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## Abstract

Despite increasing diversity within many societies, ethnically endogamous unions remain common. In contexts where one ethnic minority has lived alongside the majority for centuries, understanding who partners with whom is central to understanding how ethnic boundaries are maintained or dissolved. This study examines the role of own and parental ethnolinguistic affiliation for the first partner choice in Finland. We provide a unique test of the relevance of ethnic endogamy across two generations, in a context where both study groups are indigenous, but one (Finnish speakers) overwhelmingly outnumbers the other (Swedish speakers). Using register data on the total population, we examine how a person's ethnolinguistic affiliation and background affect the choice of the first cohabiting partner in terms of the partner's ethnolinguistic affiliation and background. We apply discrete-time competing risk models separately for men and women born 1970-1983. Results indicate that Swedish-registered individuals with two Swedish-registered parents are the most likely to partner with another Swedish-registered person with endogamous background. Alongside them, partnering with a Swedish-registered person with exogamous background is most likely among individuals who themselves come from mixed unions. Patterns are remarkably consistent. The most likely partners of Finnish-registered persons with two Finnish-registered parents is the inverse of the most likely partners of Swedish-registered persons with two Swedish-registered parents. In both ethnolinguistic groups and across genders, mothers' ethnolinguistic affiliation is more important for partner choice than fathers'.

**Keywords:** partner choice, endogamy, minority-majority context, ethnicity, cohabitation

Stockholm Research Reports in Demography 2021:10

ISSN 2002-617X

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## **Introduction**

When individuals from minority groups find partners in the majority population, social boundaries are blurred, and minority group belonging may be weakened, or even disappear, over time. Understanding how individuals from minority groups navigate the partner market is, therefore, essential in order to comprehend the process of intergenerational transmission of ethnic identities. This question is highly relevant given that heterogeneity has increased within many populations through recent waves of immigration to North American and European countries, the so-called “diversity explosion” (Frey 2014). As a consequence, more individuals are growing up with parents with different ethnicities (Andersson, Obućina, and Scott 2015; Kulu and González-Ferrer 2014). In many places, increased modernization and urbanization have occurred in conjunction with a gradual break-down of social boundaries between groups, and those most affected by modernization are expected to be most likely to intermarry (O’Leary 2001). Many people make partner decisions on emotional rather than instrumental reasons (Shorter 1975) and can independently decide with whom to enter a cohabiting union. These processes are thus associated with lesser influence of third parties, such as parents or social or religious institutions. More people also meet in new arenas, such as educational establishments, where they might assort on achieved traits, such as education, rather than on ascribed traits, such as ethnicity (Blossfeld 2009).

Yet, that individuals assort on ethnicity is a robust finding across the social sciences (Hwang et al. 1997; Kalmijn 1994; Kalmijn and van Tubergen 2006). This pattern seems to persist in more heterogamous populations, and when an ethnic minority is small and the odds are stacked against endogamy. Much of the literature on determinants of partner choice among majority-minority groups is based on native-immigrant unions, where intermarriage is considered the final step in the integration process (Qian and Lichter 2011). However, little of what is known about mixed unions is based on partnership between two native or indigenous groups, not least in a European context (Obućina 2016; Saarela and Finnäs 2014). Understanding union formation in the context of indigenous minority-majority groups is crucial, as it may shed light on how groups who have lived side-by-side for centuries maintain social boundaries and how ethnicity is passed on. With increasing prevalence of mixed unions in many contexts, an increasing amount of individuals has an exogamous background, that is, parents who are discordant on a given trait. Despite this development, most studies base partner characteristics on a single measure, such as ego’s ethnicity, and risk discounting the impact of mixed parental

ancestry, and/or how affiliation of the children interacts with the parents' affiliation in shaping partner choice for the next generation.

Here we focus on partner choice in the *first* cohabiting union for a number of reasons. First, early adulthood, the life stage when most first cohabitations occur, is a focal life course period that can have profound impact on individuals' subsequent decision-making and wellbeing, regardless of whether the first union remains intact in the long-term, or proceeds to marriage. For instance, the timing of family formation, fertility, and whether an individual is likely to have children with multiple partners are potential consequences of the first partnership and its longevity. Family demographic behaviours during early adulthood are also associated with differential earnings and labour market trajectories that can impact individuals well into middle age (Kahn, García-Manglano, and Bianchi 2014). Second, even though first cohabitations tend to be more transitory than marital unions, a considerable part are indeed solidified and result in childbearing and/or formalization through marriage (García Pereiro et al. 2014). This is especially the case in our study context, Finland, where many children are born within cohabiting (non-marital) unions, and many cohabiting unions remain intact but without transition into marriage (Saarela and Finnäs 2014). Thus, by considering first cohabiting unions of the focal individuals, we capture many unions that will result in children to whom ethnicity is passed on. Third, by considering first unions we achieve a more equal comparison between groups, as no individuals are affected by previous relationship histories in the partner choice, or differential rates of separation. Evidence suggests that if a union is dissolved, whether that union was endogamous or exogamous predicts partner choice in subsequent unions (Obućina 2016). Thus, there is value in examining all unions before any "weeding out" process of less stable unions have occurred (cf. Blackwell and Lichter 2004).

Register-based studies on how first partner choice depends on own and parental ethnic affiliation are rare. In this paper we seek to address this gap in the literature. The focus of the paper is to examine with whom individuals enter their first cohabiting union in Finland, where the Swedish-speaking minority (5% of the population) resides next to the Finnish-speaking majority (90%) and has done so for centuries. Finland is a unique context with two distinct native ethnolinguistic groups with equal constitutional rights, basically no discrimination based on ethnolinguistic affiliation, and intermarriage across the two groups is common. That the social barriers between Swedish and Finnish speakers are low, together with the egalitarian and homogenous context, is important when it comes to transferring any dynamics to relationships

between other social groups, and their ability to break group boundaries. There are examples in this realm, for instance on ethnic intermarriage between ancestral natives in former Yugoslavia (Smits 2010), and religious intermarriage between Catholics and Protestants in Northern Ireland (O’Leary and Finnäs 2002), but there is a notable lack of examples where exogamous unions suffer little stigma, discrimination or other social sanctions.

We are primarily interested in the partner choice of Swedish-registered individuals (with endogamous or exogamous parents), as it is the behaviour of these individuals who will determine how the Swedish-speaking minority identity is passed on, and the future position of the Swedish language in Finland. Our contribution will display the extent to which endogamy is maintained for the Swedish-speaking minority with a fully Swedish-speaking background, and also the patterns in partner choice for Swedish speakers with mixed background. We can hold constant contextual factors, such as the share of Swedish speakers in the different local areas studied, and educational level of the study persons and both parents. As we examine partner choice in first cohabiting unions not only by an individual’s own ethnolinguistic affiliation, but also by each parent’s ethnolinguistic affiliation, the taxonomy renders six detailed ethnolinguistic combinations that we use as predictors for partner’s ethnolinguistic affiliation with the same level of detail. Our framework and predictions are derived from theories of partner matching and value similarity, as well as the existing evidence of a maternal bias in children’s language registration, which are discussed further below.

## **Background**

Endogamy or homogamy, that two partners share ascribed or achieved characteristics, is common. Assortative mating based on age, education, ethnicity and religion is prevalent in many contexts (Wiik and Holland 2018; Carol 2016; Qian and Lichter 2018; Blossfeld 2009; O’Leary and Finnäs 2002). Ethnicity and race are two dimensions that show considerable homophily in friendships as well as marriages (McPherson, Smith-Lovin, and Cook 2001). A large body of literature has documented that unions where partners share characteristics or have greater “value similarity” are both more common and more stable (Dribe and Lundh 2012; Kalmijn et al. 2005; Milewski and Kulu 2014; van Ham and Tammaru 2011). Despite great diversity within many contemporary societies, especially with the advent of large-scale international immigration, a considerable proportion of unions formed are still endogamous in one way or another (Hannemann et al. 2018). Studies that have examined endogamy in first

cohabitations are nevertheless few, while more is known on endogamy or homogamy by marital order. Overall, remarriages tend to be more heterogamous than first marriages, possibly because individuals cast a wider net second time around (Qian and Lichter 2018). In the US, the association between male SES and entry into marriage is stronger in first than in second marriages (Shafer and James 2013). For intermarriages between immigrants and natives in Sweden, individuals who are most likely to enter a intermarriage after divorce are those who were previously in an intermarriage (Obućina 2016). Even if remarriages become more heterogamous than first marriages, the so-called “weeding out” effect between first cohabitation and the transition to marriage may imply that first unions are more heterogamous than first marriages. It is not clear, however, whether partner preferences vary with union order, or whether differences between structural and norm related factors also change over time, between union types and orders.

### **Preferences, opportunities and norms**

It is generally argued that partner choice is governed by preferences, opportunities and third party norms (Kalmijn 1998). An individual might hold certain preferences for a putative partner, but whether these are realized is contingent on the supply of partners who meets one’s criteria (Blau and Schwartz 1984). Opportunities can be operationalized as the absolute number of potential partners within a given group, the relative size of ethnic groups, as well as the adult sex ratio and the level of segregation between social or ethnic groups (Kulu and González-Ferrer 2014). Studies that have sought to examine opportunities for minority groups have often focused on migrant groups in the US or Europe, and examined their relative group size and likelihood of exogamy, in terms of partnership with the mainstream population or another immigrant origin group. For example, among minority immigrant groups in the Netherlands, origin group size is negatively correlated with ethnic exogamy (van Tubergen and Maas 2007). Although the world is becoming increasingly interconnected and the opportunities to meet partners may have increased (the pool has expanded), many people still find a partner who lives nearby (Haandrikman, van Wissen, and Harmsen 2011), or attends the same institutions, such as higher education (Blossfeld 2009), and therefore often are like themselves (Schwartz and Mare 2005). Evidence even suggests that with the advent of online dating, couples have become more endogamous, because finding others of the same race or sex is facilitated by the online search tools (Thomas 2020).

In addition to individual preferences and opportunities, norms regarding whom to partner with matter too. Third party influence from parents has been a focal decision-maker in marriages across the globe historically, when arranged marriages and material transactions between lineages were common (Fox 1967). In many non-western cultures parents still have a large say in marital arrangements, although this influence has lessened over time with modernization and marriage for emotional rather than instrumental reasons (Shorter 1975). Nevertheless, even in contemporary Western societies, crossing social boundaries in marriage and unions is generally associated with some degree of normative disapproval (Kalmijn et al. 2005). A lack of support and encouragement from family and friends within one's group may explain higher rates of divorce among mixed unions, and why such unions are less likely to be favoured in the first place. Religious institutions and social ties in small communities have also been important in preserving and promoting norms of endogamy. Many young adults leave the nest and enter a more independent life phase where parents are not able to interfere, and can choose their own social circles. For instance, young adults in the US who move further away from their parents are more likely to enter racial exogamous unions than those who remain geographically closer to their parents (Rosenfeld and Kim 2005).

