The Panel of Elected Representatives

2018, First Wave

Methodology report

Øivind Skjervheim

Asle Høgestøl

Olav Bjørnebekk

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REPRESENTANTPANELET

IDEAS2EVIDENCE
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BACKGROUND

This report describes the procedures of data collection of the first wave of The Panel of Elected Representatives, including the recruitment of panel members. Furthermore, the report describes technical aspects of the data collection as well as the representativity of the panel.

The Panel of Elected Representatives is an internet-based survey of elected representatives, at all political levels, in Norway. The survey deals with matters that are important to society, representation and democracy. All elected politicians are invited to participate.

The Panel of Elected Representatives is part of The Digital Social Science Core Facility (DIGSSCORE) at the University of Bergen (UiB). The Panel of Elected Representatives is also affiliated with the Norwegian Citizen Panel. The University of Bergen is the owner and treatment manager of the Panel of Elected Representatives. ideas2evidence handles the practical implementation of the survey, and is responsible for recruiting participants, as well as sending and receiving surveys to and from respondents

The first wave was fielded in the spring of 2018 and according to plan, DIGSSCORE will conduct annual or biannual surveys in the future.

TECHNICAL ASPECTS OF THE SURVEY

SOFTWARE

The web-based research software Confirmit is used to administer the surveys and the panel. Confirmit is a "Software-as-a-Service" solution, where all software runs on Confirmit's continuously monitored server park, and where survey respondents and developers interact with the system through various web-based interfaces. The software provides very high data security and operational stability. The security measures are the most stringent in the industry, and Confirmit guarantees 99.7 percent uptime. ideas2evidence is responsible for the programming of the survey on behalf of The Panel of Elected Representatives

PILOT – PROCEDURE AND ASSESSMENT

The survey went through extensive small-N pilot testing before data collection. The pilot testing was done in collaboration between ideas2evidence and the involved researchers.

The pilot testing was regarded as successful, and no major technical revisions were deemed necessary. On the same note, the field period is also regarded successful without any technical irregularities.

RANDOMIZATION PROCEDURES

Some of the questions in The Panel of Elected Representatives requires randomization procedures. The context of each randomization procedure may vary, [1] but they all share some common characteristics that will be described in the following.

All randomization procedures are executed live in the questionnaire. This means that the randomization takes place while the respondent is filling in the questionnaire, as opposed to pre-defined randomizations. Randomizations are mutually independent, unless the documentation states otherwise.

[1] Some examples: randomly allocate treatment value in experiments, randomize order of an answer list/array, order a sequence of questions by random.

The randomization procedures are written in JavaScript. Math.random()[2] is a key function, in combination with Math.floor()[3]. These functions are used to achieve the following:

- Randomly select one value from a vector of values
- Randomly shuffle the contents of an array

The first procedure is typically used to determine a random sub-sample of respondents to i.e. a control group. Say for example we wish to create two groups of respondents: group 1 and group 2. All respondents are randomly assigned the value 1 or 2, where each randomization is independent. When N is sufficiently large, the two groups will be of equal size (50/50).

Here is an example of the JavaScript code executed in Confirmit:

```
var form = f("x1");
if(!form.toBoolean()) // If no previous randomization on x1
{
  var precodes = x1.domainValues();// Copies the length of x1
  var randomNumber : float = Math.random()*precodes.length;
  var randomIndex : int = Math.floor(randomNumber);
  var code = precodes[randomIndex];
  form.set(code);
}
```

The second procedure is typically used when defining the order of an answer list as random. This can be useful for example when asking for the respondent's party preference or in a list experiment. However, since i.e. a party cannot be listed twice, the procedure must take into account that the array of parties is reduced by 1 for each randomization.

Here is an example of the JavaScript code executed in Confirmit [4]:

```
Function shuffle(array) {
  var currentIndex = array.length, temporaryValue, randomIndex;
  // While there remain elements to shuffle...
  while (0 !== currentIndex) {
    // Pick a remaining element...
    randomIndex = Math.floor(Math.random() * currentIndex);
    currentIndex -= 1;

    // And swap it with the current element.
    temporaryValue = array[currentIndex];
    array[currentIndex] = array[randomIndex];
    array[randomIndex] = temporaryValue;
  }
  return array;
}
```

[2] Please see following resource (or other internet resources):https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Math/random
[3] Please see following resource (or other internet resources):https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Math/floor
[4] Code collected from Mike Bostocks visualization: https://bost.ocks.org/mike/shuffle/

PANEL RECRUITMENT AND DATA COLLECTION - WAVE 1

RECRUITING PANEL MEMBERS

All elected representatives at all political levels in Norway - municipal councils, county councils, the Storting (parliament) and the Sami Parliament of Norway – were invited to participate in the Panel of Elected Representatives. The contact information was collected through Kommuneforlaget AS's registers, as well as public information from the websites of municipalities, counties, the Storting and the Sami Parliament of Norway.

