

Mandatory Civil Service and Its Impact on Social Cohesion

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Introduction

With increasing diversity, segregation, and polarization in Western societies, there is a need to learn more about 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 and social class 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 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 and outside one's educational background. We argue that exposure to outgroup members that occurs during military service should decrease intergroup boundaries and increase the likelihood of cross ethnic- and educational partnerships.

Intermarriage between immigrants and natives in a 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 and 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; Lieberman and Waters 1986).

Similarly, the degree of social endogamy has been viewed as a barometer of social fluidity and high levels of social endogamy have been argued to be a factor that reproduces existing class structures in society (Van Leeuwen and Maas 2005). Some of the key factors that lead to social-class endogamy are related to third party influences, individual preferences, and structural constraints of the marriage market. Given the high degree of social and geographical segregation individuals experience in their daily lives, opportunities to meet and develop meaningful relationships with others outside of their social class are limited (Kalmijn and Flap 2001).

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 1978 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 22 (*värnpliktersättning*). 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 and the share of university educated 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. As a sensitivity check, we supplement our main analysis with an instrumental variable approach where the conscription officer's admissions rate is used as an instrument for doing military service (Hjalmarsson and Lindquist 2019).

In addition to studying the association between doing military service and intermarriage, we also examine how group composition during military service is associated with intermarriage, among those doing military service. This measure is constructed by first defining an individual's social context during military service as the year by unit by rank, and then calculating the share of first or second generation non-western immigrants in a platoon, and the share of men whose mother only has the 9-year compulsory education (we exclude the ego from these calculations). For these analyses, we only include privates, given that higher rank individuals in the same large unit are likely to be dispersed over smaller subunits.

Outcomes

Ethnic intermarriage 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 Swedish born to two Swedish-born parents
- (2) The probability to partner with someone from the same category (one of the six above)
- (3) For those with non-Swedish backgrounds, the probability to partner with someone from the same country of origin

Method

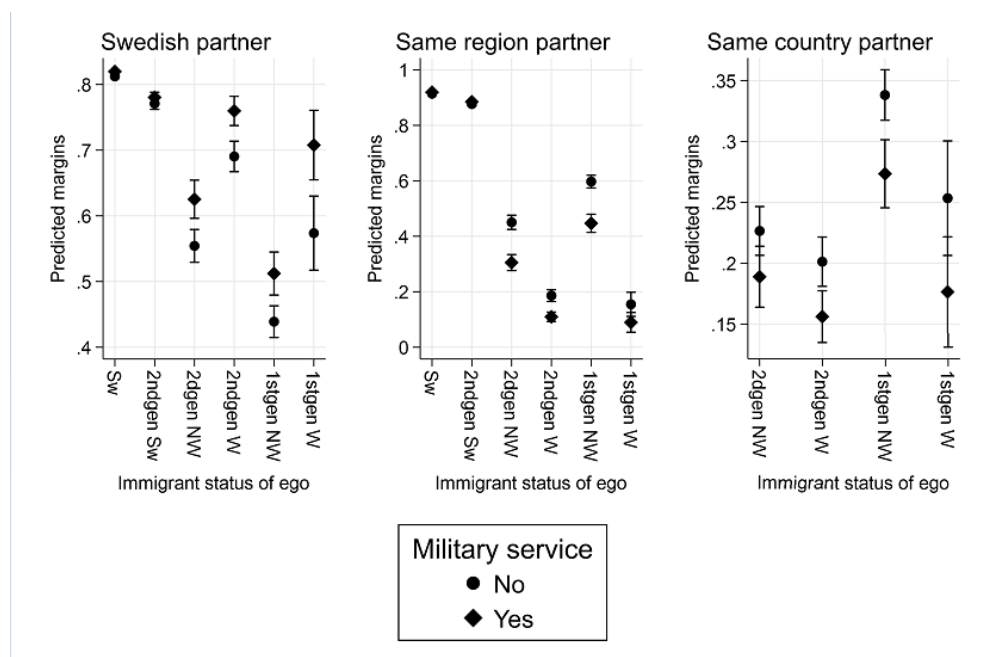
Our main analyses rely on logistic regressions on the likelihood for the first partner to (1) be from a more marginalized ethnic group and (2) be Swedish with two Swedish parents.

Preliminary findings

Figure 1 presents the predicted margins derived from logistic regressions on ethnicity of the partner, by whether the ego has done military service or not, while allowing for this effect to vary by immigrant background. All models control for year of birth, the three test scores at conscription, and the educational and ethnic composition in ones' neighborhood when growing up.

Figure 1: Logistic regressions on likelihood to partner with (1) partner from more marginalized group and (2) Swedish partner with two Swedish parents.