While preferences, opportunities and norms can dictate partner choice, sociologists and other scholars have attempted to tease apart the different mechanisms that can give rise to endogamous (or homogamous) unions. Studies that compare intermarriage between different ethnic or immigrant origin groups repeatedly find that groups that are more closely related in terms of values and world views are more likely to intermarry (Dribe and Lundh 2011; van Ham and Tammaru 2011). The matching hypothesis postulates that individuals seek others who are like themselves (DiMaggio and Mohr 1985; Kalmijn 1994). In contrast, if most individuals favour a highly educated partner, educational homogamy can result from the fact that those with the highest education themselves are more likely to be favoured by other highly educated individuals. This is sometimes referred to as the competition hypothesis and posits that individuals seek the highest possible amount of a given trait (Mare 1991). When examining these separate explanations in a Western or European context, support has been found for competition on economic traits, but matching on cultural traits (Kalmijn 1994; Schwartz 2013). Sharing the same ethnic background may be seen as a particularly poignant trait in a prospective partner, as it not only signifies group belonging but also eases communication and facilitates raising of any common children.

In contrast, exogamous unions, where individuals differ on ascribed traits, may arise because partners exchange traits, meaning that a more desirable characteristic in one domain is traded for a less desirable characteristic in another (Merton 1941), such as ethnicity for high education or income. Status exchange theory originated from studies on Black-White intermarriage in US, but empirical support for it is more ambiguous for other ethnic groups and contexts (Jacobs and Labov 2002; Kalmijn 2010; Kalmijn and van Tubergen 2006). Inherent to the idea of status exchange is a clear hierarchy between ethnic groups. This is less relevant when, as in this study, there are two socially equal groups who both might seek to find a culturally similar partner who speaks the same language. Thus, while we control for education in our analyses, we are not explicitly concerned with testing theories of status exchange.

Ethnic endogamy is of high sociological relevance as it can provide an indication of how close different groups are to one another, and how these relations and attitudes may change over time. When the minority is an immigrant group and the majority the mainstream population, the research question often invokes assimilation, and views intermarriage as the final step of the integration process (Qian and Lichter 2011). However, much less is known about partner choice in contexts where the minority is not a migrant group. This is important for several reasons. First, when exogamy is defined as between two distinct ancestral groups, this provides insights into how ethnicity is passed on across generations, and how individuals navigate group belonging (partner preference) in tandem with timing of life events such as partnership formation. In contrast to native-immigrant partnerships, exogamous unions between two indigenous groups do not suffer from migration-event biases and therefore avoids issues of how to interpret marriage migration. Second, when both ancestral groups have social contexts and the same established relations that many immigrants lack when they settle in a destination country, the comparison between the groups becomes more equal. Individuals in both indigenous minority and majority groups have grown up with knowledge and presence of the other group, and may share political and regional aspects, as a result from being part of the same nation state. Third, when the minority group is neither economically, nor socially disadvantaged, any potential bias from selection on social status or resources, and exogamy through status exchange, is removed. Some of the arguments outlined above for why it is crucial to study separate native-born groups could be applied to studies of descendants of immigrants, for whom there is a growing literature (Kulu and González-Ferrer 2014). Yet, we argue that there is an essential distinction between a minority group with parents who are native-born and descendants of immigrants who have an ancestral country and ethnicity based elsewhere.

## **The study context**

There are few contexts where partner choice in a constrained partner market can be studied through population wide data with a high degree of resolution. Finland provides a unique exception in this respect. The country has two ancestral native ethnolinguistic groups, Finnish speakers (90%) and Swedish speakers (5%, or approximately 290 000 individuals). While the two groups have the same constitutional rights and are similar on many observable characteristics (Saarela and Finnäs 2014), the ethnolinguistic division has profound impact on Finnish society, through separate social and cultural institutions, parallel school systems, geographic residential segregation, and even a separate Swedish-speaking army brigade (McRae 1997). This ethnolinguistic division stems from centuries of shared history, as Finland was a part of the Swedish realm until 1809, when it fell under Russian rule. When Finland became independent from the Russian empire in 1917, it was as a bilingual republic in which the two groups were guaranteed equal rights. The two ethnolinguistic groups in Finland function like separate ethnicities in how they are traditionally defined (cf. Gordon 1964). They are also divided by the practicalities of two distinct languages that do not share recent linguistic roots.

Since the 1950s the Swedish-speaking population has been facing large demographic changes. Swedish speakers have decreased in relative as well as absolute terms, Finnish speakers have moved into regions that were previously primarily Swedish-speaking, and the proportion of individuals who find their partner across the ethnolinguistic border has doubled (Finnäs 2012). In the 1950s, approximately 20% of the Swedish-speaking population married a Finnish-speaking spouse (Finnäs 1986). This figure rose gradually until the 1980s when it levelled off, and today about 40% of the unions of Swedish speakers are to a Finnish speaker (Finnäs 2015). While a person can be registered with only one mother tongue, an increase in the number of unions across the ethnolinguistic border during the 20th century has meant that a substantial number of children are raised by parents from both ethnolinguistic groups. However, there are clear differences in the stability of unions between endogamous Finnish and Swedish-speaking unions. Endogamous Finnish-speaking unions have about twice as high separation risk as endogamous Swedish-speaking unions, and these differences cannot be explained by socioeconomic differences between the groups. Instead arguments about high social integration and low mobility of Swedish speakers have been proposed as mechanisms behind the stability of Swedish-endogamous unions (Finnäs 1997; Saarela and Finnäs 2018). Out of all

compositions, ethnolinguistically exogamous unions are the most labile (Finnäs 1997; Saarela and Finnäs 2014), which suggests that individuals from both ethnolinguistic groups pay some cost from partnering outside of their own group.

Although the two groups have become closer and more intermixed, Finland is currently at an interesting juncture where there is still a clear divide between the majority Finnish speakers and the minority Swedish speakers. While closer integration across social groups in a society is clearly beneficial to social cohesion, it is not known how the present dynamics will impact the long-term development of the Swedish-speaking minority. How an ethnic minority will fare in relative numbers is determined by demographic processes related to births, deaths and emigration. Birth rates and death rates currently have a negligible impact on Finnish/Swedish population composition, while net emigration rates have a slightly more prominent role (Weber and Saarela 2019). The single most important factor is instead the extent and patterning of exogamous partnership, and in particular how the ethnolinguistic affiliation in these are passed on to the next generation. Approximately 65% of all children born in Finnish-Swedish unions are currently registered as Swedish speakers. If it is the mother who is Swedish-registered, this proportion is almost 85%, while it is about 55% if it is the father who is Swedish-registered (Saarela 2021).

The Swedish-speaking Finns and their family behaviour has been thoroughly mapped. In exogamous unions, mothers are more likely to pass on their ethnolinguistic affiliation to children than fathers, while Swedish-speaking men are more likely to partner with Finnish-speaking women, than vice versa (Saarela, Kolk, and Obucina 2020). Individuals with an exogamous background are likely to be proficient in both languages, and this may lead them to have a larger partner market. In other words, their ability to communicate in both Swedish and Finnish means they have access to a larger supply of putative partners. Swedish speakers who reside in mixed regions, such as the Helsinki area, are likely to speak both languages well, whereas bilingualism is less common among those who are registered as Finnish speakers. The ethnolinguistic registration is generally done at birth or close thereafter. The population registration system enforces a binomial view of the ethnolinguistic boundaries in the sense that multiple affiliations cannot be chosen. Consequently, most research has been based on ego's (single) measure of ethnolinguistic affiliation, and little is known about how partner choice differs by own and parental ethnolinguistic affiliation (Finnäs 2015).

## Contribution

We are able to closely examine how individuals with exogamous background maintain, or further dissolve, group boundaries. In the international literature, data on ethnic-group belonging across generations have been rarely used, and individuals with mixed heritage have often been inferred as the product of an assimilation process, without dissecting the majority vs. minority perspective in the own partner choice. Studying first partner choice in our detailed fashion is important, because it can reveal the patterning and extent to which young individuals form coresidential unions outside their own social group. It thereby discloses among whom the minority-group belonging is passed on in an endogamous fashion, and for whom an exogamous union contributes to broadening the majority population over generations.

A key contribution is that we use complete and highly detailed data on ethnolinguistic affiliation of the ego, the mother and the father, which is necessary for the fine-grained groups between which we distinguish. The focal individuals who are Swedish-registered may have two Swedish-registered parents, or be from a mixed union with a mother who is Swedish-registered and a Finnish-registered father, or *vice versa*. The same goes for individuals who are Finnish-registered. This taxonomy leads to six distinct categories of own and parental ethnolinguistic affiliation, which we will refer to in greater detail below. We rely on broad national register data on partner outcomes (rather than stated partner preferences), and will therefore not try to ascertain the relative role of preferences, norms or opportunities. However, we control for educational level of both generations, as well as the ethnolinguistic composition and sex ratio of the area of residence area, so that differential geographic opportunities to find a given partner should not bias the results.

Our partner-choice predictions are primarily derived from the value similarity hypothesis, meaning that Swedish speakers will most likely match with other Swedish speakers. Ego's own affiliation is considered instrumental and to reflect real group membership, such as going to a Swedish vs. Finnish school, receiving governmental information in Swedish vs. Finnish, and engaging in institutions of either language. Matches with Swedish-registered persons are consequently most likely done by Swedish-registered egos, before Finnish-registered egos, and regardless of parental ethnolinguistic composition. The counter perspective, which we find less plausible, would be that ego's registration is mostly symbolic and would imply a small differential in partner choice by own ethnolinguistic affiliation.

In addition, we take into account the gender difference in transmitting the ethnolinguistic affiliation. The maternal bias in the ethnolinguistic registration of children (Obućina and Saarela 2020) implies that Swedish-registered mothers would be more influential than Swedish-registered fathers for partner choice. Having a Swedish-registered mother, as compared to having a Swedish-registered father, should therefore be linked to a higher probability of choosing a Swedish-registered partner or a partner with some Swedish background. Technically, the same assumption can be made for Finnish-speaking mothers on a Finnish-speaking partner, although throughout, we are primarily interested in partner choices of the minority Swedish group.

### **Predictions**

We predict that Swedish-registered individuals with a Swedish-registered mother and a Swedish-registered father (SSS) would most likely match with others with the same composition (SSS), followed by Swedish-registered persons with a Swedish-registered mother and a Finnish-registered father (SSF). They should in turn be followed by Swedish-registered persons with the reverse parental composition (SFS). Then follow Finnish-registered persons with a Swedish-registered mother and a Finnish-registered father (FSF), Finnish-registered persons with a Finnish-registered mother and a Swedish-registered father (FFS), and lastly Finnish-registered persons with endogamous Finnish background (FFF).

We are somewhat agnostic with regard to who partners with Swedish-registered partner with mixed background (SSF or SFS), and with a Finnish-registered partner with mixed background (FFS or FSF). We predict that Swedish-registered egos, irrespective of parental affiliation will be the most likely to partner with the first mentioned. Similarly, Finnish-registered egos, irrespective of parental affiliation, will be the most likely to pair with the second mentioned.

The partner choice of a Finnish-registered partner with endogamous Finnish background will be most common for similar egos, followed by the inverse pattern as argued for Swedish-registered persons above.

There is also a partner outcome consisting of all other potential ethnolinguistic combinations, which we include for completeness, but about which we make no *a priori* predictions.

In addition to the predicted ranking described above, our empirical analyses will, through estimated effect sizes, reveal any differences in magnitude between the ethnolinguistic categories. We will therefore disclose if the closeness in partner choice is gradually driven by the degree of ethnolinguistic affiliation, or whether there is binary divide between Swedish- and Finnish-registered persons.

Swedish-registered men and women show different levels of forming ethnolinguistically endogamous and exogamous partnerships (Finnäs 2010). However, it is not known how this plays out when data over two generations are considered. We therefore make no predictions with regard to sex but will examine differences in magnitude.

