

# LORE methodological note 2017:2

## Recruitment to the Migration Attitudes panel. Recruitment rates and demographic differences

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Per Eisele

The SOM Institute, University of Gothenburg

### ABSTRACT

This methodological note analyzes the probability to sign up to the Citizen Panel depending on a set of demographic characteristics of individuals of the invited sample. The results show that some demographics factors are clearly related to non-response. For example, people who are married, older, born in Sweden, and have two or three children living are more likely to sign up to the panel than other people.

### Introduction

In 2016 a major recruitment to the probability based part of the Citizen Panel at the University of Gothenburg was launched. A random sample of 26,500 individuals aged 18 to 70 years from the Swedish national population register were invited to sign up for online panel through a mailed invitation postcard. After three weeks, those who had not yet signed up for the panel were sent another postcard reminding them to do so. The sample from the national population register includes information about the individuals' age and sex along with marital status, number and age of children, and country of birth.

Out of the 26,500 individuals 251 had incorrect addresses and could not be delivered by the postal service, which is equal to almost one percent of the total gross sample. Corrected for this the total net sample size is 26,249 individuals and the overall response rate rises from 8.53 to 8.61. The undeliverable addresses are not completely evenly distributed between different groups: they are more common among individuals that are young, born outside Sweden and have no children, for example. However, despite these statistically significant patterns, no single group has more than two percent undeliverable addresses. Thus, these differences are quite small and the remainder of the analyses will be conducted on the entire gross sample of 26,500 individuals.

This note aims to increase our understanding about the characteristics that make an individual more or less likely to sign up to the Citizen Panel and follows up on previous reports of similar recruitment efforts (e.g. Riedel, 2014). The general hypothesis is that

the probability to sign up to the Citizen Panel is not randomly distributed in the overall sample, but that the probability of non-response is larger in certain demographic groups.

## Results

Basic descriptive statistics showing the recruitment rates among a set of demographic characteristics are shown in Table 1. To further analyze to what extent demographic characteristics have an impact on recruitment to the web panel a series of ANOVA analyses were conducted (see appendix 2). The results show that the likelihood of signing up to the Citizen Panel and to answer the recruitment survey is higher for a person older than 60 years than for a person who is 18-30 years. There is no major difference in recruitment rates between respondents aged 31-40 and 41-50, but then there is a major increase in the odds of participant's recruitment. When the respondents reach 50+ and the recruitment rate increases from around 9 percent to more than 14 percent (see Table 1 for recruitment rates in all categories). Older people are more likely to sign up to the Citizen Panel than younger people (see appendix a). Perhaps having more free time compensate for a presumed lesser internet coverage. Married people are more likely to join the panel than unmarried people (see appendix 2). In a previous study (Riedel, 2014) a negative correlation between the number of children and the probability to sign up to the panel. This was not the case in this study. People having two or three children are most likely to sign up while having now children at all come on second place. With more than 3 children there is a negative correlation between number of children and recruitment rate (see appendix 2). The age effect was much stronger for participants born in Sweden than for people born outside Sweden. The largest difference being in the age group 60 plus (see appendix 2). The age effect was stronger for men than for women. With a large increase in recruitment rate for men in the oldest age category (see appendix 2). People born outside Sweden are less likely to join than people born in Sweden and differences in marital status are greater for people born in Sweden (see appendix 2).

## Concluding remarks

When modeling the respondent characteristics in the entire invited sample that was provided by the national population register it becomes clear that there are several demographic factors that influence the probability to join the Citizen Panel. There is thus a demographic non-response bias in this recruitment with a lower frequency of young people, fewer unmarried, and relatively few people with many children. People born in another country than Sweden are also underrepresented. Of all these factors, age seems to be the most influential demographic characteristics.

