

## **Couple formation by mother tongue of immigrants in Finland 1987-2023**

*Jan Saarela, Linus Andersson & Caroline Ugglå*

### **Introduction**

Language comprehension arguably plays a significant role in social interaction, including partnership formation. Mother tongue can overlap with shared characteristics such as ethnicity or country of origin, but even when this is not the case, a shared mother tongue can bridge such boundaries, and provide access to sociolinguistic community, which also facilitate partner formation (Stevens 1992; Stevens & Schoen 1988).

At the same time, learning or adopting a new language can also signal adaptation to a new cultural environment (e.g., Adsera & Ferrer, 2011; Ahn & Lubotsky, 2025; Guven & Islam 2015). Adopting the language of the destination country is usually stated as desirable by governments in these countries, and sometimes it is requested by residents as grounds for citizenship. In the context of migration, this raises two important questions about how language shapes the formation of partnerships. (i) To what extent do migrants form unions with persons who share their native language? (ii) Do migrants increasingly form unions across linguistic boundaries across the time spent in the destination country?

Existing research on migrants' partnership formation tend to address these issues only indirectly, as language is often approximated through broad categories such as country of origin or migrant status (e.g., Hanneman et al., 2018). Furthermore, most evidence build on cross-sectional data offers only a snapshot in time, even though language acquisition and partner choices unfold dynamically across the life course (e.g., Schwartz 2015). This limits our understanding of how migrants' integration is reflected in their intimate lives.

This paper addresses these gaps by drawing on unique administrative data from Finland that, for the first time, allows direct identification of individuals' mother tongue across the entire population and over an extended period. We examine patterns of first-partner selection by mother tongue among migrants who arrived in Finland without a partner between 1987 and 2023, as well as the role of age at arrival for partner's mother tongue among those who arrived as children.

### **Data and analytical approach**

We use Finnish register data covering all residents between 1987 to 2023, as well as their cohabiting partner during this period. The analytical population consists of all foreign-born persons who immigrated to Finland between 1987 to 2022, and who do not have Finnish or Swedish (the two official languages of Finland) as their mother tongue (N=253,821). This analytical population is divided into two groups: (i) those who arrived before age 18, for whom we analyse partnership formation since age at arrival, and (ii) those who arrived as adult without a partner. Immigrants who arrive with a partner are studied only for descriptive purposes and thus excluded from further analysis.

The key variable of interest, mother tongue, is documented by the authorities, and for immigrants around the time they arrive in Finland. Mother tongue is required and self-reported information to the authorities, but it does not require any deliberate action for Finnish-born persons with unilingual background. A person may in the register have only one mother tongue. Changing your mother tongue is possible, but rare.

The dependent variable in our analyses is the mother tongue of the partner in the first cohabiting union entered by the migrant, which takes one of four mutually exclusive categories: (i) Finnish, (ii) Swedish, (iii) same as the migrant, (iv) or other.

For adults (aged 18+ years) who arrived as singles, we study first partnership formation since the year of immigration. For child arrivals (age<18), we study partnership formation since age 18 years, by age at arrival. In multivariate settings, we control time in Finland, age at arrival, year of arrival, educational level, and language-group concentration of the local-level partner market (at arrival, or at age 18, by sex, for ages 18-49 years). We measure individuals' educational level at the latest point of observation, in order to avoid issues related to the fact that entry into a first partnership might predate a completed education. For many recent immigrants, educational information is also incomplete in the Finnish registries. Educational level is categorised into (i) primary, (ii) vocational upper secondary, (iii) general upper secondary, (iv) bachelor, (v) master's, or (vi) doctoral.

We analyse the transition to first partnership by mother tongue of the partner using a time-to-event approach. To adjust for confounding factors, and to allow for the hazard to vary across process time, we use piece-wise constant exponential hazard models. We fit models per the event of interest, that is, partnership formation with a partner of Finnish, Swedish, same, or other mother tongue, respectively.

## **Preliminary results and conclusions**

The majority of male and female immigrants who do not have Swedish or Finnish as their mother tongue, and who arriving without a partner in adult age, form a partnership with someone who has the same mother tongue as themselves. Among those who arrive to Finland as children, here defined as below age 18, it is most common to find a partner whose mother tongue is Finnish. A central question of ours is then what the process of finding a partner of a given mother tongue looks like across time.

We first consider migrants who arrived without a partner in adult ages. Figure 1 shows incidence rates that adjust for the aforementioned control variables. The rate of partnering with someone of a given mother tongue is estimated from separate regression models. The main pattern is that, for both men and women, the rate of partnering decreases steadily over time after the first two years, irrespective of mother tongue. Partnering with a person that has the same mother tongue remains consistently most common for both sexes.