## **Data and Methodology**

We use Finnish register data that have unique linkage of ethnolinguistic identity for multiple generations. Each person in the data can be linked to his or her mother and father, as long as the parent had not died before the end of 1970. Through anonymized person numbers we can link individuals to various socioeconomic variables and demographic controls, and importantly to cohabitation by the residential address. The data is accessed through Statistics Finland's FIONA system, and used with the permission number TK-53-1370-17.

In the analyses, we include all individuals who were born in Finland 1970-1983, and who have information on their own, mother's and father's registered mother tongue (Finnish, Swedish, or other). Practically all individuals have this information, as it is not possible to reside in Finland without getting governmental information in either language. Further, we impose the restriction that the individual must be resident in Finland from birth until age 18, when we start the time at risk. The oldest individuals (born in 1970) will begin their time at risk in 1988 and are followed until age 35 in 2005. The youngest cohort (born in 1983) will be 35 in 2018, which is our last year of observation. The partner choice measured is ego's first cohabiting partner. Cohabitation is wide-spread in Finland, and many such unions subsequently turn into marital unions (Saarela and Finnäs 2014).

Finland is one of the few countries in the world where cohabiting unions, regardless of whether the couple has children or not, can be identified in the population registers. Cohabitations are based on a definition by Statistics Finland that notes if a person is domiciled with an opposite-

sex individual (we can consider heterosexual couples only), who is not a sibling or a parent, in the same dwelling beyond 90 days, and the age difference to the other person does not exceed 20 years. Cohabitation is also recognised if the couple has a common child. We include all cohabitations, that is, also those that start as marital unions, although for women born in the 1960s-1980s, only 10% of all unions started with marriage (Jalovaara 2012). The cohabitation measure applied has been established as accurate (Lyngstad and Jalovaara 2010), and conforms to international standards for the classification and identification of couples in households (Kennedy and Fitch 2012).

### *Ethnolinguistic affiliation*

The measure of ethnolinguistic affiliation refers to the ego's, the mother's, and the father's mother tongue, as observed in the population registers. The same typology is used for partners. Own mother tongue is measured at age 18. Few individuals change their registered mother tongue after this point (Obućina and Saarela 2019). For the mother and the father, respectively, it refers to whether a person has ever been Swedish-registered, and else if ever Finnish-registered, in order to capture Swedish lineage in the family (cf. Saarela et al. 2020). This typology results in six categories, SSS, SSF, SFS, FSF, FFS and FFF, where the first letter is for the index person or partner, the second letter to the index person's or partner's mother, and the third letter to the index person's or partner's father. For the index persons, all other and generally uncommon, combinations are excluded. For partners we include a category "other", in order to capture all possible partner choices. It is comprised predominantly by foreign-born individuals with some other mother tongue than Swedish or Finnish, and has been small until recently due to the low number of foreign-born immigrants before the 1990s.

### *Modelling*

We apply discrete-time competing risk models for the hazard of entering a union with a partner of the type SSS, SSF, SFS, FSF, FFS, FFF, and "other", respectively, as a function of individuals' ethnolinguistic categorisation and control variables. The cohabitation risks are estimated from age 18, in a discrete-time manner by calendar year. Individuals are right-censored at emigration, death, or at age 35, whichever comes first. The focus is on risk ratios between ego categories on having a partner of a specific ethnolinguistic type. Because partner choice may differ by sex, and in order to avoid statistical complications from inter-partner dependence (cf. Elwert and Christakis 2006), we estimate separate models for men and women.

### *Control variables*

We include one control variable for ego's education and a combination of highest educational level of ego's parents, because higher education is associated with delayed entry into unions and generally different life course patterns (Jalovaara and Fasang 2017; Jalovaara et al. 2019). For the egos, educational level is a time-varying variable categorized into primary, secondary and tertiary level of education. Parental education is a combination of mother's and father's highest observed level of education (primary, secondary or tertiary), resulting in nine categories. Variables' distributions are found in the Appendix.

We also include two contextual control variables at the local municipality (*kunta*) level. One is the proportion of the adult population aged 18-45 years in a municipality, for any given year, ever Swedish-registered. This accounts for the probability of meeting Swedish-registered partners, considering that Swedish speakers reside predominantly along the west coast, and in the south, including the Helsinki metropolitan area, and are less mobile than Finnish speakers. The other contextual variable captures the yearly adult-sex ratio at the municipality level, which previously has been linked to union formation (Schacht and Smith 2017; Uggla and Mace 2017). It is based on the proportion men to women in the adult population aged 18-45 years. The age range was chosen to reflect that individuals aged up to 45 may still be considered part of the partner market for our 35 year olds. Both these contextual variables are lagged, so that it is where ego lived in the previous calendar year that may predict entry into cohabitation with a particular partner. The contextual variables are categorised into quintiles for easier interpretation. See the Appendix for distributions and further details.

## **Results**

### *Descriptive statistics*

We first construct cumulative proportions of ethnolinguistic affiliation of the first partner for each type of index person (SSS, SSF, SFS, FFS, FSF and FFF) among women (Figure 1a-f) and men (Figure 2a-f). Note that the denominator of these cumulative proportions are based on all individuals at age 18, regardless of whether they are subsequently right-censored due to emigration or death.

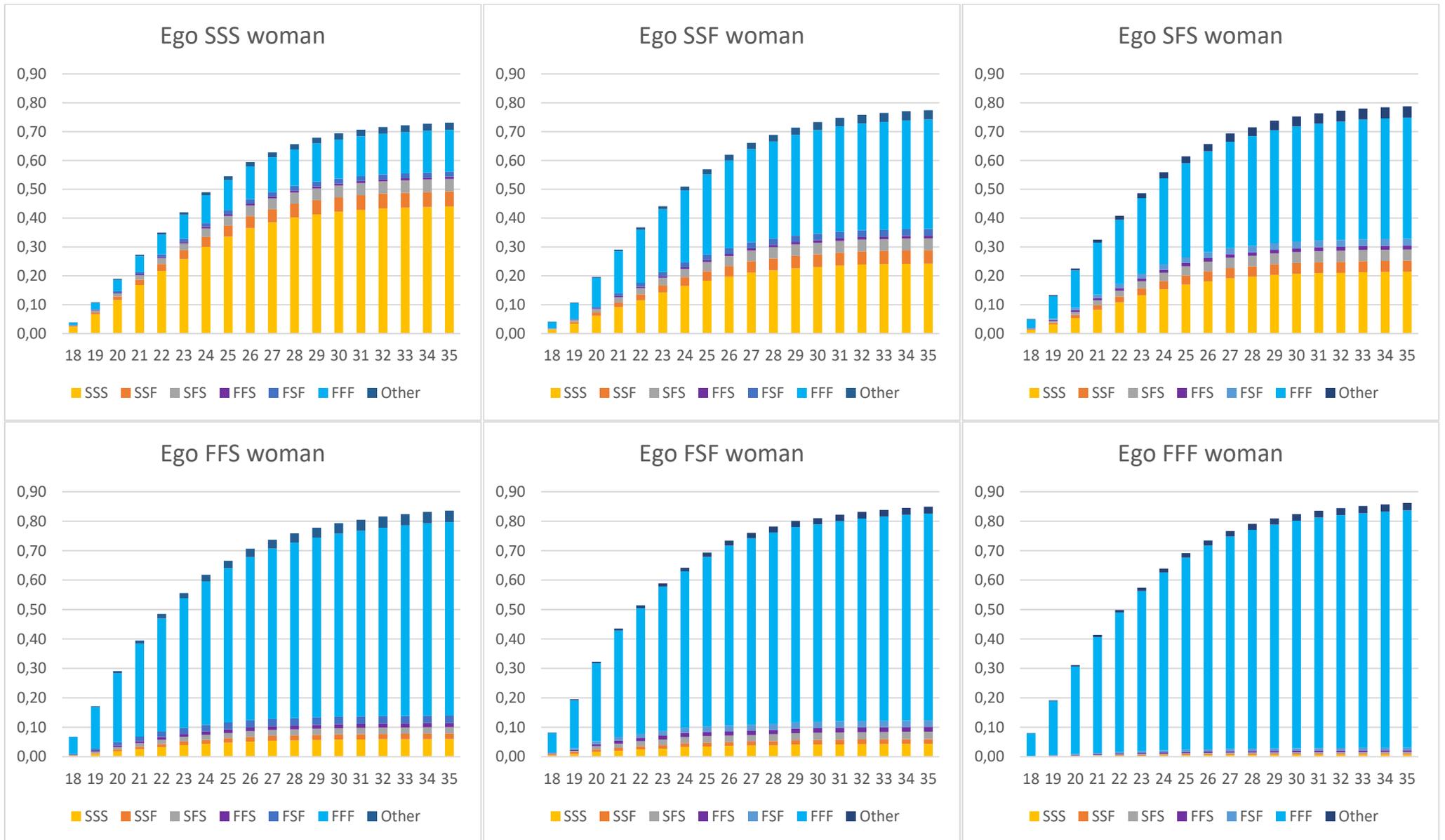


Figure 1a-f. Cumulative proportion of women's first cohabiting partner's ethnolinguistic background, by ego's ethnolinguistic background, in the order of ego, mother and father, e.g. SSF: Swedish-registered ego, with Swedish-registered mother, Finnish-registered father. Other: partners with another mother tongue than Swedish or Finnish.