The contact information was collected and systematized by the project team at DIGSSCORE. The final list contained 11,362 representatives where the majority were listed with a postal address as well as an email address.

THE RECRUITMENT PROCESS

The panel members were invited by a postal letter and subsequent email reminders. First, letters were sent to all elected representatives.. The letters contained the following information: a) a description of the project, b) the Citizen Panel's policy on privacy and measures taken to protect the anonymity of the participants, c) the time-frame of the project, d) the participants' rights to opt out of the panel at any time in the future, e) contact information for the people responsible for the project, f) a unique log-in id and the web address to the panel's web site and g) the estimated time required to complete the survey (8 minutes).

The invitational letter was posted 15th of March 2018.

Subsequent reminders were all distributed by email. The reminders referred to the invitational letter and repeated essential information about the project. The unique log-in code and web address was replaced by a direct link to the survey.

The reminders were sent to those respondents who a) had not logged into the survey, or b) had not completed the survey.

RESULTS OF THE RECRUITMENT PROCESS

Of the 11,362 representatives, 11,308 were invited by postal letter, 26 were invited by email, and 28 were not registered with a postal address or a valid email address. Of the 11,334 respondents who were contacted, 61 respondents opted out or reported back that they for various reasons could/should not participate. 40.3 percent (4,535) of the remaining 11,273 logged on and accessed the survey. 4,184 individuals completed the questionnaire, and 351 exited the questionnaire before completion. 39 percent of the incompleted responses are kept as a part of the survey data. The remaining 214 incomplete responses are excluded from the survey due to lack of data. In sum, the recruitment to the Panel of Elected Representatives survey resulted in 4,321 **survey respondents**, a recruitment rate of 38.2 percent. Future waves will collect data among this pool of survey respondents, which makes the survey respondents active members of the panel.

RESPONSES BY METHOD OF DATA COLLECTION

Table 1: Number of responses and response rates for the new panel members by the various stages of data collection

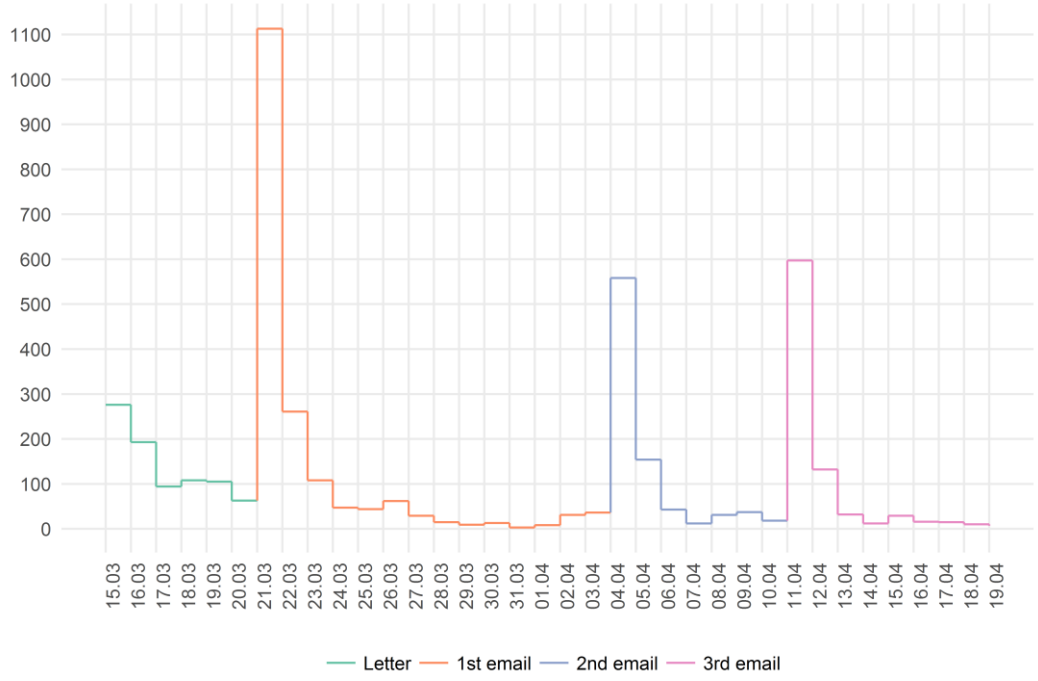
	Response	Response rate (%)	Cumulative Responses	Cumulative Response Rate (%)
Invitation (15th of March)	856	7,6 %	856	7,6 %
Reminder 1 (e-mail) (21th of March)	1662	14,7 %	2518	22,3 %
Reminder 2 (e-mail) (4th of April)	831	7,4 %	3349	29,6 %
Reminder 3 (e-mail) (11th of April)	972	8,6 %	4321	38,2 %

Table 2 summarizes the effects of the various stages of data collection. The invitation letter accumulated 856 responses, about half of what the first email reminder generated. The third (and last) reminder produced more responses than the second reminder.