Table 1. Percentage of panel registration (recruitment) across demographic factors

Demographic factors	Recruitment		
	No (n)	Yes (n)	Percent recruited
18-30 years	5 631	303	5.11
31-40 years	4 116	260	5.94
41-50 years	4 311	319	6.89
51-60 years	3 934	401	9.25
61+ years	6 248	977	13.52
Female	12 097	1 110	8.40
Male	12 143	1 150	8.65
Married	9 959	1 205	10.79
Not married	10 616	709	6.26
Divorced	2911	290	9.06
Widowed	754	56	6.91
0 children	8 442	660	7.25
1 child	3 578	324	8.30
2 children	7 642	803	9.51
3 children	3 275	356	9.80
4 children	911	87	8.72
5 children	251	21	7.72
5+ children	141	9	10.11
Born in Sweden	19 406	2 020	9.43
Born outside Sweden	4 834	240	4.73
<b>Total</b>	<b>24 240</b>	<b>2 260</b>	<b>8.53</b>

*Comment:* Percentage of complete the invited sample that signs up for participation in the panel.

## References

Riedel, K. (2014). Demographic and geographic differences in recruitment rates to a probability based web panel. *LORE methodological note*.

## Appendix 1

Frontpage: "What's your opinion?"



Backside: "Your opinion is needed for research on democracy and public opinion"



Hej!

Du har blivit slumpmässigt utvald till att delta i Göteborgs universitets Medborgarpanel. Genom att vara med kan du bidra till kunskapen om människors åsikter om samhällsutvecklingen och om aktuella frågor och problem.

Att delta i Medborgarpanelen innebär att du två till fyra gånger per år får en webbenkät skickad till din e-post med frågor om samhälle, politik och viktiga problem idag. Varje undersökning tar ca 5-10 minuter att besvara och genomförs av forskare vid Göteborgs universitet.

Dina åsikter är lika viktiga oavsett vem du är eller hur intresserad av samhällsfrågor du är. Det är viktigt att du som har blivit utvald deltar för att våra undersökningar ska spegla Sveriges befolkning. Vi hoppas därför att just du vill ställa upp.

Anmäl dig genom att skriva in följande länk i adressraden på din webbläsare:

[www.medborgarpanelen.gu.se/vykort](http://www.medborgarpanelen.gu.se/vykort)

Använd ditt användarnamn och lösenord för att logga in.

Användarnamn:  
Lösenord:

Med vänliga hälsningar  
Johan Martinsson, fil. dr.  
info@medborgarpanelen.gu.se  
Tel: 031-786 30 60 (vardagar kl 15.00-16.00)