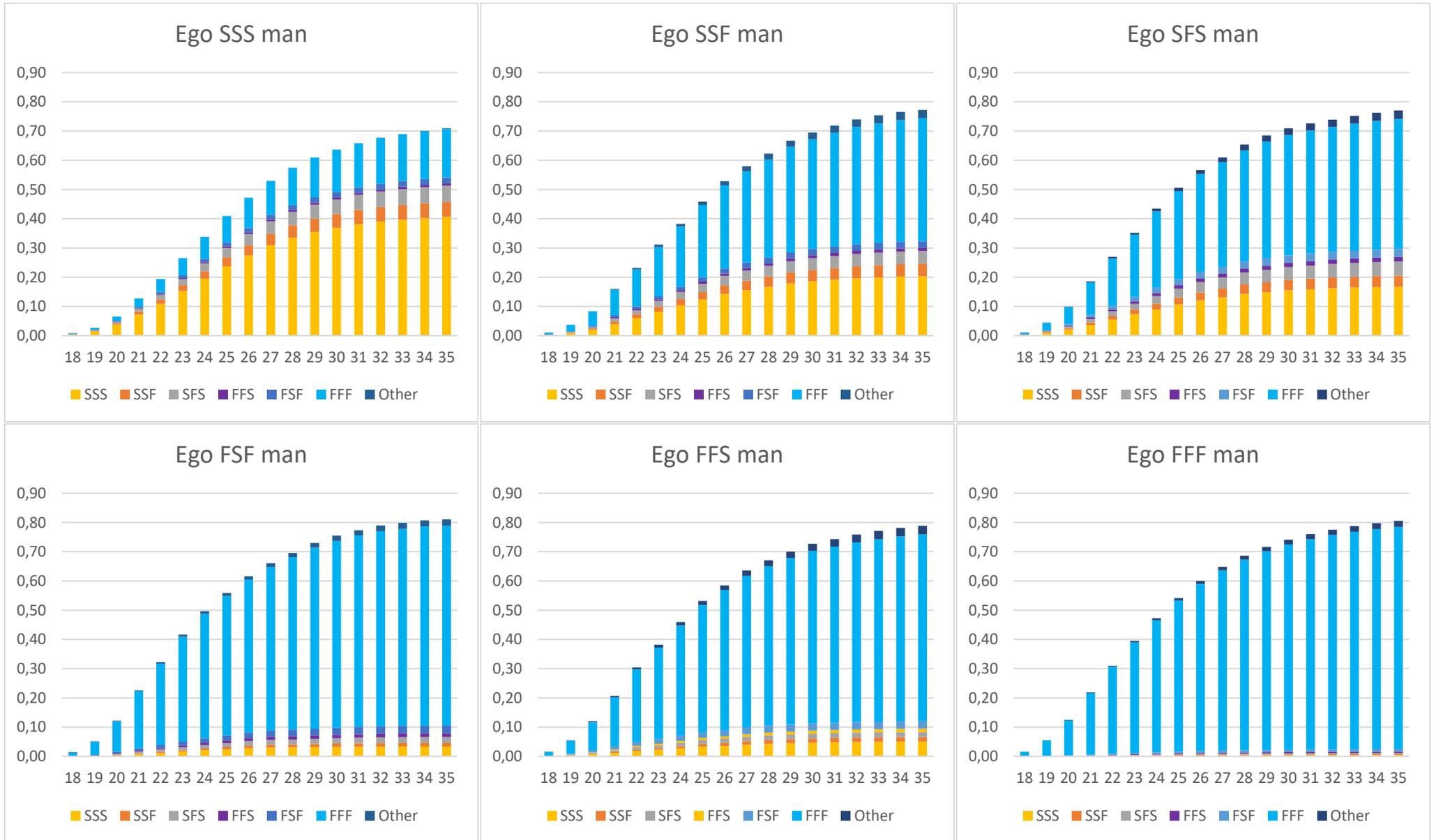


Figure 2a-f. Cumulative proportion of men's first cohabiting partner's ethnolinguistic background, by ego's ethnolinguistic background, in the order of ego, mother and father, e.g. SSF: Swedish-registered ego, with Swedish-registered mother, Finnish-registered father. Other: partners with another mother tongue than Swedish or Finnish.

Figure 1af shows that among Swedish-registered women with both parents Swedish-registered, about 45% have had a first cohabiting partner with the same composition (i.e. also SSS) by age 35. Conversely, Finnish-registered women with both parents Finnish-registered (FFF), 80% have had a FFF man as their first partner by the same age, while the equivalent figure for having had a SSS male partner was only 0.7%. Swedish-registered women with mixed background (SSF and SFS) had lower rates of partnering with SSS men, but were more likely to do so than their Finnish-registered counterparts. The partner choice of men shows a similar pattern to that of women, but Swedish-registered men are somewhat more likely to partner with a Finnish-registered person. Among Swedish-registered men with uniform Swedish background, about 40% partner with a similar (SSS) woman in their first cohabiting union. The probability is about 20% for Swedish-registered men with mixed background, but much lower among Finnish-registered men with mixed background (Figure 2af and Table 2).

Tables 1 and 2 give the number of individuals who enter into each respective type of first cohabiting union, but also the number of individuals who were right-censored due to emigration, death, or never having cohabited by age 35. SSS women are the most likely of all groups to emigrate before any other of these outcomes (17%), compared to only 3% of the Finnish-registered women with uniform Finnish background. The equivalent figures are approximately 11% for SSS men and 2% for FFF men. The probability of not having had any cohabiting partner at age 35 is approximately 7% for SSS women, 8% for FFF women, 13% for SSS men and 15% for FFF men.

		Partner's ethnolinguistic background/censoring outcome										
		SSS	SSF	SFS	FFS	FSF	FFF	Other	Never	Emigrated	Died	Total
Ego's ethnolinguistic background	SSS	6 690	661	789	110	259	2 212	382	996	2 521	33	14 653
	SSF	862	146	165	34	84	1 348	113	281	414	6	3 453
	SFS	871	165	156	56	96	1 704	159	317	387	10	3 921
	FFS	310	114	97	73	133	3 415	204	420	258	18	5 042
	FSF	117	66	43	44	59	1 876	62	199	121	5	2 592
	FFF	2 821	1 764	1 648	2 170	3 363	310 292	9 690	30 427	11 727	1 057	374 959
	Total	11 671	2 916	2 898	2487	3 994	320 847	10 610	32 640	15 428	1 129	404 620

**Table 1. Women's first cohabiting partner by own ethnolinguistic background.** FFF: signifies ethnolinguistic background in the following order ego:mother:father. For example: FSF denotes an individual who is registered as a Finnish-speaker, with a mother registered as a Swedish-speaker and a father registered as a Finnish-speaker. Partner's ethnolinguistic background denotes ego's *first* cohabiting partner (first cohabiting union). If no cohabitation has occurred by age 35, the individual is recorded as never cohabitated. Emigrated and died are recorded as such if this event occurs before any cohabitation. Individuals who return to Finland are not included in the data, even if they enter cohabitation at that time. "Other" includes all other languages and combinations. This category is small because our sample consists only of individuals born in Finland.

		Partner's ethnolinguistic background/censoring outcome										
		SSS	SSF	SFS	FFS	FSF	FFF	Other	Never	Emigrated	Died	Total
Ego's ethnolinguistic background	SSS	6 662	910	843	129	326	2 722	339	2 120	1 682	145	15 878
	SSF	809	172	172	43	89	1 675	112	498	280	33	3 883
	SFS	668	194	151	63	108	1 775	115	514	241	40	3 869
	FFS	269	91	81	60	137	3 370	156	795	129	62	5 150
	FSF	103	60	37	39	81	2 064	65	426	65	26	2 966
	FFF	1 915	1 580	1 217	1 844	3 387	305 859	8 348	59 311	6 359	4 582	394 402
	Total	10 426	3 007	2 501	2 178	4 128	317 465	9 135	63 664	8 756	4 888	426 148

**Table 2. Men's first cohabiting partner by own ethnolinguistic background.** FFF: signifies ethnolinguistic background in the following order ego:mother:father. For example: FSF denotes an individual who is registered as a Finnish-speaker, with a mother registered as a Swedish-speaker and a father registered as a Finnish-speaker. Partner's ethnolinguistic background denotes ego's *first* cohabiting partner (first cohabiting union). If no cohabitation has occurred by age 35, the individual is recorded as never cohabitated. Emigrated and died are recorded as such if this event occurs before any cohabitation. Individuals who return to Finland are not included in the data, even if they enter cohabitation at that time. "Other" includes all other languages and combinations. This category is small because our sample consists only of individuals born in Finland.

### *Competing risks models*

Results of the competing risk regressions are summarised in Table 3 for women and Table 4 for men. Each column represents a different partner outcome, while egos' ethnolinguistic affiliation is in the rows. A Swedish-registered ego with endogamous Swedish background (SSS) is the reference category in all models. We display results of unadjusted models and fully adjusted models side by side. Notably, results in adjusted models do not generally differ markedly from those in unadjusted models. We therefore focus on the adjusted models, but highlight examples where results diverge. Estimates for the control variables in the adjusted models are found in the Appendix.

As predicted, SSS women are the most likely to partner with an SSS man, followed by SSF, SFS, FFS, FSF, and least likely are FFF women (Table 3). There is a quite notable difference in the magnitude of the hazard ratio (HR) between SSS egos (the reference) and Swedish-registered egos with mixed background, or 0.55-0.50. There is an additional gap to Finnish-registered index persons with mixed backgrounds (HR 0.15-0.12), and even further to Finnish-registered with endogamous background (HR 0.04). In other words, these risks cluster into four groups (SSS, Swedish-registered mixed, Finnish-registered mixed, and FFF), with rather little difference depending on the sex of each parent. The partner choice of men also showed this patterning (Table 4).

We then consider who pairs with mixed background individuals. To partner with an SSF or SFS male is most likely among SSS and mixed background (SSF/SFS) women. For these models, the difference in hazard ratios between SSS and SSF/SFS individuals is not as large as in the previous SSS model, and not statistically significant. However, there is still a divide between the groups identified above, including between Swedish-registered and Finnish-registered individuals with mixed background, or approximately 0.97 and 0.80 vs. 0.72 and 0.42, respectively. Among Finnish-registered index persons, having a Swedish-registered mother (FSF) as compared to having a Swedish-registered father (FFS) is associated with a higher risk of partnering with an SFS (but not an SSF person).

Matches of Finnish-registered individuals with mixed backgrounds are somewhat less uniform, and display differences between unadjusted and adjusted models, and between the models for women and men. Notably, the combination of gender and parental ethnolinguistic affiliation is less consistent for the FFS and FSF partner choice than they were for the SFS and SSF partner

choice. SFS women (followed by FSF) is the most likely partner of an FFS man, whereas FSF women is the most likely match of FFS men. Interestingly, in three out of four of these models the most likely match for Finnish-registered individual with mixed background is another Finnish-registered individual with such background (FFS and FSF for men and women), while SSS partners are the least likely in both male and female models. We discuss further the role of the local ethnolinguistic context for these results in the Discussion.

Lastly, we report on the first cohabiting partners of FFF women and men. Unsurprisingly, FFF women are the most likely to partner with an FFF man, and least likely to partner with an SSS man (Table 3), and *vice versa* by sex for men (Table 4). The categories in between are in line with our predictions; the “more Swedish”, and in mixed unions if mother is Swedish-registered rather than the father, the less likely is a person to have a first partner who is FFF.

Overall, the estimates from these models match fairly well with our predictions. A pattern of clustering between a) Swedish-registered with two Swedish-registered parents b) Swedish-registered with mixed backgrounds, c) Finnish-registered with mixed backgrounds, and d) Finnish-registered with two Finnish-registered parents emerged in several of the models. The prediction that mother’s ethnolinguistic affiliation (relative to father’s affiliation) would correlate more closely with ego’s partner choice was supported in the SSS, SSF, SFS and FFF models, but less consistent in models of Finnish-registered with mixed backgrounds. In sum, both ego’s and parental affiliation are important for the relative risk of a certain type of first partner, and nearly all estimates are statistically significant. The magnitudes are sizeable, in particular for models predicting an SSS or FFF partner. As compared to SSS index persons, the hazard ratio for FFF women to partner with SSS men is 0.04, and 7.82 to partner with FFF men, while it is 0.03 for FFF men to partner with SSS women, and 6.31 to partner with FFF women, net of controls.

		Risk of first cohabiting partner's ethnolinguistic background													
		SSS		SSF		SFS		FFS		FSF		FFF		Other	
		Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
Ego's ethnolinguistic background	SSS	1	1	1	1	1	1	1	1	1	1	1	1	1	
	SSF	0.45*	0.55*	0.85	0.93	0.91	0.96	1.27	1.40	1.34*	1.45*	2.92*	2.94*	1.21	1.15
	SFS	0.39*	0.50*	0.70*	0.80*	0.90	0.97	1.84*	2.06*	1.34*	1.47*	3.38*	3.33*	1.49*	1.50*
	FFS	0.10*	0.15*	0.33*	0.44*	0.46*	0.58*	1.82*	2.28*	1.41*	1.75*	6.46*	6.11*	1.44*	1.62*
	FSF	0.07*	0.12*	0.28*	0.42*	0.52*	0.72*	2.13*	2.84*	1.21*	1.62*	7.39*	6.80*	0.84	1.04
	FFF	0.01*	0.04*	0.07*	0.22*	0.09*	0.26*	0.72*	1.78*	0.47*	1.22*	9.24*	7.82*	0.90*	1.57*
	events	11 671		2 898		2 916		2 487		3 994		320 847		10 610	

**Table 3. Competing risk showing subdistribution hazard rates (HR) for risks of first cohabiting partner's ethnolinguistic background, women.** Right-censored at emigration, death or at age 35. \* denotes significant at the <0.05 level. Unadj.- unadjusted. Adj. denotes adjusted and controls for ego's education (primary, secondary, tertiary, time-varying), parental education (mother and father, primary, secondary, tertiary, time-constant), proportion of ever Swedish-registered ages 18-45 in quintiles (time-varying, year -1. municipality-level), adult sex ratio ages 18-45 in quintiles (time-varying, year -1. municipality-level). Ethnolinguistic background is in the order of ego: mother: father, e.g. SSF: Swedish-registered ego, with Swedish-registered mother, Finnish-registered father.