Figure 1 shows that most representatives answer the survey the same day as they are contacted. The pattern is slightly different, however, when they are contacted by letter. The day to day decline of responses is not as steep as the day to day decline when contacted by email.

Email generated far more answers then the letter. We believe that the main reason is that the email contains a direct link to the questionnaire. The representative does not have to make the detour by the panel's website and use the log-in id, which makes it easier to answer "on the run".

Figure 1: Answer by day and mode

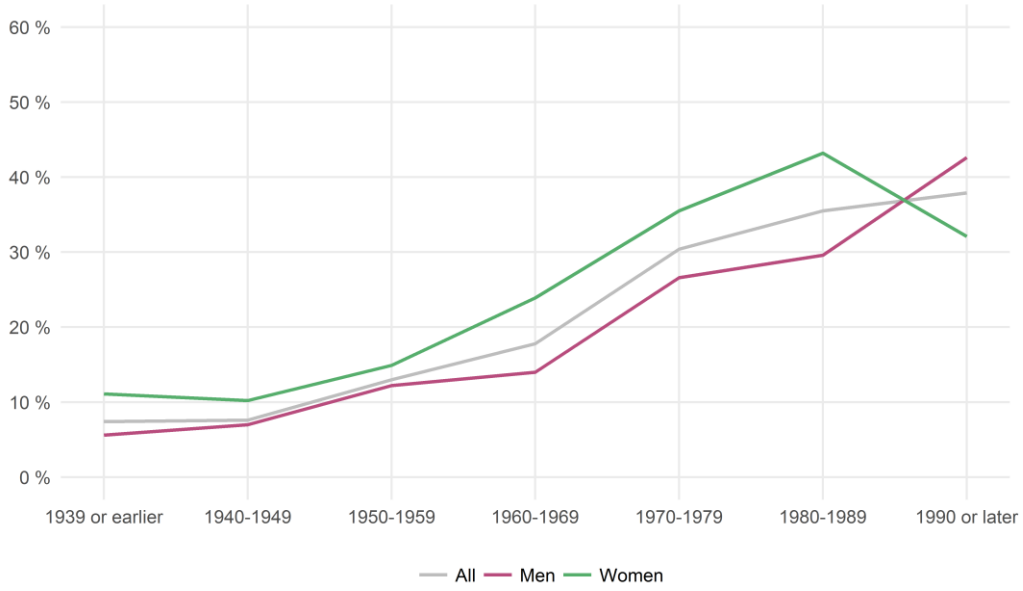


PLATFORMS

The questionnaire was prepared for data input via smart phones. In order to enhance the respondents' experience with the questionnaire, mobile users got a different visual representation of some questions.

21.2 percent of all survey respondents that opened the questionnaire used a mobile phone. 6.6 percent of the mobile users did not complete to such an extent that they were classified as respondents. For non-mobile users the percentage was 4.3 percent. Mobile users were thus slightly more likely to leave the questionnaire before completion.

Figure 2: Share of mobile users by gender and age



The general tendency is that younger respondents are more inclined to use their mobile phone when answering the questionnaire (figure 2). Female representatives born between 1980 and 1989 and male representatives born in 1990 or later use their mobile most frequently.

Women are in general more inclined to use mobile phones to answer the questionnaire compared to men. All female age groups are more inclined to answer the questionnaire on their mobile compared to their male counterparts, with the exception of the respondents born in 1990 or later where men are more inclined to use their mobile.

TIME USAGE

The challenge of measuring average time usage is that respondents may leave the questionnaire open in order to complete the survey later. This idle time causes an artificially high average for completing the survey. If we include only respondents that use 60 minutes or less, the average response time is 11.3 minutes (table 2).

Table 2: Average time usage (minutes

	All respondents
All users	11.3
Non-mobile users	12.1
Mobile users	11.4

On average mobile users use slightly less time than non-mobile users. The difference is less than what is documented in the NCP questionnaires, which is explained by the fact that the NCP questionnaires has a more extensive use of complex survey experiments. [5]

[5] The documentation report from wave 7 of The NCP (available here: www.digsscore.uib.no/download-data-and-documentation) noted that mobile users spend considerable less time answering some of the more complex questions in the questionnaire (i.e. questions with long and/or high degree of complexity in the vignettes). This could imply that users on mobile platforms spend less time reading vignettes before answering the questions. 65 percent of the respondents answering "don't know" to one specific, complex question in the wave 7 survey were mobile users, a significantly higher number than expected when we take into account that the percentage of respondents answering the survey on a mobile phone is 26 percent of the total sample. Our evidence show that mobile users on average spent less time than non-mobile users on 85 percent of the questions in the seventh wave.