Full set of controls included. Predicted margins

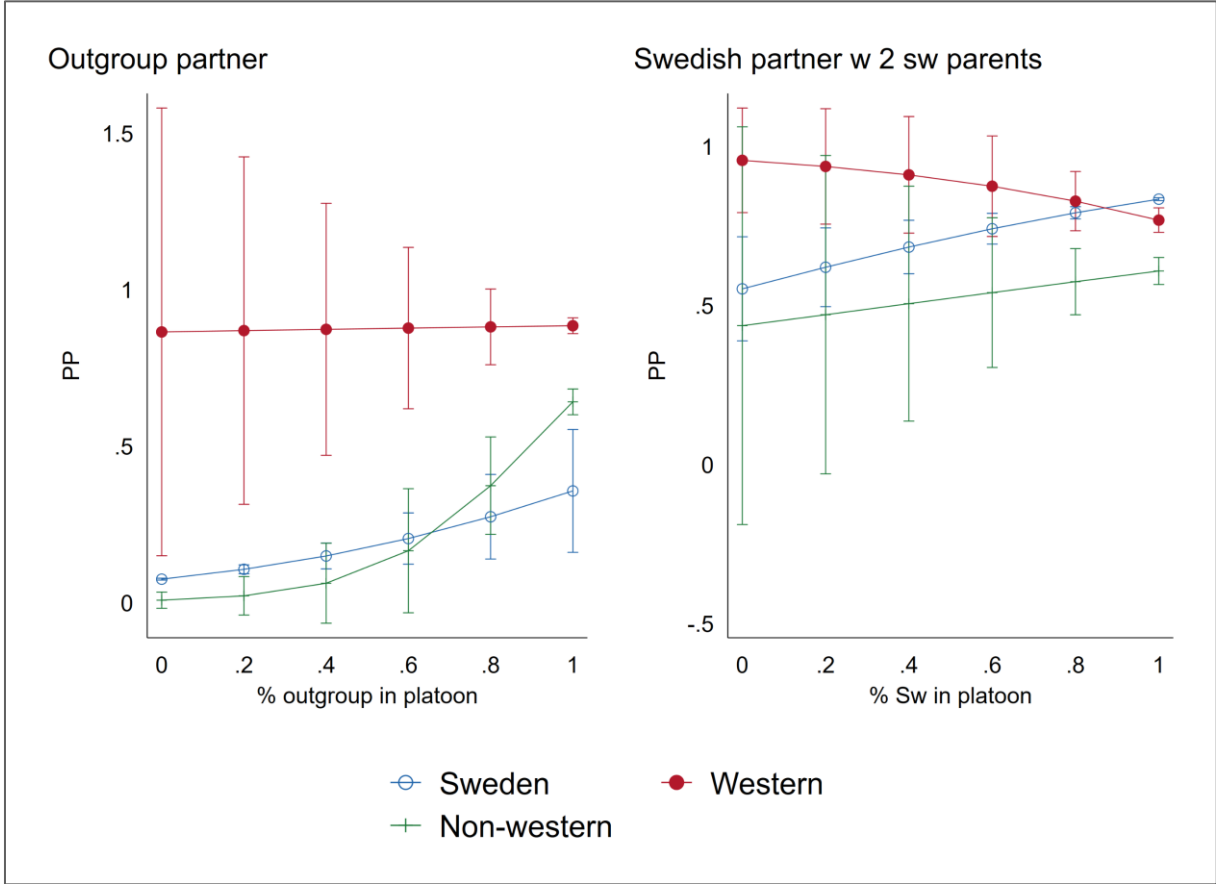


The analyses presented in Figure 1 reveal that doing military service is associated with partner choice for all groups except for those with Swedish background. The left hand panel in Figure 1 shows that the probability to partner with a Swede was higher for those that did military service for G2 Non-Western and Western individuals and G1 Western and Non-Western individuals. The center panel suggests that the same groups experience a lower probability to partner with an individual in the same origin group category. Finally, the panel on the right shows that among the non-Swedish population, doing military service is associated with a lower probability to partner with someone from the same country of origin. The results remain also when adjust for possible selection into military service by instrumental variable regression (not presented).

In a next step, we examine how the social context during military service is associated with outgroup partnership formation, presented in Figure 2. Specifically, Figure 2 displays the predicted probability to partner with an outgroup (left panel) and the predicted probability to partner with a Swede (right panel)

by the share of outgroup in the platoon (left) and the share of Swedes in the platoon (right). In Figure 2, first and second generation individuals are combined in each origin group category. Contrary to Figure 1, we find that Swedes display an increased probability to partner with an outgroup (left panel) when they are exposed to larger shares of outgroups in their platoon. A similar pattern is found for Non-Western individuals. A similar pattern is largely confirmed in the right hand panel where we find an increasing probability to partner with Swedes for both non-Western and Swedish individuals when there are higher degrees of exposure to Swedes in the platoon.