		Risk of first cohabiting partner's ethnolinguistic background													
		SSS		SSF		SFS		FFS		FSF		FFF		Other	
		Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
Ego's ethnolinguistic background	SSS	1	1	1	1	1	1	1	1	1	1	1	1	1	
	SSF	0.42*	0.49*	0.81*	0.84*	0.75*	0.79*	1.33	1.46*	1.09	1.15	2.92*	2.81*	1.32*	1.31*
	SFS	0.34*	0.40*	0.71*	0.76*	0.85*	0.89	1.96*	2.11*	1.33*	1.36*	3.24*	3.01*	1.35*	1.41*
	FFS	0.09*	0.13*	0.28*	0.35*	0.29*	0.35*	1.37*	1.63*	1.24*	1.42*	5.38*	4.85*	1.34*	1.58*
	FSF	0.06*	0.09*	0.22*	0.29*	0.33*	0.42*	1.54*	1.92*	1.27	1.53*	6.04*	5.43*	0.96	1.18
	FFF	0.01*	0.03*	0.05*	0.15*	0.06*	0.18*	0.55*	1.34*	0.40*	0.95	7.19*	6.31*	0.93	1.54*
	events	10 426		2 501		3 007		2 178		4 128		3 174		65	

**Table 4. Competing risk showing subdistribution hazard rates (HR) for risks of first cohabiting partner's ethnolinguistic background, men.** Right-censored at emigration, death or at age 35. \* denotes significant at the <0.05 level. Unadj.- unadjusted. Adj. denotes adjusted and controls for ego's education (primary, secondary, tertiary, time-varying), parental education (mother and father, primary, secondary, tertiary, time-constant), proportion of ever Swedish-registered ages 18-45 in quintiles (time-varying, year -1. municipality-level), adult sex ratio ages 18-45 in quintiles (time-varying, year -1. municipality-level). Ethnolinguistic background is in the order of ego: mother: father, e.g. SSF: Swedish-registered ego, with Swedish-registered mother, Finnish-registered father.

### *The timing of the first cohabitation*

Entry into cohabitation with *any* partner, that is, regardless of partner's ethnolinguistic affiliation, is faster for Finnish-registered individuals than for Swedish-registered individuals (see Appendix). However, by age 35, approximately equally many had entered the first cohabitation. In order to see if the hazard rate ratios are affected by differential timing into the first cohabitation between the groups, we ran separate models for ages 18-22 and ages 23-35 years. This cut-off was chosen to provide roughly half of the cohabiting events in each group. Overall, these results reveal that the estimates are highly similar in both age categories, and as compared with the main results' entire age range (see the Appendix for supplementary analyses). Notwithstanding loss of power due to smaller sample sizes, conclusions remain the same. This implies that partner choice is largely unaffected by any differences between ethnolinguistic groups in timing of the first cohabitation.

## **Discussion**

We have examined who partners with whom, in terms of the first cohabiting union by individuals' own and parental ethnolinguistic affiliation. To our knowledge, this is the first study that uses full population data across two generations to map minority-majority unions among two distinct ethnic groups that are ancestral to the country of study. Our contribution is important for understanding the prevalence of endogamy and exogamy in other contexts, where minority groups are diminishing, indigenous languages risk extinction, or where some ethnic groups face numerical obstacles in search for a partner who shares their ethnicity or language. Specifying six combinations of ethnolinguistic background that encompass two endogamous and four mixed background combinations, and comparing partner choice across these combinations, is a novel approach to unpack the dynamics by which social boundaries are maintained. We also contribute with an analysis of distance between social groups in cohabitations (i.e. not marriages only), which may reveal more diverse partner choice patterns than after a weeding out process when only more stable (marital) unions remain.

A key insight from the results is the importance of considering group belonging across two generations. In most of the models, we saw a pattern of differences in magnitude between Swedish-registered with uniform Swedish background, Swedish-registered with mixed background, Finnish-registered with mixed background, and Finnish-registered with uniform Finnish background. For instance, as compared with Swedish-registered persons with uniform Swedish background, those with mixed background are considerably less likely to partner with

Swedish-registered person with uniform Swedish background. This pattern was found among both men and women. In other words, while ego's affiliation proved important, not all Swedish-registered individuals are equal in their first partner choice risk. The combined affiliations of parents are consequently needed to understand the full complexity of partner choices in this minority-majority context.

These patterns are consistent with the value similarity hypothesis, i.e. that partners choose others with similar values and attitudes. Yet, it is hard to discern whether the partner choice patterns result because individuals share similar values or because of other factors that would promote unions between similar individuals. An alternative, but not mutually exclusive explanation for these assortative mating patterns is that opportunities to find others like oneself play a major role. For instance, individuals with mixed backgrounds are more likely to reside in mixed areas, such as the Helsinki region, and may therefore be more likely to meet other mixed background people who live there. However, controlling for the share of Swedish speakers at the local level did not affect our results markedly. In most adjusted models, the differences between ego types were attenuated, but the order was the same. The exception were the models for FSF/FFS partners, which fluctuated with controls for education, local language background and proportion men in the area. In the adjusted models, Finnish-registered individuals with uniform Finnish background did not lag far behind those with mixed background in partnering with Finnish-registered persons with mixed background, whereas in the unadjusted models they were less likely than SSS egos to partner with a FSF/FFS person. This may be due to a combination of low population sizes of these groups, and that Finnish-registered individuals reside in predominantly Finnish-speaking areas.

The clear distinction in partner choice between Swedish speakers with uniform Swedish background and Swedish speakers with mixed background suggests that a part of the Swedish speaking minority has an especially tight-knit community, in which residential mobility is low, and for whom endogamous partnership is more likely to be transmitted. Once such endogamous unions are formed, they are less likely to break down and lead to other (potentially exogamous) partnerships (Saarela and Finnäs 2014). It has been proposed that a high degree of social integration is a contributing factor for the considerably lower divorce rates among endogamous Swedish-speaking couples as compared with Finnish-speaking couples (Finnäs 1997). Interestingly, we noted that Swedish-registered individuals did not have higher raw rates of "never partnered" by age 35. In fact Finnish speakers, and especially FFF men, were the least

likely to have had a cohabiting union. This goes against the idea that being the minority makes it less likely to find a partner, at least for coresidential unions we examine here.

Our data indicated that individuals with mixed background clustered in between endogamous pairs of either ethnolinguistic group. In the international literature, individuals with mixed ethnic background are often considered to have a more blurred identity than those from endogamous majority or minority unions, and may identify more with national than ethnic identity (Lewin-Epstein and Cohen 2019; Song 2010). A parallel between the Finnish case can be drawn to individuals born to one Jewish and one non-Jewish parent in the US, among whom religious exogamous marriage is much more common than children from endogamous Jewish marriages (Fishman 2004). Children of mixed marriages are also much less likely to identify as Jewish. Sociologists have recognized that ethnic categorizations are not static, but continually reformulated (Lieberson and Waters 1986). This may especially be the case for individuals who live and interact closely with another ethnic group, such as in the event of intermarriage (Petts and Petts 2019). In Finland, language (and bilingualism) adds a practical aspect to such continual reformulation. Yet, when parents choose a Swedish ethnolinguistic affiliation for their children, this often entails attending a Swedish speaking school and being part of the Swedish speaking community. How much identity that comes from having one Finnish speaking parent who did not grow up as part of that community is difficult to ascertain without qualitative data, but our partner choice analysis provides an indication of closeness between mixed background individuals and persons in the “other” group.

We corroborated and extended earlier findings on the role of mothers over fathers in transmitting ethnolinguistic identity. We show that the maternal bias in ethnolinguistic transmission to children previously documented in Finland (Obućina and Saarela 2019; Saarela et al. 2020) and among French-English speaking families in Canada (Robinson 1989) extends to that child’s first partner choice. The exception was matches of Finnish-registered persons with mixed background, where the maternal-paternal order was more inconsistent across models and sex. One could have hypothesised sex-specific transmission, i.e. that fathers’ affiliation would matter more for sons, and mothers only for daughters, but we did not see such a pattern.

It should also be highlighted that a large proportion of Swedish-registered individuals emigrated before forming a cohabiting union in Finland (approximately 17% and 11% of women and men,

respectively). The most common destination is the neighbouring country Sweden. During the past 20 years, two thirds of all emigration of Swedish-speaking Finns have been in the direction of Sweden, and the net emigration loss during the same period amounts to approximately 3700 Swedish-registered persons (Saarela 2021). These migration patterns have potential implications on our results. The non-movers we are capturing are either Swedish speakers who are particularly well-integrated in the Swedish-speaking community, or conversely, Swedish speakers who are more open to interacting with the Finnish-speaking society and, thus, possibly also more open to a Finnish-speaking partner. Nevertheless, we had to focus on individuals in the stationary population in order to reliably capture the first cohabitation.

We have examined *first* partner choice but are aware that some individuals will move on from the partnership observed here. For roughly the similar time frame, eight years after union entry 42% of the cohabitations had proceeded to marriage without children, 23% to cohabitation with children, and the remaining 35% had ended in separation (Saarela and Finnäs 2014). Future studies could investigate the partner choice in childbearing unions, and in particular as a function of previous partner choice (cf. Obucina 2016), to understand whether there are patterned differences by union order. How the patterns observed may shift with partner's education has been beyond the scope of this article, and such an approach must of course leave out those who do not find a partner. Also, many first cohabiting unions occur during the early 20s when a sizable part of the population have yet to complete their tertiary education. However we note that the controls for ego's and parental education did not change the results to any considerable extent.

A few factors are important to bear in mind when seeking to generalize these findings. Despite that some Swedish-speaking regions display strong social integration, one can equally characterise Finland as a context where social boundaries are weak and ethnically based discrimination is not prevalent. Finland is also a very homogenous country; immigration was almost non-existent until a few decades ago. The main heterogeneity consists of the two ancestral groups examined here, rather than diverse immigrant origins. This stands in clear contrast to the diversity in other European countries that stems from long-term immigration, and the stigma and discrimination that is often associated with ethnic or racial intermarriages in e.g. the US. Despite such differences, we believe that our findings can be informative for understanding social relationships between majority-minority groups. The low social

boundaries in Finland remove unnecessary constraints and allow young people to form unions with those they naturally come in contact with, regardless of social background.