Second, we consider migrants who arrived in Finland as children. We now focus on how partnership formation by the mother tongue of the partner relates to age at arrival of the migrant. Figure 2 shows that age at arrival is decisive. Among both men and women, the risk of partnering with someone with the same mother tongue increases substantially with each consecutive age at arrival, while the risk of partnering with someone with Finnish mother tongue is most common if the immigrant arrived before the teenage, or before age 12 years.

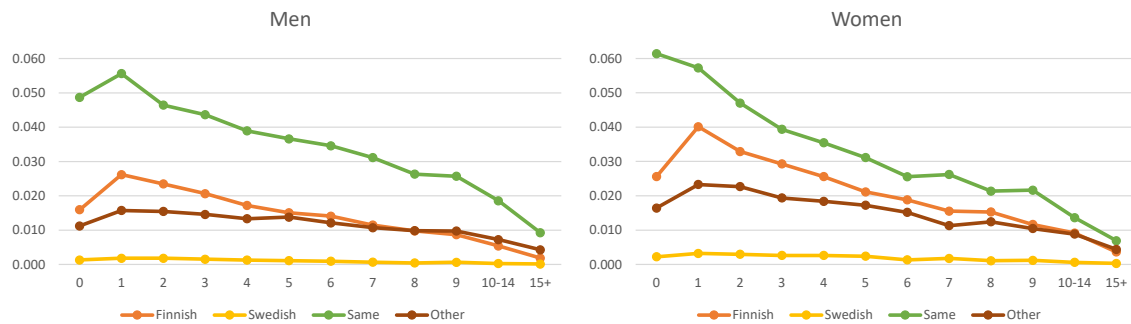


Figure 1. Incidence rate of partnering someone of a given mother tongue since time at arrival among migrants who arrived at age 18+ years without a partner.

Notes: Estimates from piece-wise constant exponential hazard models. Separate regression models per event (partner formation with a partner of a given mother tongue). Adjusted for control variables.

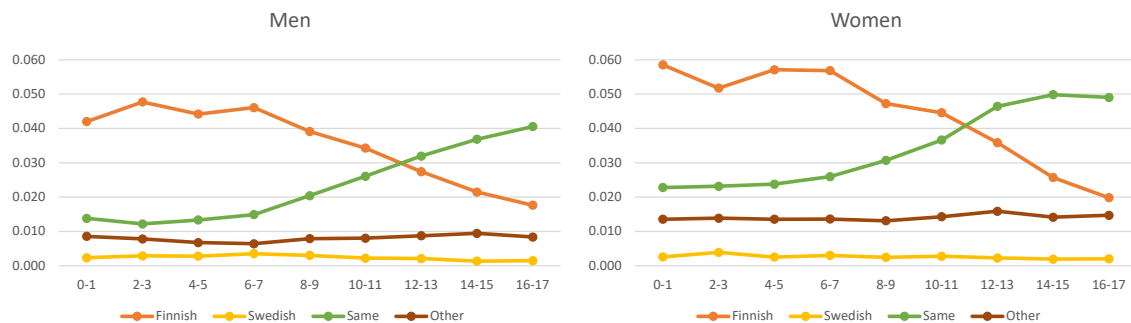


Figure 2. Incidence rate of partnering someone of a given mother tongue by age at arrival among migrants who arrived before age 18 years.

Notes: Estimates from piece-wise constant exponential hazard models. Separate regression models per event (partner formation with a partner of a given mother tongue). Adjusted for control variables.

To summarize, this study concludes that mother tongue is a powerful sorting mechanism in partnership formation. By addressing the issue from a longitudinal and full-population perspective, we are able to extend conclusions of previous research in two basic but important ways. First, we show that concordant language sorting, partnering with someone of the same mother tongue as the migrant, diminishes over time. Second, we show that age at arrival displays a very strong and close to linear relationship in partnering by mother tongue; lower age at arrival increases the risk of partnering with someone of the native majority mother tongue (Finnish), and higher age at arrival increases the risk of partnering with someone of the same (foreign) mother tongue.

Language is one dimension of traits that may constitute the basis of ethnicity or social grouping more generally. Our results are not to be generalised across contexts. Yet, the context of Finland is particularly fit for an analysis of the salience of mother tongue for partnering. The Finnish language is isolated as a language group, with few linguistic or historical commonalities to other spoken languages. Hence, practically all foreign-born immigrants, regardless of origin, who migrate to Finland, lack basic skills in the language of this destination country, which effectively holds constant an important unobserved factor for partnering by mother tongue.

## References

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