Figure 2. Logistic regression on partner characteristics. Only those serving as privates. Controlled for three types of test scores at conscription, neighborhood ethnic and educational composition at age 18, year of military service, staff category, mother’s education.



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 have not. When considering exposure to outgroups, we find that even Swedes experience an increased probability to partner with an outgroup when they are more exposed in the military. 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).

References

- Alba, Richard D., and Reid M. Golden. 1986. "Patterns of Ethnic Marriage in the United States." *Social Forces* 65(1):202–23.
- Alba, Richard, and Victor Nee. 2003. *Remaking the American Mainstream: Assimilation and Contemporary Immigration*. Cambridge: Harvard University Press.
- Allport, Gordon W. 1954. *The Nature of Prejudice*. Reading, MA: Addison-Wesley.
- Choi, Kate H., and Marta Tienda. 2017. "Marriage-Market Constraints and Mate-Selection Behavior: Racial, Ethnic, and Gender Differences in Intermarriage: Marriage Market and Intermarriage." *Journal of Marriage and Family* 79(2):301–17. doi: 10.1111/jomf.12346.
- Dribe, Martin, and Paul Nystedt. 2015. "Is There an Intermarriage Premium for Male Immigrants? Exogamy and Earnings in Sweden 1990–2009." *International Migration Review* 49:3–35.
- Elwert, Annika, and Anna Tegunimataka. 2016. "Cohabitation Premiums in Denmark: Income Effects in Immigrant–Native Partnerships." *European Sociological Review* 32(3):383–402. doi: 10.1093/esr/jcw018.
- Hennerdal, Pontus. n.d. "Geocontext. GitHub Repository." Retrieved (<https://github.com/PonHen/geocontext>).
- Hewstone, Miles. 2015. "Consequences of Diversity for Social Cohesion and Prejudice: The Missing Dimension of Intergroup Contact: Consequences of Diversity for Social Cohesion and Prejudice." *Journal of Social Issues* 71(2):417–38. doi: 10.1111/josi.12120.
- Hjalmarsson, Randi, and Matthew J. Lindquist. 2019. "The Causal Effect of Military Conscription on Crime*." *The Economic Journal* 129(622):2522–62. doi: 10.1093/ej/uez014.
- Hou, Feng, Zheng Wu, Christoph Schimmele, and John Myles. 2015. "Cross-Country Variation in Interracial Marriage: A USA–Canada Comparison of Metropolitan Areas." *Ethnic and Racial Studies* 38(9):1591–1609. doi: 10.1080/01419870.2015.1005644.
- Iceland, John, and Kyle Anne Nelson. 2010. "The Residential Segregation of Mixed-Nativity Married Couples." *Demography* 47(4):869–93. doi: 10.1007/BF03213731.
- Kalmijn, Matthijs. 1998. "Intermarriage and Homogamy: Causes, Patterns, Trends." *Annual Review of Sociology* 24(1):395–421. doi: 10.1146/annurev.soc.24.1.395.
- Kalmijn, Matthijs, and Henk Flap. 2001. "Assortative Meeting and Mating: Unintended Consequences of Organized Settings for Partner Choices*." *Social Forces* 79(4):1289–1312. doi: 10.1353/sof.2001.0044.
- Kalmijn, Matthijs, and Frank van Tubergen. 2006. "Ethnic Intermarriage in the Netherlands: Confirmations and Refutations of Accepted Insights." *European Journal of Population / Revue Européenne de Démographie* 22:371–97. doi: 10.1007/s10680-006-9105-3.
- Keuschnigg, Marc, Selcan Mutgan, and Peter Hedström. 2019. "Urban Scaling and the Regional Divide." *Science Advances* 5(1). doi: 10.1126/sciadv.aav0042.
- Lieberson, Stanley, and Mary C. 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(1):79–91.
- Pettigrew, Thomas F. 1998. "INTERGROUP CONTACT THEORY." *Annual Review of Psychology* 49:65–85.
- Pettigrew, Thomas F., and Linda R. Tropp. 2006. "A Meta-Analytic Test of Intergroup Contact Theory." *Journal of Personality and Social Psychology* 90(5):751–83. doi: 10.1037/0022-3514.90.5.751.
- Qian, Zhenchao, and Daniel T. Lichter. 2001. "Measuring Marital Assimilation: Intermarriage among Natives and Immigrants." *Social Science Research* 30:289–312. doi: <https://doi.org/10.1006/ssre.2000.0699>.
- Van Leeuwen, Marco HD, and Ineke Maas. 2005. "Endogamy and Social Class in History: An Overview." *International Review of Social History* 50(S13):1–23.