Another crucial point is that there are both similarities and differences between ethnic and language groups (Stevens and Schoen 1988). Finnish speakers and Swedish speakers are two distinct ethnicities divided by the practicalities of language. It is likely that the relatively small differences between any combination of Swedish-registered persons in having a Swedish-registered partner reflects the importance of sharing a common language. While both languages are mandatory in school, knowledge of the other language is often poor among Finnish speakers, whereas most Swedish speakers are proficient in both languages. Having one Finnish-speaking parent who has chosen or agreed to register the child as a Swedish speaker seems to lead to a “Swedish identity”. Having some connection to a minority group may lead individuals to identify with this group if it is seen as desirable, and if it carries some material benefit (Liebersen 1985). It has been argued that Swedish-registration is one such entity, which may be why Swedish-registration of children is more common than Finnish-registration in mixed unions (Finnäs and O’Leary 2003).

Regardless of explanation, we conclude that the binary registration system in Finland, where parents have to choose *one* registered language for their children, appears to reflect the social group of their child at young adult age, and that it is a good predictor of first partner choice. A relatively large group of Swedish speakers with endogamous background might keep partnering endogamously and maintain a Swedish identity, but Swedish speakers with exogamous background will have a large influence over the relative composition of ethnolinguistic groups in Finland in the future. It has not been our objective to disentangle the mechanisms behind partner choice patterns, but our detailed taxonomy could fruitfully be applied to other minority-majority contexts, in order to better understand how social boundaries evolve. Future research might also reveal whether the role that mothers have in passing on ethnolinguistic identity is the same across ethnic groups, and the variation in parental versus ego’s own affiliation across contexts.

### **Acknowledgements**

Financial support from Stiftelsen för Åbo Akademis Forskningsinstitut is gratefully acknowledged. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

## References

- Andersson, Gunnar, Ognjen Obućina, and Kirk Scott. 2015. "Marriage and Divorce of Immigrants and Descendants of Immigrants in Sweden." *Demographic Research* 33 (1): 31–64. <https://doi.org/10.4054/DemRes.2015.33.2>.
- Blackwell, Debra L., and Daniel T. Lichter. 2004. "Homogamy among Dating, Cohabiting, and Married Couples." *Sociological Quarterly* 45 (4): 719–37. <https://doi.org/10.1111/j.1533-8525.2004.tb02311.x>.
- Blau, Peter M., and Joseph E Schwartz. 1984. *Cross Cutting Social Circles: Testing a Macrostructural Theory of Intergroup Relations*. Orlando, FL: Academic Press.
- Blossfeld, Hans Peter. 2009. "Educational Assortative Marriage in Comparative Perspective." *Annual Review of Sociology* 35: 513–30. <https://doi.org/10.1146/annurev-soc-070308-115913>.
- Carol, Sarah. 2016. "Like Will to Like? Partner Choice among Muslim Migrants and Natives in Western Europe." *Journal of Ethnic and Migration Studies* 42 (2): 261–76. <https://doi.org/10.1080/1369183X.2014.963037>.
- DiMaggio, Paul, and John Mohr. 1985. "Cultural Capital, Educational Attainment, and Marital Selection." *American Journal of Sociology* 90 (6): 1231–61.
- Dribe, Martin, and Christer Lundh. 2011. "Cultural Dissimilarity and Intermarriage: A Longitudinal Study of Immigrants in Sweden 1990-2005." *The International Migration Review* 2: 297–324. <https://doi.org/10.1111/j>.
- . 2012. "Intermarriage, Value Context and Union Dissolution: Sweden 1990 — 2005." *European Journal of Pop* 28 (2): 139–58.
- Elwert, Felix, and Nicholas A Christakis. 2006. "Widowhood and Race." *American Sociological Review* 71: 16–41.
- Finnäs, Fjalnar. 1986. *Den Finlandssvenska Befolkningsutvecklingen 1950–1980: En Analys Av En Språkgrupps Demografiska Utveckling Och Effekten Av Blandäktenskap [An Analysis of the Demographic Development of a Language Group and the Effect of Mixed Marriages]*. Helsinki: Svenska litteratursällskapet i Finland.
- Finnäs, Fjalnar. 1997. "Social Integration, Heterogeneity, and Divorce: The Case of the Swedish-Speaking Population in Finland." *Acta Sociologica* 40 (3): 263–77. <https://doi.org/10.1177/000169939704000303>.
- . 2012. *Finlandssvenskarna 2012*.
- . 2015. "Tvåspråkiga Familjer Och Deras Betydelse För Demografin." In *Gruppspråk*,

- Samspråk, Två Språk. Svenskan i Finland – i Dag Och i Går. Skrifter Utgivna Av Svenska Litteratursällskapet i Finland, No. 799, 201–20. Helsinki: Svenska Litteratursällskapet i Finland.*
- Finnäs, Fjalar, and Richard O’Leary. 2003. “Choosing for the Children: The Affiliation of the Children of Minority-Majority Group Intermarriages.” *European Sociological Review* 19 (5): 483–99. <https://doi.org/10.1093/esr/19.5.483>.
- Fishman, Sylvia Barack. 2004. *Double or Nothing? Jewish Mixed Marriage*. Lebanon: Brandeis University Press.
- Fox, Robin. 1967. *Kinship & Marriage: An Anthropological Perspective*. Cambridge, UK: Cambridge University Press.
- Frey, William H. 2014. *Diversity Explosion: How New Racial Demographics Are Remaking America*. Washington DC: Brookings Institution Press.
- García Pereiro, Thaís, Roberta Pace, and Maria Grazia Didonna. 2014. “Entering First Union: The Choice between Cohabitation and Marriage among Women in Italy and Spain.” *Journal of Population Research* 31 (1): 51–70. <https://doi.org/10.1007/s12546-014-9123-7>.
- Gordon, Milton M. 1964. *Assimilation in American Life*. New York, NY: Oxford University Press.
- Haandrikman, Karen, Leo J G van Wissen, and Carel N. Harmsen. 2011. “Explaining Spatial Homogamy. Compositional, Spatial and Regional Cultural Determinants of Regional Patterns of Spatial Homogamy in the Netherlands.” *Applied Spatial Analysis and Policy* 4 (2): 75–93. <https://doi.org/10.1007/s12061-009-9044-6>.
- Ham, Maarten van, and Tiit Tammaru. 2011. “Ethnic Minority-Majority Unions in Estonia.” *European Journal of Population* 27 (3): 313–35. <https://doi.org/10.1007/s10680-011-9236-z>.
- Hannemann, Tina, Hill Kulu, Leen Rahnu, Allan Puur, Mihaela Hărăguș, Ognjen Obucina, Amparo González Ferrer, et al. 2018. “Co-Ethnic Marriage versus Intermarriage among Immigrants and Their Descendants: A Comparison across Seven European Countries Using Event-History Analysis.” *Demographic Research* 39 (1): 487–524. <https://doi.org/10.4054/DemRes.2018.39.17>.
- Hwang, Sean-Shong, Rogelio Saenz, and Benigno E. Aguirre. 1997. “Structural and Assimilationist Explanations of Asian American Intermarriage.” *Journal of Marriage and the Family* 59 (3): 758. <https://doi.org/10.2307/353959>.
- Jacobs, Jerry A., and Teresa G. Labov. 2002. “Gender Differentials in Intermarriage among

- Sixteen Race and Ethnic Groups.” *Sociological Forum* 17 (4): 621–46.  
<https://doi.org/10.1023/A:1021029507937>.
- Jalovaara, Marika. 2012. “Socio-Economic Resources and First-Union Formation in Finland, Cohorts Born 1969-81.” *Population Studies* 66 (1): 69–85.  
<https://doi.org/10.1080/00324728.2011.641720>.
- Jalovaara, Marika, and Anette Eva Fasang. 2017. “From Never Partnered to Serial Cohabitors: Union Trajectories to Childlessness.” *Demographic Research* 36 (1): 1703–20. <https://doi.org/10.4054/DemRes.2017.36.55>.
- Jalovaara, Marika, Gerda Neyer, Gunnar Andersson, Johan Dahlberg, Lars Dommermuth, Peter Fallesen, and Trude Lappegård. 2019. “Education, Gender, and Cohort Fertility in the Nordic Countries.” *European Journal of Population* 35 (3): 563–86.  
<https://doi.org/10.1007/s10680-018-9492-2>.
- Kahn, Joan R., Javier García-Manglano, and Suzanne M. Bianchi. 2014. “The Motherhood Penalty at Midlife: Long-Term Effects of Children on Women’s Careers.” *Journal of Marriage and Family* 76 (1): 56–72. <https://doi.org/10.1111/jomf.12086>.
- Kalmijn, M. 1994. “Assortative Mating by Cultural and Economic Occupational Status.” *American Journal of Sociology* 100 (2): 422–52.
- Kalmijn, Matthijs. 1998. “Intermarriage and Homogamy: Causes, Patterns, Trends.” *Annual Review of Sociology* 24 (1): 395–421. <https://doi.org/10.1146/annurev.soc.24.1.395>.
- . 2010. “Educational Inequality, Homogamy, and Status Exchange in Black-White Intermarriage. A Comment on Rosenfeld.” *AJS* 115 (4): 1252–63.
- Kalmijn, Matthijs, Paul M. de Graaf, and Jacques P.G. Janssen. 2005. “Intermarriage and the Risk of Divorce in the Netherlands: The Effects of Differences in Religion and in Nationality, 1974-94.” *Population Studies* 59 (1): 71–85.  
<https://doi.org/10.1080/0032472052000332719>.
- Kalmijn, Matthijs, and Frank van Tubergen. 2006. “Ethnic Intermarriage in the Netherlands: Confirmations and Refutations of Accepted Insights.” *European Journal of Population* 22 (4): 371–97. <https://doi.org/10.1007/s10680-006-9105-3>.
- Kennedy, Sheela, and Catherine Fitch. 2012. “Measuring Cohabitation and Family Structure in the United States: Assessing the Impact of New Data from the Current Population Survey.” *Demography* 49 (4): 1479–98. <https://doi.org/10.1007/s13524-012-0126-8>. Measuring.
- Kulu, Hill, and Amparo González-Ferrer. 2014. “Family Dynamics Among Immigrants and Their Descendants in Europe: Current Research and Opportunities.” *European Journal*

- of Population* 30 (4): 411–35. <https://doi.org/10.1007/s10680-014-9322-0>.
- Lewin-Epstein, Noah, and Yinon Cohen. 2019. “Ethnic Origin and Identity in the Jewish Population of Israel\*.” *Journal of Ethnic and Migration Studies* 45 (11): 2118–37. <https://doi.org/10.1080/1369183X.2018.1492370>.
- Lieberson, Stanley, and Mary Waters. 1986. “Ethnic Groups in Flux: The Changing Ethnic Responses of American Whites.” *The ANNALS of the American Academy of Political and Social Science* 487: 79–91.
- Lieberson, Stanley. 1985. “Unhyphenated Whites in the United States.” *Ethnic and Racial Studies* 8 (1): 159–80. <https://doi.org/10.1080/01419870.1985.9993479>.
- Lyngstad, Torkild Hovde, and Marika Jalovaara. 2010. “A Review of the Antecedents of Union Dissolution.” *Demographic Research* 23: 257–92. <https://doi.org/10.4054/DemRes.2010.23.10>.
- Mare, Robert D. 1991. “Five Decades of Educational Assortative Mating.” *American Sociological Review* 56 (1): 15. <https://doi.org/10.2307/2095670>.
- Mepheron, Miller, Lynn Smith-lovin, and James M Cook. 2001. “B IRDS OF A F EATHER: Homophily in Social Networks.” *Annual Review of Sociology* 27: 415–44.
- Merton, Robert K. 1941. “Intermarriage and the Social Structure.” *Psychiatry* 4 (3): 361–74. <https://doi.org/10.1080/00332747.1941.11022354>.
- Milewski, Nadja, and Hill Kulu. 2014. “Mixed Marriages in Germany: A High Riks of Divorce for Immigrant-Native Couples.” *European Journal of Population* 30 (1): 89–113. <https://doi.org/10.1007/s10680-013-9298-1>.
- O’Leary, Richard. 2001. “Modernization and Religious Intermarriage in the Republic of Ireland.” *British Journal of Sociology* 52 (4): 647–65. <https://doi.org/10.1080/00071310120084517>.
- O’Leary, Richard, and Fjalar Finnäs. 2002. “Education, Social Integration and Minority-Majority Group Intermarriage.” *Sociology* 36 (2): 235–54. <https://doi.org/10.1177/0038038502036002001>.
- Obućina, Ognjen. 2016. “Partner Choice in Sweden Following a Failed Intermarriage.” *European Journal of Population* 32 (4): 511–42. <https://doi.org/10.1007/s10680-016-9377-1>.
- Obućina, Ognjen, and Jan Saarela. 2019. “Intergenerational Transmission of Ethnic Identity in Mixed Native Couples in Finland.” *Acta Sociologica*. <https://doi.org/10.1177/0001699319847507>.
- . 2020. “Intergenerational Transmission of Ethnic Identity in Mixed Native Couples in

