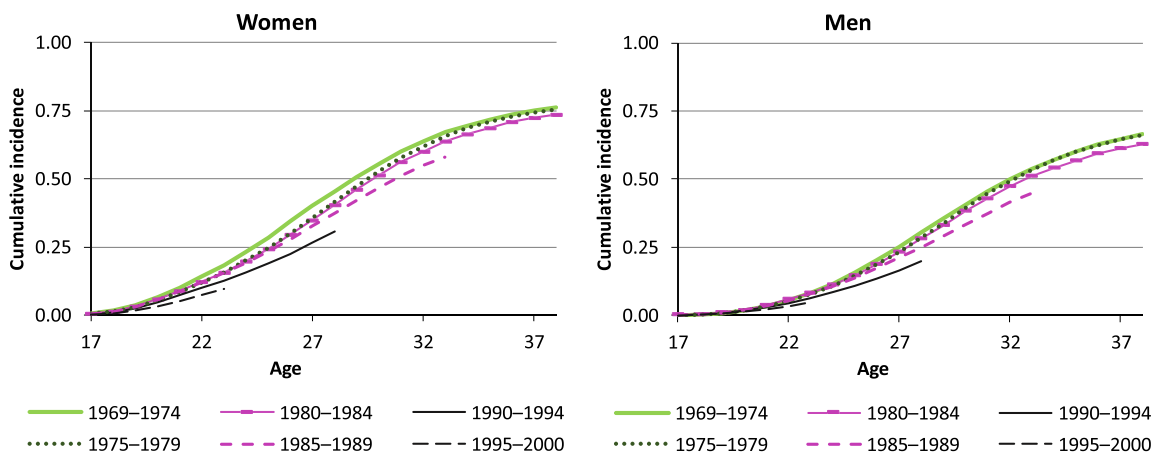


Fig. 1. Cumulative incidence of family formation events: Formation of first co-residential partnerships, first marriages, and first births among Finnish women and men born between 1969 and 2000, who were observed from 1988 to 2018.

Note: The risk set for first partnerships and first marriages was defined as persons at age 17, who had never been in a co-residential partnership; whereas the risk set for first births included those who were childless at age 17. Women and men were observed until a respective event, or censored at the end of the observation period, age 42, emigration, or death, whichever came first. See [supplementary Table S2](#) for numeric data.

Source: Finnish register data, authors' calculations.