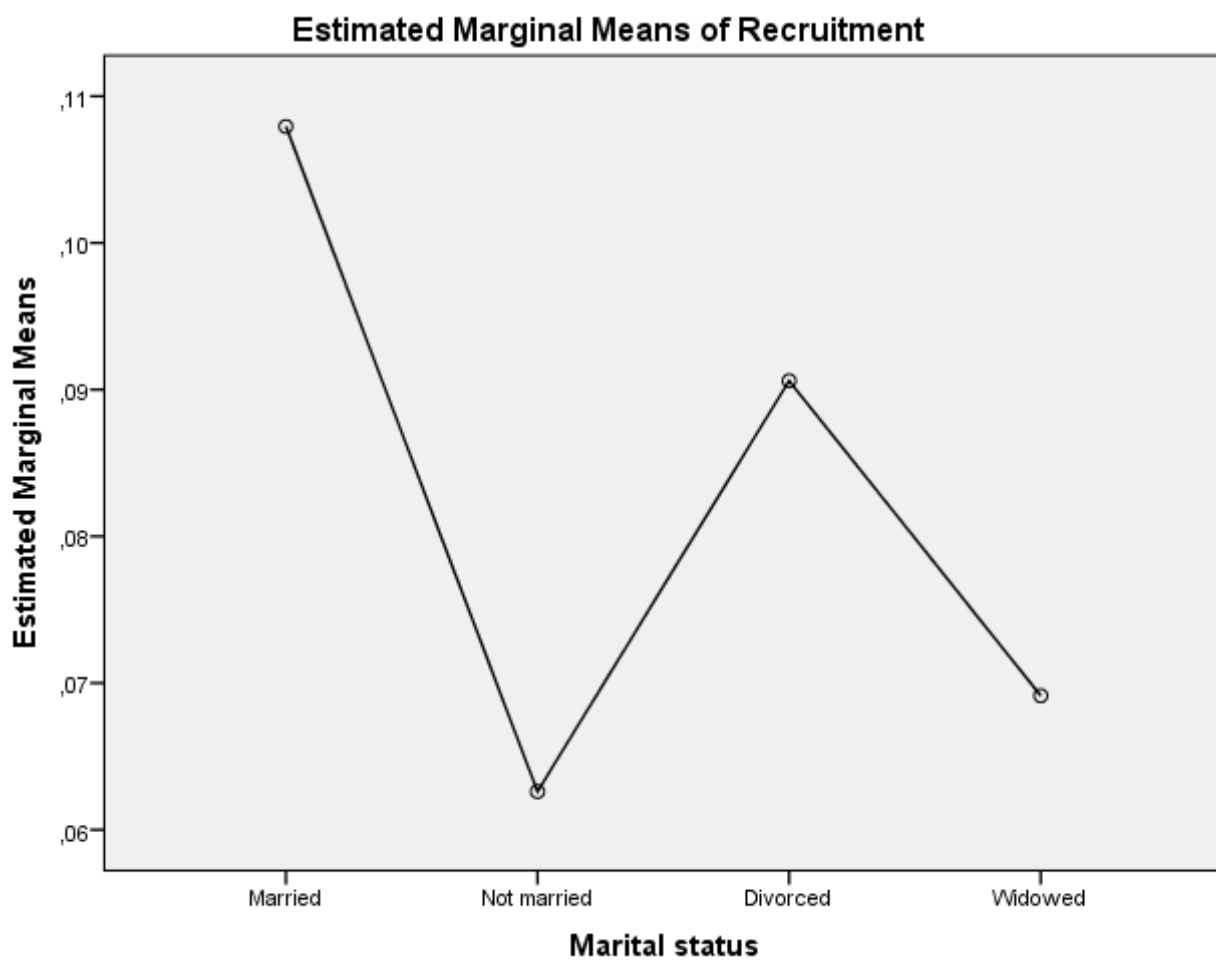
Din åsikt behövs till forskning  
om demokrati och opinion

Returadress:  
Statsvetenskapliga institutionen  
Göteborgs universitet  
Box 711, 405 30 Göteborg