- Finland.” *Acta Sociologica (United Kingdom)* 63 (1): 103–23.  
<https://doi.org/10.1177/0001699319847507>.
- Petts, Amy L., and Richard J. Petts. 2019. “Gender Matters: Racial Variation and Marital Stability Among Intraracial Couples.” *Journal of Family Issues* 40 (13): 1808–31.  
<https://doi.org/10.1177/0192513X19849631>.
- Qian, Zhenchao, and Daniel T. Lichter. 2011. “Changing Patterns of Interracial Marriage in a Multiracial Society.” *Journal of Marriage and Family* 73 (5): 1065–84.  
<https://doi.org/10.1111/j.1741-3737.2011.00866.x>.
- . 2018. “Marriage Markets and Intermarriage: Exchange in First Marriages and Remarriages.” *Demography* 55 (3): 849–75. <https://doi.org/10.1007/s13524-018-0671-x>.
- Robinson, Patricia A. 1989. “French Mother Tongue Transmission in Mixed Mother Tongue Families.” *Canadian Journal of Sociology / Cahiers Canadiens de Sociologie* 14 (3): 317. <https://doi.org/10.2307/3340607>.
- Rosenfeld, Michael J., and Byung Soo Kim. 2005. “The Independence of Young Adults and the Rise of Interracial and Same-Sex Unions.” *American Sociological Review* 70 (4): 541–62. <https://doi.org/10.1177/000312240507000401>.
- Saarela, Jan. 2021. “Finlandssvensk Rapport 2021.” Helsinki.
- Saarela, Jan, and Fjalar Finnäs. 2014. “Transitions within and from Ethno-Linguistically Mixed and Endogamous First Unions in Finland.” *Acta Sociologica* 57 (1): 77–92.  
<https://doi.org/10.1177/0001699313487533>.
- . 2018. “Ethno-Linguistic Exogamy and Divorce: Does Marital Duration Matter?” *Sociological Focus* 51 (4): 279–303. <https://doi.org/10.1080/00380237.2018.1431506>.
- Saarela, Jan, Martin Kolk, and Ognjen Obucina. 2020. “Kinship, Heritage and Ethnic Choice : Ethnolinguistic Registration across Four Generations in Contemporary Finland.” *Stockholm Research Reports in Demography*.
- Schacht, Ryan, and Ken R. Smith. 2017. “Causes and Consequences of Adult Sex Ratio Imbalance in a Historical U.S. Population.” *Philosophical Transactions of the Royal Society B: Biological Sciences* 372 (1729). <https://doi.org/10.1098/rstb.2016.0314>.
- Schwartz, Christine R. 2013. “Trends and Variation in Assortative Mating: Causes and Consequences.” *Annual Review of Sociology* 39: 451–70.  
<https://doi.org/10.1146/annurev-soc-071312-145544>.
- Schwartz, Christine R., and Robert D. Mare. 2005. “Trends in Educational Assortative Marriage from 1940 to 2003.” *Demography* 42 (4): 621–46.  
<https://doi.org/10.1353/dem.2005.0036>.

- Shafer, Kevin, and Spencer L. James. 2013. "Gender and Socioeconomic Status Differences in First and Second Marriage Formation." *Journal of Marriage and Family* 75 (3): 544–64. <https://doi.org/10.1111/jomf.12024>.
- Shorter, Edward. 1975. "Illegitimacy, Sexual Revolution, and Social Change in Modern Europe." In *The Family in History: Interdisciplinary Perspectives*, edited by T. K. Rabb and R. I. Rotberg, 48–85. New York, NY: Harper Torchbooks.
- Smits, Jeroen. 2010. "Ethnic Intermarriage and Social Cohesion. What Can We Learn from Yugoslavia?" *Social Indicators Research* 96 (3): 417–32. <https://doi.org/10.1007/s11205-009-9485-y>.
- Song, Miri. 2010. "What Happens after Segmented Assimilation? An Exploration of Intermarriage and 'mixed Race' Young People in Britain." *Ethnic and Racial Studies* 33 (7): 1194–1213. <https://doi.org/10.1080/01419871003625271>.
- Stevens, Gillian, and Robert Schoen. 1988. "Linguistic Intermarriage in the United States." *Journal of Marriage and the Family* 50 (1): 267. <https://doi.org/10.2307/352445>.
- Thomas, Reuben J. 2020. "Online Exogamy Reconsidered: Estimating the Internet's Effects on Racial, Educational, Religious, Political and Age Assortative Mating." *Social Forces* 98 (3): 1257–86. <https://doi.org/10.1093/sf/soz060>.
- Tubergen, Frank van, and Ineke Maas. 2007. "Ethnic Intermarriage among Immigrants in the Netherlands: An Analysis of Population Data." *Social Science Research* 36 (3): 1065–86. <https://doi.org/10.1016/j.ssresearch.2006.09.003>.
- Uggla, Caroline, and Ruth Mace. 2017. "Adult Sex Ratio and Social Status Predict Mating and Parenting Strategies in Northern Ireland." *Philosophical Transactions of the Royal Society B*.
- Weber, Rosa, and Jan Saarela. 2019. "Circular Migration in a Context of Free Mobility: Evidence from Linked Population Register Data from Finland and Sweden." *Population, Space and Place* 25 (4): 1–12. <https://doi.org/10.1002/psp.2230>.
- Wiik, Kenneth Aarskaug, and Jennifer A. Holland. 2018. "Partner Choice and Timing of First Marriage among the Children of Immigrants in Norway and Sweden." *Acta Sociologica* 61 (2): 143–62. <https://doi.org/10.1177/0001699317718611>.

Appendix.

Figure A1ab. Kaplan- Meier plots by ego's ethnolinguistic background, for *any* partner before 35.

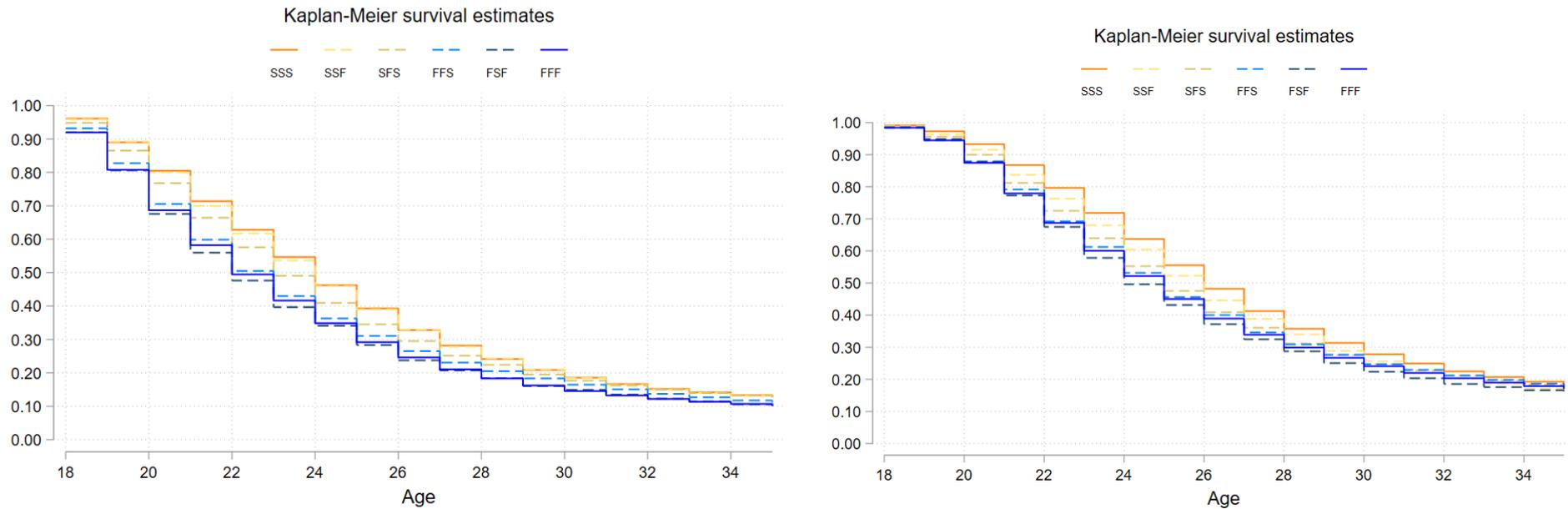
Table A1. Full adjusted models (with controls), women

Table A2. Full adjusted models (with controls), men.

Table A3. Age-stratified models, women.

Table A4. Age-stratified models, men.

Table A5a-c. Bivariate statistics of years at risk, by ego's ethnolinguistic affiliation and background.



**Figure A1ab.** Kaplan-Meier plots for any partner (first cohabitation), by ego's ethnolinguistic background, for *any* partner before age 35, women (left) and men (right).