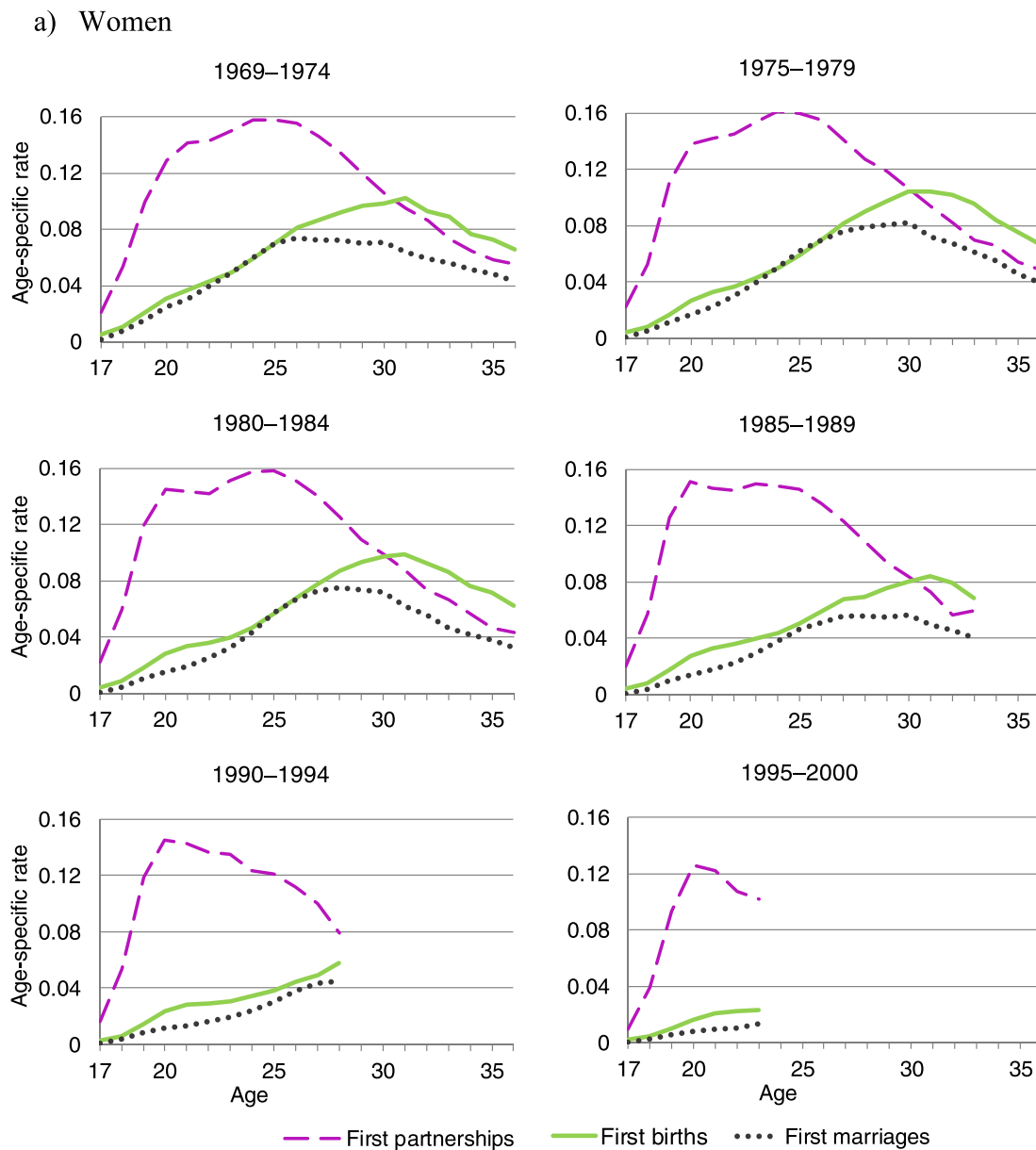


Fig. 2. Age-specific rates of family formation events: Formation of first partnerships, first marriages, and first births by birth cohorts among Finnish women and men born between 1969 and 2000, who were observed from 1988 to 2018.

Note: Non-standardized age-specific rates are calculated separately for each event and birth cohort.

Source: Finnish register data, authors' calculations.

births might be underestimated, to some extent.⁷

The right-hand graph in Fig. 3 shows the progression to first births within second partnerships among women, who were still childless at the time of partnership formation. Interestingly, for cohorts born from 1985 to 1989 and later, the tendency of delaying first birth within partnerships does not only concern the first (and possibly brief)

⁷ For cohorts born in the 1970s and 1980s, we repeated the calculation with partnerships that were formed at the age of 29 or later (results are available from the authors, on request). The pattern of delaying childbearing within partnerships was less explicit than the one we observed with partnerships formed at younger ages. Still, a cohort trend towards postponement was clearly visible. Thus, our results are robust in terms of the cohort trend, that we observed.

partnerships of young adults, but applies also to second childless partnerships. This corroborates the expectation (hypothesis H4) that the association between partnership formation and entry into parenthood tends to weaken among recent cohorts.

5.2.2. Role of partnership dissolution

Although some couples may not opt for parenthood, others will not accomplish their reproductive goals because their partnerships dissolve before first births. The incidences of separations within co-residential partnerships of childless women show, that towards recent cohorts, childless first partnerships are increasingly short-lived (Fig. 4, left-hand graph). The separation intensities are highest in the first years of partnership for all cohorts, whereas the proportion of childless partnerships surviving a longer period decreases in the more recent cohorts. Among women born in the 1970s, half of the first partnerships dissolve within