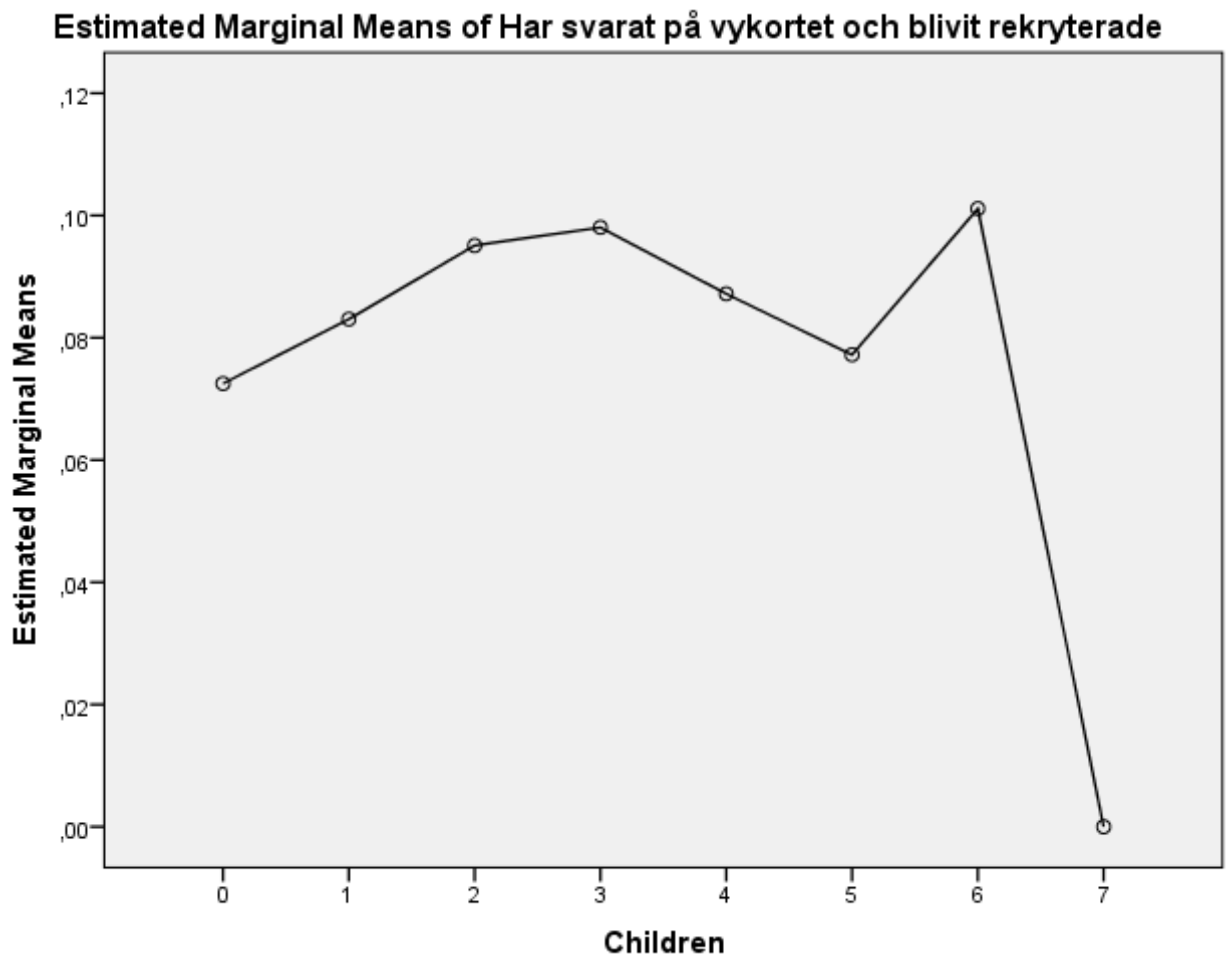
## Appendix 2



The result show a strong age effect  $F(4, 26495) = 95.45, (p < .001)$  with participation increasing with age. Bonferroni post hoc analyses show that the largest effect is between age group 5 compared to the other groups.



There is a significant effect on marital status on recruitment rate  $F(3, 26496) 50.94$ , ( $p < .001$ ). Bonferroni post hoc test show that it is the married people that differ from the other marital status categories.



\*Answered the postcard and were recruited

The result show a significant main effect for number of children  $F(11, 26488) = 3.96$ , ( $p < .001$ ). Post hoc analysis confirm that the reliable effect is participants with 2 or 3 children compared to participants with no children. The high value for people with 6 children are not significant.



There was a main effect for birth of country  $F(1, 26490) = 88.44$  and for age  $F(4, 26490) = 28.53$ , and a significant interaction effect  $F(4, 26490) = 5.36$ . All effects with  $p < .001$ . The age effect (increased likelihood to participate in the panel with age) are greater for people born in Sweden than for people born outside Sweden.

