# Mandatory civil service and its impact on social cohesion

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International migration has been one of the most important drivers of demographic change in the West over the past half-century. During this period, many advanced Western societies not only saw sharp increases in the size of the foreign-born population, but also a compositional shift in the origins of the migrant populations that dramatically increased the ethnic diversity of the host societies. Beyond the demographic implications, increases in immigration and ethnic diversity are associated with profound societal challenges. In particular, the theoretical and empirical literature has argued that ethnic diversity poses a risk to social cohesion and threatens the vitality of the welfare state (Alesina and Ferrara 2000; Alesina, Glaeser, and Sacerdote 2001; Dahlberg, Edmark, and Lundqvist 2012; Laurence, Schmid, and Hewstone 2019; van der Meer and Tolsma 2014; Putnam 2007). In ethnically diverse settings, individuals may perceive outgroup members as threats or competition for scarce material and immaterial resources in the society, such as jobs, housing, identity, or social transfers (van der Meer and Tolsma 2014). This eventually leads to a deterioration in trust and subsequently a decline in social cohesion.

Today, social cohesion has more prominently entered the political discourse as populism has been on the rise and people seem to be living increasingly segregated lives (i.e., Wang et al. 2018). As a result, it is of interest to understand how social cohesion may be fostered in diverse societies. Hewstone (2015) argues that the mediating factor between ethnic diversity and social cohesion is intergroup contact (Allport 1954; Hewstone 2015; Pettigrew 1998). Contact theory posits that positive contact between individuals from different groups promotes positive intergroup attitudes (Hewstone 2015; Pettigrew and Tropp 2006). Thus, forcing intergroup interaction may be one possible way to increase the long run interconnectedness of individuals across groups.

This study aims to test this hypothesis by examining the effects of military service on social cohesion across ethnic groups in Sweden. The key element of this study is that military service was mandatory for all male citizens during the period 1901-2010. During military service, men were exposed to their peers that they likely would not have met otherwise, and engaged in rigorous training that required a high degree of team work. Since participants were unable to choose where and with whom they were assigned, this environment was, at least partially, independent of that in which individuals grew up. Furthermore, this setting fulfills the four requirements for positive intergroup contact as stipulated by (Allport 1954; Pettigrew 1998)

The outcome of this study is partner choice. Specifically, we estimate the probability to partner (marry or cohabit with shared children) outside of one's own ethnic category. We argue that exposure to outgroup members that occurs during military service should decrease intergroup boundaries and increase the likelihood of cross ethnic partnerships.

Intermarriage between immigrants and natives in as host society has widely been regarded as one of the most informative measures of immigrant social integration. Since marriage is an intimate and often long-term relationship, intermarriage rates may serve as a barometer for the openness of a society and social cohesion between immigrants and natives (Alba and Golden 1986; Alba and Nee 2003; Kalmijn nd van Tubergen 2006; Qian and Lichter 2001). In addition, intermarriage is also a factor that potentially influences the integration process (Dribe and Nystedt 2015; Elwert and Tegunimataka 2016; Iceland and Nelson 2010; Kalmijn 1998; Lieberson and Waters 1986).

Partner choices are the result of preferences and opportunity. Individuals may simply prefer to partner with someone that is similar to them in terms, for example, education, socioeconomic background,

culture, and/or ethnicity. Homogamy or endogamy may be preferred as it minimizes sources of conflicts between partners, reinforces each other's behaviors and values, and enlarges the opportunities to engage in similar activities (Kalmijn 1998). At the same time, however, an individual's opportunity to partner endogamously or exogamously depends on structural factors, such as residential segregation and composition of the local marriage market (Choi and Tienda 2017). As a result, endogamous partnership does not necessarily reflect a preference for a partner similar to oneself, but could be the result of lack of exposure to outgroup members.

Endogamy may also be influenced by the social groups of which an individual is a member (i.e., ethnic group or socioeconomic class). Because mixed partnerships threaten the homogeneity of the group, group members may oppose exogamy by enforcing group identification and/or imposing sanctions. The strength of group norms and an individual's identification with the group depend to a large extent on the size of and proximity to the networks in which one is embedded (Hou et al. 2015). For example, neighborhood contexts that are homogenous with respect to their social and cultural background may inhibit exogamy by strengthening group solidarity—which in turn influences the preferences of group members—and restricting the diversification of the local partner market—influencing the opportunity to meet potential outgroup partners.

#### Data

We utilize Swedish population register data including all men born between 1973 and 1979 who were Swedish citizens when they were aged 17, i.e. were required to attend conscription for military service. From the Swedish taxation register, we learn whether they have done military service, by whether they received any military service benefits between ages 18 and 30 (*värnpliktsersättning*). We capture family SES characteristics (income and education of parents) at the age of 18, and at this age we also capture the share of Swedish born individuals among the man's 500 closest neighbors (Hennerdal n.d.). We follow the men until they are 37, and at this point in time, we examine the characteristics of their first female partner, measured as opposite-sex marital partner or mother to one's child, whatever comes first. In order to adjust for overall higher marriage rates among those doing military service, we only include those who have a partner when they are aged 37.