b) Men

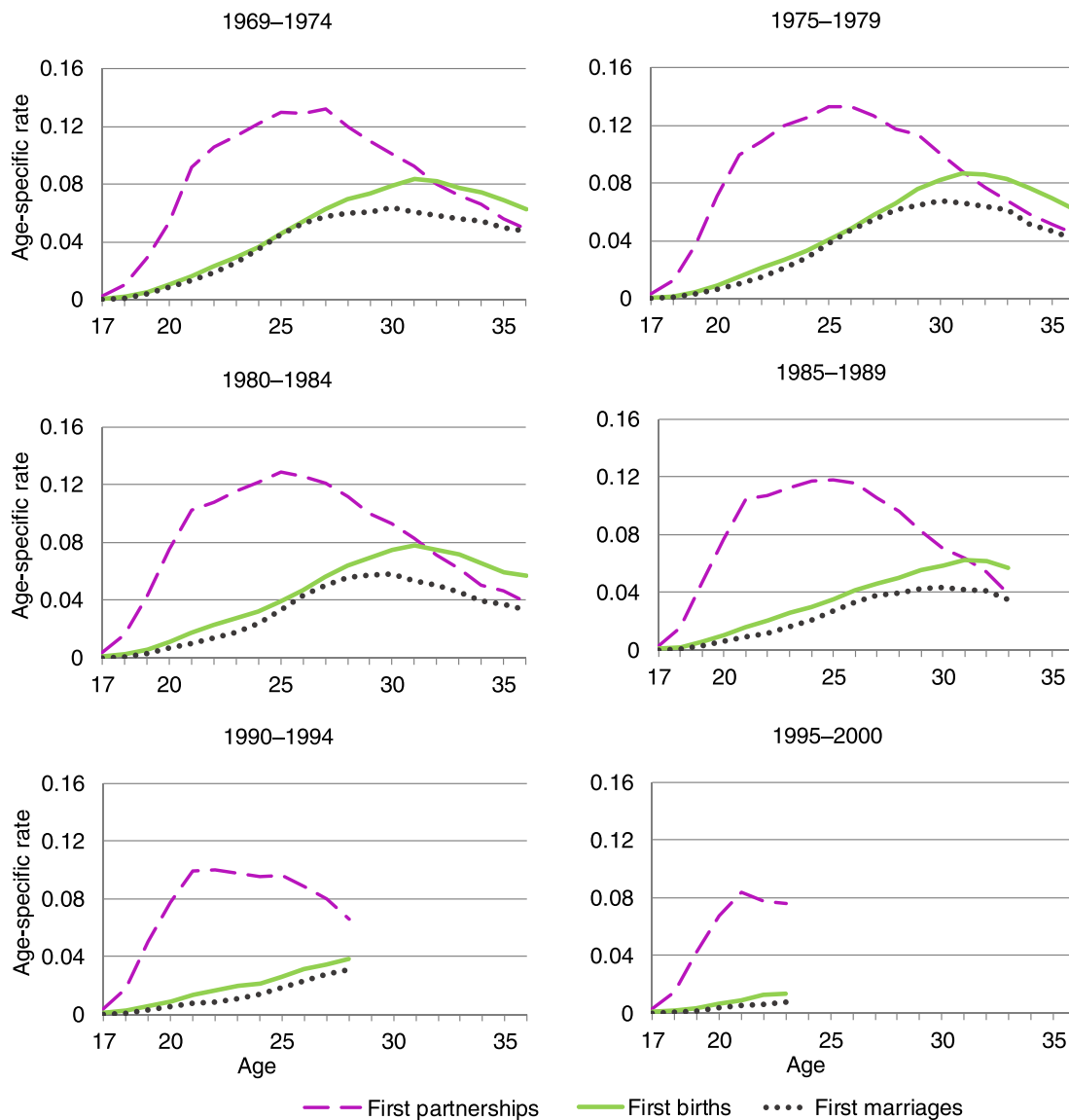


Fig. 2. (continued).

ten years of partnership formation, and for cohorts born in the 1980s, it takes a few years less to reach the same level. The trend towards lower stability in partnerships is even more pronounced among women born in the 1990s. The right-hand graph of Fig. 4 shows, that with regard to cohort trends, the overall pattern of incidences of separation within second partnerships resembles trends for first partnerships, except for a somewhat smaller variation among those born between the 1970s and early 1980s.

5.2.3. First births within partnerships and separation considered jointly

Fig. 5 presents the cumulative incidences of first births and separation of first partnerships, calculated jointly, as competing risks. For the sake of clarity, we compared cohorts born during 1969–1979, 1980–1989, and 1990–2000. Among women born in the 1970s having a

child within five years of their first partnerships was twice as common as separating before first births. Then, in the following decades, the incidences of first birth and separation shift in opposite directions: the incidences of first births decrease, whereas the incidences of partnership dissolutions increase.⁸ Women born in the 1990s shifted to a new pattern, with separation without having a child, becoming a more common scenario than having a child. This holds true at least for women born after 1990, who had formed their first partnerships in their early or mid-twenties.