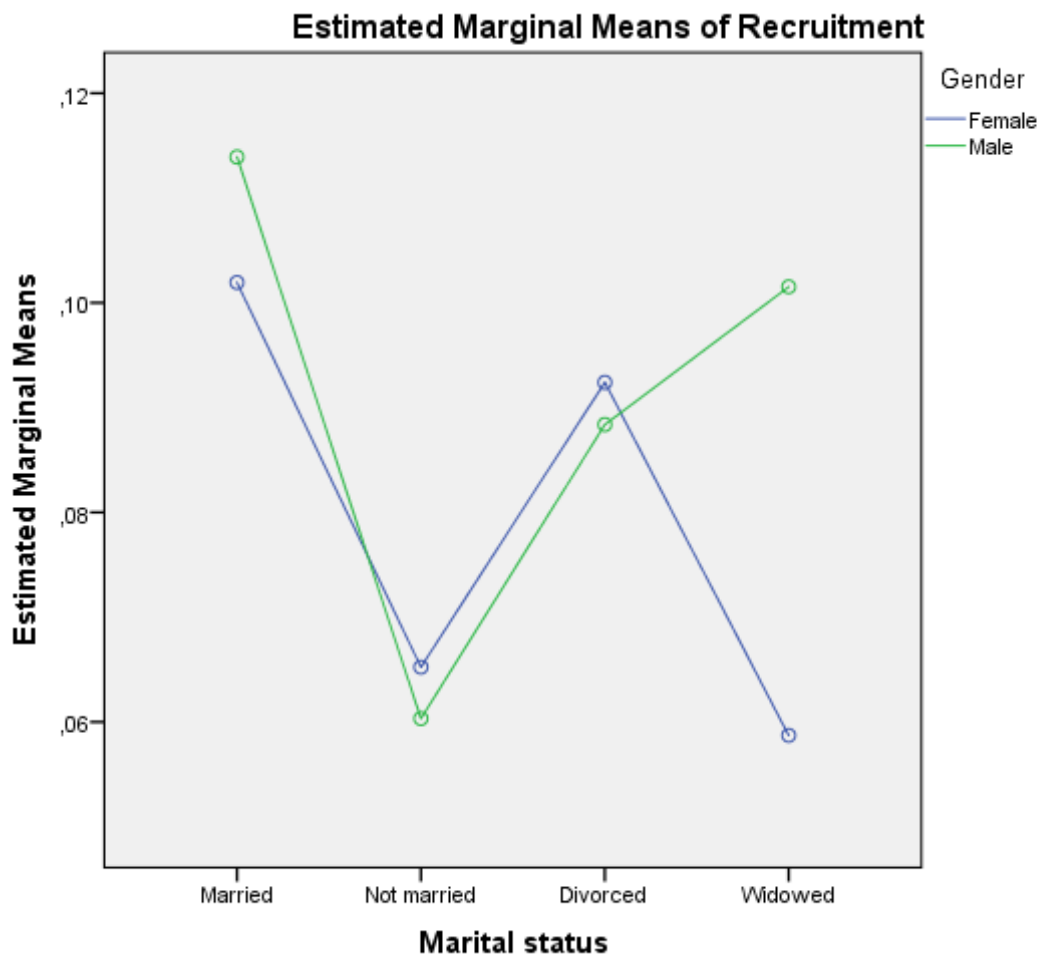




The result show main effects for both marital status  $F(1, 26492) = 46.45$  and birth country  $F(3, 26492) = 17.86$  and an interaction effect  $F(3, 26492) = 7.38$  that is due to the fact that the differences in marital status are greater for people born in Sweden.



There was a main effect for age  $F(4, 26490) = 96.13, (p < .001)$  but no effect for gender. The interaction effect  $F(4, 26490) = 4.31, (p = .002)$  is due to the fact that the age effect was stronger for men than for women.



The result showed a significant main effect for marital status  $F(3, 26492) = 49.52$ , ( $p < .001$ ) but no effect for gender. The interaction effect  $F(3, 26492) = 2.90$ , ( $p = .03$ ) consist of the opposite result for male widowers than for female widowers.

The Laboratory of Opinion Research (LORE) is an academic web survey center located at the SOM Institute, the Department of Journalism, Media and Communication at the University of Gothenburg. LORE was established in 2010 as part of an initiative to strengthen multidisciplinary research on opinion and democracy. The objective of the Laboratory of Opinion Research is to facilitate for social scientists to conduct web survey experiments, collect panel data, and to contribute to methodological development. For more information, please contact us at: [info@lore.gu.se](mailto:info@lore.gu.se)