		SSS	SSF	SFS	FFS	FSF	FFF	Other
Ego's ethnolinguistic background	SSS	1	1	1	1	1	1	1
	SSF	0.55*	0.93	0.96	1.40	1.45*	2.94*	1.15
	SFS	0.50*	0.80*	0.97	2.06*	1.47*	3.33*	1.50*
	FFS	0.15*	0.44*	0.58*	2.28*	1.75*	6.11*	1.62*
	FSF	0.12*	0.42*	0.72*	2.84*	1.62*	6.80*	1.04
	FFF	0.04*	0.22*	0.26*	1.78*	1.22*	7.82*	1.57*
Ego education (Secondary)	Primary	0,64*	0,54*	0,63*	0,66*	0,77	0,87*	0,76*
	Tertiary	2,80*	2,63*	2,60*	2,47*	2,57	1,72*	2,31*
Parental education (Both secondary)	Primary-Primary	0,98	1,19*	1,11	1,15	1,07	1,00	0,84*
	Primary-Secondary	0,97	1,14	1,13	1,18*	1,01	1,00	0,93
	Primary-Tertiary	0,80*	0,83	0,98	0,93	0,87	0,82*	1,07
	Secondary-Primary	0,96n	1,05	1,10	1,12	1,05	1,00	0,90*
	Secondary-Tertiary	0,78*	1,06	0,93	0,97	0,96	0,80*	1,17*
	Tertiary-Primary	0,84*	1,01	1,10	0,87	0,98	0,84*	1,10
	Tertiary-Secondary	0,80*	1,01	1,15	0,90	0,98	0,85*	1,17*
	Tertiary-Tertiary	0,71*	1,15*	1,04	0,82*	0,83	0,69*	1,27*
Proportion Swedish-registered, municipality year-1 (3 <sup>rd</sup> quintile)	1 <sup>st</sup> quintile	0,07*	0,05*	0,17*	0,36*	0,38	0,93*	0,65*
	2 <sup>nd</sup> quintile	0,50*	0,29*	0,61*	0,65*	0,47	1,00	0,82*
	4 <sup>th</sup> quintile	3,32*	2,16*	2,48*	2,84*	1,89	0,97*	1,28*
	5 <sup>th</sup> quintile	56,50*	15,24*	15,67*	8,02*	7,79	0,78*	2,62*
Proportion male, municipality year-1 (3 <sup>rd</sup> quintile)	1 <sup>st</sup> quintile	0,72*	1,20*	1,38*	1,26*	1,25	1,40*	2,13*
	2 <sup>nd</sup> quintile	1,02	1,24*	1,21	1,42*	1,40	1,18*	1,45*
	4 <sup>th</sup> quintile	0,96	1,35*	0,80	1,10	0,70	0,93*	0,78*
	5 <sup>th</sup> quintile	1,04	1,08	0,70	1,08	0,61	0,86*	0,80

**Table A1. Competing risk showing subdistribution hazard rates (HR) for risks of first cohabiting partner's ethnolinguistic background, women.** Fully adjusted model. Parental education is in the order of mother:father.

		SSS	SSF	SFS	FFS	FSF	FFF	Other
Ego's ethnolinguistic background	SSS	1	1	1	1	1	1	1
	SSF	0.49*	0.84*	0.79*	1.46*	1.15	2.81*	1.31*
	SFS	0.40*	0.76*	0.89	2.11*	1.36*	3.01*	1.41*
	FFS	0.13*	0.35*	0.35*	1.63*	1.42*	4.85*	1.58*
	FSF	0.09*	0.29*	0.42*	1.92*	1.53*	5.43*	1.18
	FFF	0.03*	0.15*	0.18*	1.34*	0.95	6.31*	1.54*
Ego education (Secondary)	Primary	0,85*	0,72*	0,97	1,01	1,10*	0,96*	0,97
	Tertiary	2,00*	2,28*	2,06*	1,75*	2,14*	1,49*	2,38*
Parental education (Both secondary)	Primary-Primary	0,94	0,96	1,11	1,10	1,06	0,98*	0,86*
	Primary-Secondary	0,96	0,96	1,05	1,05	0,97	0,97*	0,93
	Primary-Tertiary	0,73*	1,00	0,93	0,88	0,95	0,87*	1,04
	Secondary-Primary	0,95	0,93	1,08	0,99	1,02	1,00	0,91*
	Secondary-Tertiary	0,84*	1,03	0,88	0,81*	0,89	0,87*	1,21*
	Tertiary-Primary	0,91*	0,85	0,85	0,84	1,09	0,91*	1,09
	Tertiary-Secondary	0,83*	0,91	1,00	0,84	0,86*	0,93*	1,16*
	Tertiary-Tertiary	0,69*	1,03	0,99	0,77*	0,83*	0,80*	1,31*
Proportion Swedish-registered, municipality year-1 (3 <sup>rd</sup> quintile)	1 <sup>st</sup> quintile	0,13*	0,15*	0,19*	0,49*	0,62*	0,90*	0,61*
	2 <sup>nd</sup> quintile	0,44*	0,62	0,58*	0,77*	0,61*	1,01	0,81*
	4 <sup>th</sup> quintile	2,53*	2,79*	2,42*	1,73*	1,98*	0,93*	1,36*
	5 <sup>th</sup> quintile	32,11*	15,44*	12,94*	6,27*	6,95*	0,80*	2,17*
Proportion male, municipality year-1 (3 <sup>rd</sup> quintile)	1 <sup>st</sup> quintile	0,86*	1,25*	1,26*	0,91	1,23*	1,70*	1,29*
	2 <sup>nd</sup> quintile	1,15*	1,17	1,31*	0,95	1,26*	1,23*	1,45*
	4 <sup>th</sup> quintile	0,99	1,07	0,91	0,85	0,66*	0,87*	1,16*
	5 <sup>th</sup> quintile	1,00	0,94	0,79	0,49*	0,47*	0,70*	0,82

**Table A2. Competing risk showing subdistribution hazard rates (HR) for risks of first cohabiting partner's ethnolinguistic background, men.** Fully adjusted model. Parental education is in the order of mother:father.

		Risk of first cohabiting partner's ethnolinguistic background													
		SSS		SSF		SFS		FFS		FSF		FFF		Other	
		Younger	Older	Younger	Older	Younger	Older	Younger	Older	Younger	Older	Younger	Older	Younger	Older
Ego's ethnolinguistic background	SSS	1	1	1	1	1	1	1	1	1	1	1	1	1	
	SSF	0.58*	0.57*	0.88	0.95	1.13	0.79	1.30	1.51	1.38	1.53*	2.82*	2.72*	1.05	1.16
	SFS	0.52*	0.52*	0.86	0.75*	1.02	0.92	2.25*	1.77*	1.45*	1.47*	3.29*	3.03*	1.76*	1.37*
	FFS	0.17*	0.15*	0.47*	0.42*	0.78	0.41*	2.46*	2.04*	1.96*	1.34	5.72*	5.24*	1.94*	1.51*
	FSF	0.14*	0.12*	0.50*	0.34*	0.95	0.51*	3.02*	2.65*	1.64*	1.59	6.33*	5.80*	1.27	0.97
	FFF	0.05*	0.04*	0.24*	0.20*	0.33*	0.20*	1.84*	1.68*	1.17	1.26*	6.95*	6.43*	1.89*	1.41*
	events	Younger: 5650 Older: 6021		Younger: 1434 Older: 1464		Younger: 1547 Older: 1369		Younger: 1449 Older: 1038		Younger: 2285 Older: 1709		Younger: 187877 Older: 132970		Younger: 3807 Older: 6803	

**Table A3. Competing risk showing subdistribution hazard rates (HR) for risks of first cohabiting partner's ethnolinguistic background, women. Age-stratified. Younger: 18-22 years, Older: 23-35 years.** Right-censored at emigration, death or at age 23/35. \* denotes significant at the <0.05 level. Controls for ego's education (primary, secondary, tertiary, time-varying), parental education (mother and father, primary, secondary, tertiary, time-constant), proportion of ever Swedish-registered ages 18-45 in quintiles (time-varying, year -1. municipality-level), adult sex ratio ages 18-45 in quintiles (time-varying, year -1. municipality-level). Ethnolinguistic background is in the order of ego: mother: father, e.g. SSF: Swedish-registered ego, with Swedish-registered mother, Finnish-registered father.

		Risk of first cohabiting partner's ethnolinguistic background													
		SSS		SSF		SFS		FFS		FSF		FFF		Other	
		Younger	Older	Younger	Older	Younger	Older	Younger	Older	Younger	Older	Younger	Older	Younger	Older
Ego's ethnolinguistic background	SSS	1	1	1	1	1	1	1	1	1	1	1	1	1	
	SSF	0.55*	0.50*	0.80	0.86	0.80	0.80*	1.54	1.41	1.17	1.14	2.80*	2.70*	1.68*	1.25
	SFS	0.47*	0.41*	0.78	0.78*	0.91	0.92	2.19*	2.13*	1.59*	1.27	3.39*	2.76*	1.53	1.43*
	FFS	1.16*	0.13*	0.30*	0.38*	0.52*	0.27*	1.45	1.83*	1.80*	1.19	5.01*	4.35*	2.08*	1.51*
	FSF	0.11*	0.09*	0.27*	0.32*	0.53*	0.39*	1.48	2.38*	1.58*	1.59*	5.66*	4.75*	1.66	1.14
	FFF	0.04*	0.03*	0.17*	0.15*	0.21*	0.17*	1.34	1.39*	1.00	0.95	6.23*	5.49*	1.77*	1.53*
	events	Younger: 3012 Older: 7414		Younger: 807 Older: 1694		Younger: 995 Older: 2012		Yong: 853 Older: 2012		Younger: 1581 Older: 2547		Younger: 123642 Older: 193 823		Younger: 1654 Older: 7481	

**Table A4. Competing risk showing subdistribution hazard rates (HR) for risks of first cohabiting partner's ethnolinguistic background, men. Age-stratified. Younger: 18-22 years, Older: 23-35 years.** Right-censored at emigration, death or at age 23/35. \* denotes significant at the <0.05 level. Controls for ego's education (primary, secondary, tertiary, time-varying), parental education (mother and father, primary, secondary, tertiary, time-constant), proportion of ever Swedish-registered ages 18-45 in quintiles (time-varying, year -1. municipality-level), adult sex ratio ages 18-45 in quintiles (time-varying, year -1. municipality-level). Ethnolinguistic background is in the order of ego: mother: father, e.g. SSF: Swedish-registered ego, with Swedish-registered mother, Finnish-registered father.

		Ego's highest education			
		Primary	Secondary	Tertiary	Total
Ego's ethnolinguistic background	SSS	11 205	66125	37348	114678
	SSF	3142	16095	9016	28253
	SFS	3766	15690	8312	27768
	FFS	6603	21362	8654	36619
	FSF	3384	10922	4583	18889
	FFF	376616	1590993	756422	2724031

**Table A5a.** Total years at risk of highest level of education, time varying, by ego's ethnolinguistic affiliation and background (order ego:mother:father).

		Parental level of education (mother's:father's)									
		PriPri	PriSec	PriTer	SecPri	SecSec	SecTer	TerPri	TerSec	TerTer	Total
Ego's ethnolinguistic background	SSS	18486	9269	4907	15276	15598	11117	5704	8586	25735	114678
	SSF	3377	1879	1989	2259	2800	3707	1200	1897	9145	28253
	SFS	3473	2436	1251	3310	3333	2186	1751	2787	7241	27768
	FFS	5512	3410	1952	4775	5273	3654	2101	2592	7338	36619
	FSF	3512	2432	1082	2191	2461	1464	705	1352	3690	18889
	FFF	393960	280407	93689	381650	381650	238513	116778	210725	494302	2724031

**Table A5b.** Total years at risk of highest level of education of ego's mother and ego's father, in that order. Pri denotes Primary, Sec-secondary, Ter-tertiary education, by ego's ethnolinguistic affiliation and background (order ego:mother:father).

		Proportion Swedish					Proportion male					
		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	Total
Ego's ethnolinguistic background	SSS	4	39	218	666	113751	68279	20183	15080	8369	2767	114678
	SSF	7	120	393	870	26863	21598	2894	1959	1438	364	28253
	SFS	9	121	450	1134	26054	21961	3014	1780	764	249	27768
	FFS	136	646	1662	3130	31045	30064	3810	1779	756	210	36619
	FSF	182	559	1319	2133	14696	14844	2157	1185	536	167	18889
	FFF	164362	418357	605378	564427	971507	1777120	430398	253116	170340	93057	2724031

**Table A5c.** Total years at risk of proportion ever Swedish-registered 18-45 years, proportion male 18-45 years at the municipality level, in quintiles, time varying, by ego's ethnolinguistic affiliation and background (order ego:mother:father).

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