The results obtained from joint modelling suggest, that the weakening of the link between partnership formation and reproduction in cohorts born between 1969 and 2000 is driven by two parallel, plausibly related changes. The first driver is a tendency to increasingly postpone entry into parenthood, in partnerships. The second driver is a further

⁸ We also examined the change in patterns for second partnerships, and observed a similar tendency (results are not shown, but are available from the authors, on request).

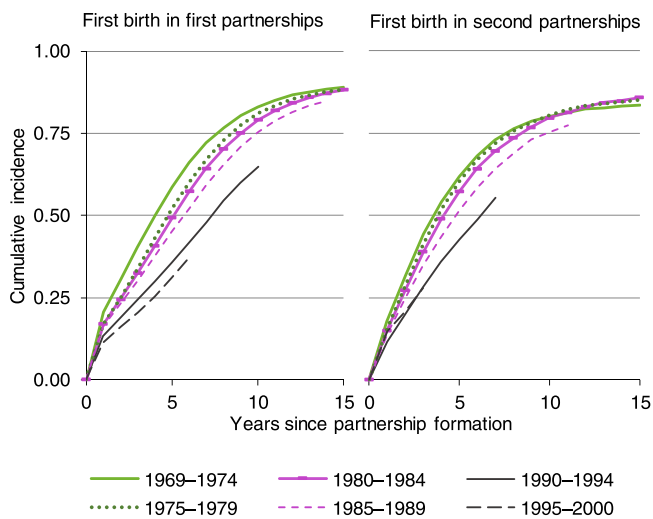


Fig. 3. Cumulative incidence of first birth within first and second partnerships among Finnish women born between 1969 and 2000, who were observed from 1988 to 2018.

Note: Risk set was defined as childless women who formed first or second co-residential partnerships. Women were observed from the formation of the respective partnership until first birth or censored at separation, the end of the observation period, emigration, or death of either of the partners, whichever came first. Only partnerships that were formed between ages 20–28 were observed.

Source: Finnish register data, authors' calculations.

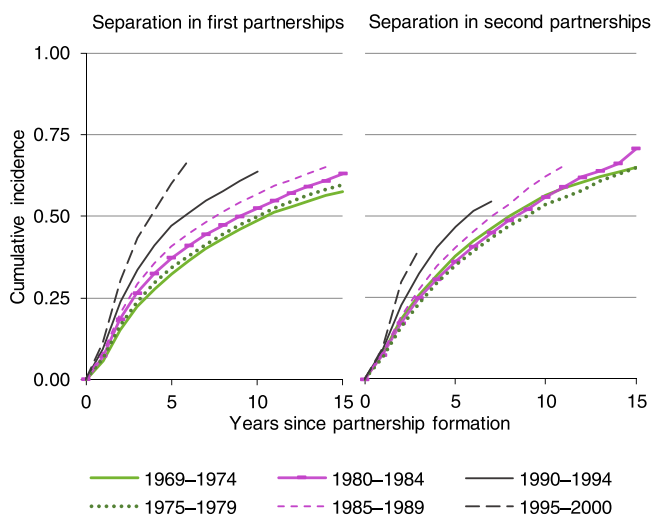


Fig. 4. Cumulative incidence of separation in first and second childless partnerships among Finnish women born between 1969 and 2000, who were observed from 1988 to 2018.

Note: Risk set includes childless women living in first or second co-residential partnerships. Women were observed from the formation of their respective partnership until separation. Censoring occurred at first birth, the end of the observation period, emigration, or death, whichever came first. Only partnerships that were formed between ages 18–28 were observed.

Source: Finnish register data, authors' calculations.

decline in the stability of childless partnerships.

6. Discussion

Our study focused on contemporary partnership dynamics, entry into parenthood, and the association between the two. Our central interest was determining, whether the patterns and associations had changed

across recent birth cohorts in Finland.

The first part of our empirical analysis tackled trends in timing, and incidences of first co-residential partnerships, first marriages, and first births among cohorts born between 1969 and 2000. In line with previous studies which recognise postponement of fertility as one of the SDT's major dimensions (Sobotka, 2017a; Lesthaeghe & Lopez-Gay, 2013), and provide rich empirical evidence indicating, that delays may also concern other events marking the stages of family formation (Billari & Liefbroer, 2010; Kohler, Billari, & Ortega, 2002; Sobotka & Toulemon, 2008), we expected similar trends to continue. Indeed, the results largely confirmed our first hypothesis (H1), that as a general trend, compared to cohorts born in the 1970s, younger cohorts delayed family formation. We obtained confirmations to our second hypothesis (H2) relating to asynchronous age schedules of family formation events, that persist across cohorts, and third hypothesis (H3) regarding the similarity of cohort trends among women and men. However, a more detailed view revealed some variations across events.