## Variables from the conscription register

At the time of conscription, a number of tests were being conducted, to assess individuals' suitability for doing military service, and to find a suitable placement for that individual. Most importantly for us, we have access to general test scores, which is a summarized measure of four intelligence tests. This measure is commonly used to measure Swedish men's IQ (Keuschnigg, Mutgan, and Hedström 2019). We also have information on their performance in the physical evaluation and the psychological evaluation (all measures ranges from 1 to 9). In order to adjust for selection into military service, which could lead to omitted variable bias, we control for all such test scores in our analyses. We have also created a measure capturing 'motivation to do military service'. This is constructed by running OLS-regressions on the general test score of individuals, by the combination of program at upper secondary school, grades at the end of lower secondary school, and birth cohort. Negative residuals from the predicted test-scores are indications of low motivation and positive residuals are indications of high motivations.

## Immigrant background

The immigrant background of the man and his female partner is measured by combining information on their respective country of birth with the country of birth of their parents. We distinguish between (1) those born in Sweden to two Swedish-born parents, (2) those born in Sweden or abroad with one foreign and one Swedish parent, (3) Second generation immigrants whose parents are from Western countries,

(4) Second generation immigrants whose parents are from non-Western countries, (5) First generation immigrants from Western countries, and (6) First generation immigrants from non-Western countries.

We are interested in two outcomes.

- (1) The probability to partner with someone born in Sweden to two Swedish-born parents
- (2) The probability to partner with someone from the same ethnic background (Swedish, Western, or non-Western).

#### Method

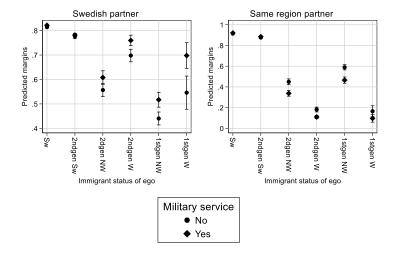
Our main analyses rely on logistic regressions on the likelihood for the first partner to be (1) Swedish born with two Swedish parents or (2) Of same ethnic background as oneself. We have also repeated our analyses using discrete choice models, and with propensity score matching, with equivalent results. Finally, we have attempted an instrumental variables approach where we instrument doing military service with the share of 1-2 years older boys at ones upper secondary school doing military service. These analyses too yielded equivalent results.

## **Preliminary findings**

Figures 1 and 2 presents average marginal effects derived from logistic regressions on likelihood to partner with (1) a Swede or (2) someone from the same ethnic background. All models control for the three test scores in military service, motivation, parents' income, parents' education and share of Swedes in one's neighborhood when growing up. Figure 1 includes the full population whereas Figure 2 only includes those who scored 4-6 on the general conscription test, in order to exclude individuals who actively tried to score low on the test, to avoid doing military service, and individuals who were extremely motivated to do military service.

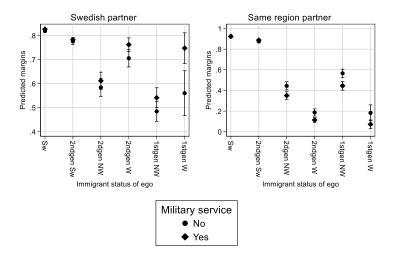
**Figure 1:** Logistic regressions on likelihood to partner with (1) Swede and (2) Same ethnic background. Full set of controls included. Predicted probabilities.

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**Figure 2:** Logistic regressions on likelihood to partner with (1) Swede and (2) Same ethnic background. Full set of controls included. Predicted probabilities. Only including individuals who scored 4-6 on the general conscription test.

#### 4-6 on test



The analyses presented in Figure 1 reveal that for Swedes, doing military service has no impact on the probability of intergroup marriage. Among individuals with Swedish background, around 80 percent partner with a Swedish born (left column), and more than 90 percent with someone with at least one Swedish parent (right column). No difference exists depending on whether the individual has done military service or not. For immigrants, however, the results are exactly in line with what we hypothesized. The results reveal a clear impact from doing military service on the likelihood of intergroup marriage, with a magnitude of around 10 percentage points for most groups. Results for the subsample of average performers in the conscription test are more or less identical, although confidence intervals are larger in Figure 2, due to the smaller sample.

# **Preliminary conclusions**

Our findings suggest that the levels of intergroup marriages are higher among immigrant men who have done military service than for immigrant men who haven't. Interestingly, we find no impact on Swedish born men, nor on foreign-born men with at least one Swedish parent. Given our extensive set of controls, and the robustness of our results across model specifications, we believe our results provide very convincing proof of that civil service has the potential to function as a means to social cohesion, thus supporting the intergroup contact hypothesis (Allport 1954). In particular, civil service functions assimilating for immigrants, given that it increases their likelihood to partner with a Swedish woman.

All our results indicate that there is an effect from doing military service on the likelihood to partner outside one's in-group. In order to be able to test the mechanisms behind this association, we are in the process of ordering additional data from Statistics Sweden, through which we will be able to examine the impact from the share of different ethnic groups in groups similar to one's platoon. We are also ordering variables that have previously been used as instruments to doing military service, in order to conduct an even more rigorous test as to whether our results are indeed causal.

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