In Finland, the median age at first births had already approached 29 years among cohorts born in the 1960s (Andersson et al., 2009). We observed a continuous delay of first births among more recent cohorts, and a declining share of women and men, who had become parents by the age of late twenties. Moreover, in cohorts born during the second half of the 1980s, only 60% of women and 45% of men had experienced the birth of their first child by the last observed age (i.e. 33 years), which was close to 10% less than in the reference cohort, and suggests that recuperation of fertility at ages 30 and above is becoming increasingly difficult.

Our results regarding cohort trends in first partnership formation were mixed. Previous studies had shown that, in the Nordic countries, among those born in the 1970s, the majority formed their first partnerships at the age of early twenties; thus, giving more space for potential delays in partnership formation among younger cohorts. Compared to first births or marriages, that already in the 1970s took place at ages close to thirty (Billari & Liefbroer, 2010), the age schedules of first co-residential partnerships in our observations were most stable across cohorts, whereas we found no evidence that the retreat of first marriages would be slowing down among more recent cohorts. This result sets Finland apart from European countries with lower incidence of cohabitation, where delays in the timing of cohabitations occurred in parallel to first marriages (Sobotka & Toulemon, 2008). Only among Finnish women born in the 1990s or later, we found signs of delays in the timing of partnership formation (marital and non-marital), which stemmed from a decrease in the incidence of non-marital partnerships. This resembled a pattern that had previously been observed in France, where the postponement of first cohabitations emerged a decade later compared to postponement of first marriages (Prioux, 2003). It is still too early to say whether also the share of women and men, who never-partner, would increase in the coming decades.

The second part of our empirical analysis addressed family dynamics within partnerships. At this step, we did not distinguish between marital status, mainly because childbearing within non-marital partnerships has been widely accepted in Finland and other Nordic countries for several decades (Billari & Liefbroer, 2010), suggesting that for many, marriage is not a prerequisite for parenthood. As expected, we observed a delay in first births within partnerships towards more recent cohorts, whereas the intensity of partnership dissolutions continued to increase. These changes were not limited to childless first partnerships, but also occurred in childless second partnerships. In tandem, the observed changes corroborate hypothesis (H4) that, at least at a behavioural level, the once close link between partnership formation and parenthood has progressively eroded in Finland. There is no reason to doubt that entering and remaining in a co-residential partnership are still strong predictors of fertility (Jalovaara & Fasang, 2017; Keizer et al., 2008; Brien et al., 1999). However, recent trends illustrate, that having a partner is not a sufficient condition to become a parent. A consequence from a life course perspective is, that more recent cohorts in Finland

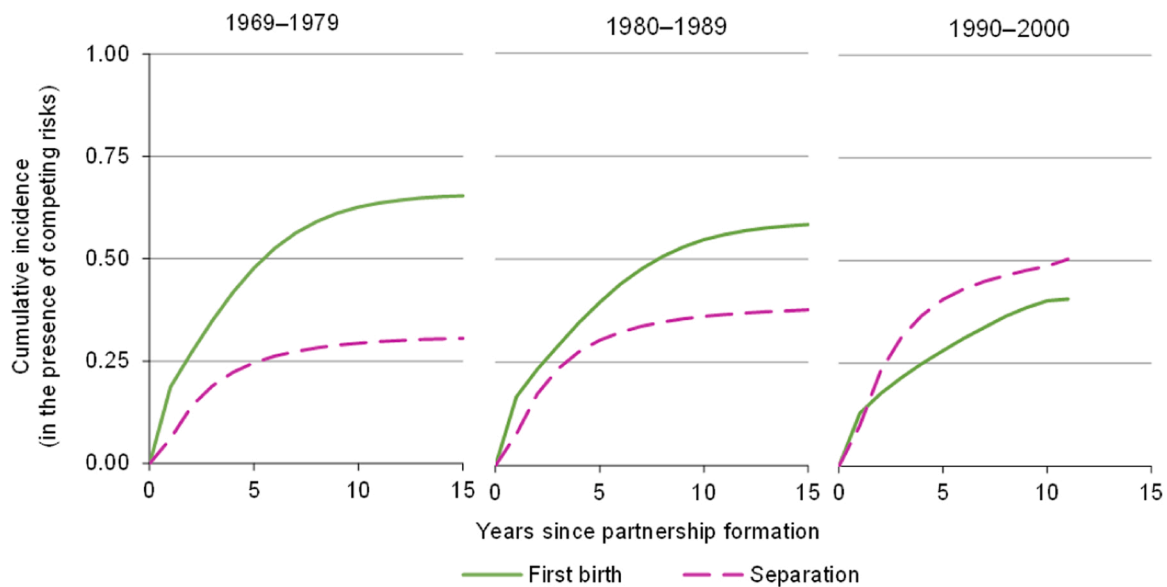


Fig. 5. Cumulative incidence of first births and separations in first childless partnerships, modelled jointly as competing risks among Finnish women born between 1969 and 2000, who were observed from 1988 to 2018.

Note: Risk set includes childless women living in first co-residential partnerships. Women were observed from the formation of partnership until first birth or separation. Competing pathways were modelled jointly. Censoring occurred at the end of the observation period, emigration, or death, whichever came first. Only partnerships that were formed between ages 18–28 were observed.

Source: Finnish register data, authors' calculations.

have increasingly lived at a stage or stages during early adulthood, that included living as a couple, but did not include childbearing.

The scale of change observed in cohorts born in the 1990s indicates, that the major changes in family dynamics and fertility that started in the Nordic countries in the late 1960s and early 1970s, which were later conceived as SDT, are far from over. Therefore, the debate over the dominant patterns of family formation continues (Elzinga & Liefbroer, 2007; Kuijsten, 1996; Van Winkle, 2020). Our study's results contribute to a wider debate over the regional characteristics of SDT. Delaying first births has been a universal trend in countries undergoing SDT (Frejka & Sardon, 2006), which leads to an extended period of childfree life in young adulthood (Andersson & Philipov, 2002; Billari & Liefbroer, 2010; Fiori, Rinesi, & Graham, 2017; McAllister & Clarke, 2000; Mogi, Nisén, & Canudas-Romo, 2021). In contrast, postponing childbearing within partnerships is not a universal pattern. Living in biologically non-reproductive partnership(s) in young adulthood, which we observed in Finland, characterises only those countries, where a relatively young age pattern of forming co-residential partnerships has persisted despite a trend towards delayed parenthood.

In the latest update of the theory, Lesthaeghe (2020:34) concluded that to explain recent falls in Nordic fertility, one needs to take into account a comprehensive package of structural and ideational factors. Our description of family dynamics among recent birth cohorts in Finland, highlights the need to also search for demographic mechanisms, that may eventually push fertility down, even in contexts where various contextual factors have previously helped avoid fertility falling to its lowest low levels (Comolli et al., 2021; Goldscheider et al., 2015; Rindfuss et al., 2016). Experiencing often short-lived (biologically) non-reproductive co-residential partnerships in young adulthood, which we observed in this study, may eventually weaken the link between partnership formation and parenthood in higher reproductive ages, as well. This observation is important because the eroding link between partnership formation and parenthood might be one of the many mechanisms that leads to further delays in first births, and challenges the ability to reach higher parities in countries with high prevalence of cohabitation, despite childbearing within cohabitation being widely accepted.

Our study could motivate future research in several ways. Further studies could investigate to what extent changes and linkages between family dynamics and childbearing vary depending on the stage of reproductive life. Future studies can also address whether childlessness is on the rise among women born in the 1990s, who may form their partnerships at a higher reproductive age. We did not differentiate between education and socio-economic status, but a more nuanced study could show which educational or socio-economic groups contribute most to the observed trends in consecutive cohorts, and help understand why first birth delays are continuing among recent cohorts. Our observations regarding the eroding link between partnership formation and parenthood based on register data could be complemented with survey data on attitudes towards partnership and parenthood. This would allow studying the extent to which shifts in behaviour are paralleled with ideational changes. A comparative research design could show whether similar shifts in family dynamics within partnerships emerge in other regions. Potentially this question will remain on the radar, when investigating trends in life course or developing the SDT thesis and other related concepts.

Declaration of interests

None

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.alcr.2023.100548](https://doi.org/10.1016/j.alcr.2023.100548).

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