REPRESENTATIVITY

In this section, we describe the representativity of the panel as a whole.

The representativity of The Panel of Elected Representatives is examined using the following variables:

- Age: 19-29 years, 30-39 years, 40-49 years, 50-59 years, 60 and above.
- Highest completed education: no education/elementary school, upper secondary, university/university college.
- Geography: Oslo/Akershus, Eastern Norway, Southern Norway, Western Norway, Trøndelag, Northern Norway.

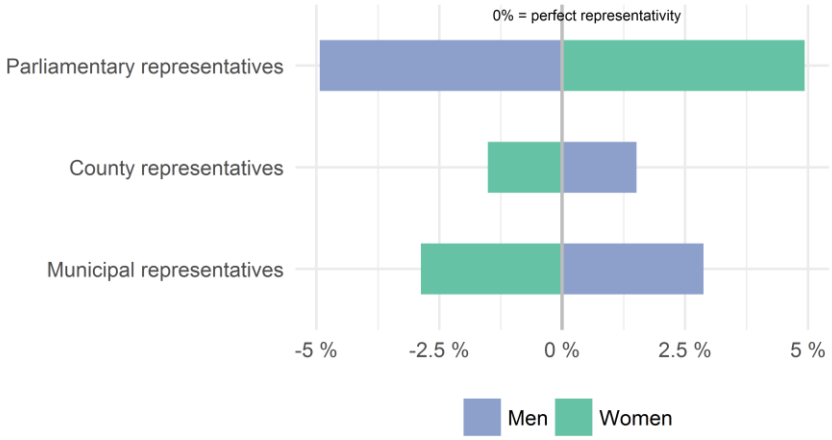
All respondents of the panel are representatives elected to office at different level of administration. Norway's three levels of administration are municipalities, counties and the national level. In total Norway has 426 municipalities and 18 counties. The Panel of Elected Representatives invited 10,707 municipal representatives, 537 county representatives and 169 members of parliament. [6]

When describing the panels' representativity we will keep the different levels of administration separate. Please notethat some of the registry data were not available at the time of writing. This applies to information regarding age and level of education of the representatives elected to the national parliament. [7]

THE REPRESENTATIVITY OF THE PANEL OF ELECTED REPRESENTATIVES

Figure 3 shows how the proportion of men and women in the panel compares to the proportion in the "population". Men are underrepresented among the parliamentary representatives, while they are overrepresented among county and municipal representatives. The bias is largest among the representatives of parliament.

Figure 3: Representativity of gender



Compared to gender, the age distribution in the panel is more on par with the population. There is a slight underrepresentation of young representatives at the municipal and county level (figure 4). At the same time representatives aged 60 years or older are overrepresented.

[6] The 39 members of the Sami Parliament were also invited but are not described any further due to low N and anonymity.

[7] The administration of the parliament has not been able to collect all necessary data after the 2017 national election.

Figure 4: Representativity of age

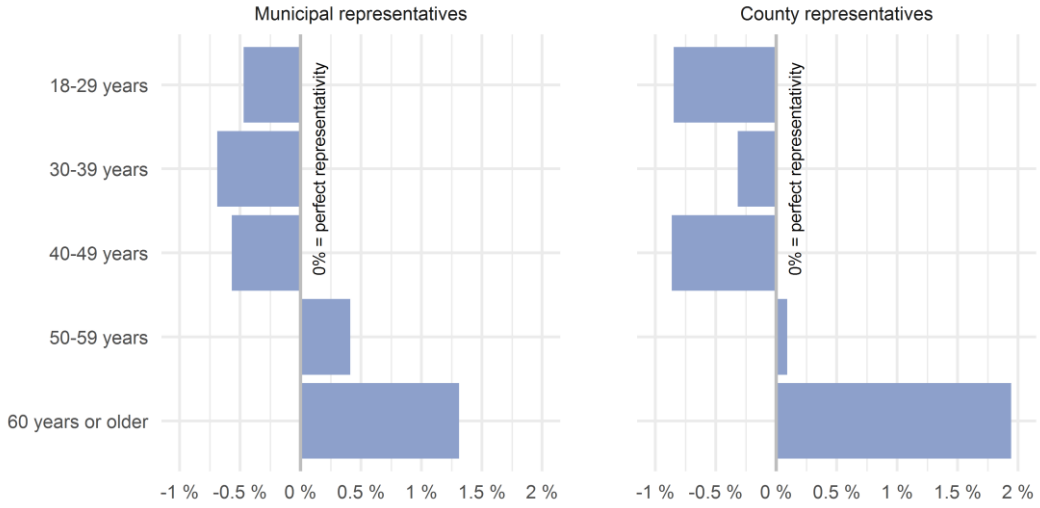
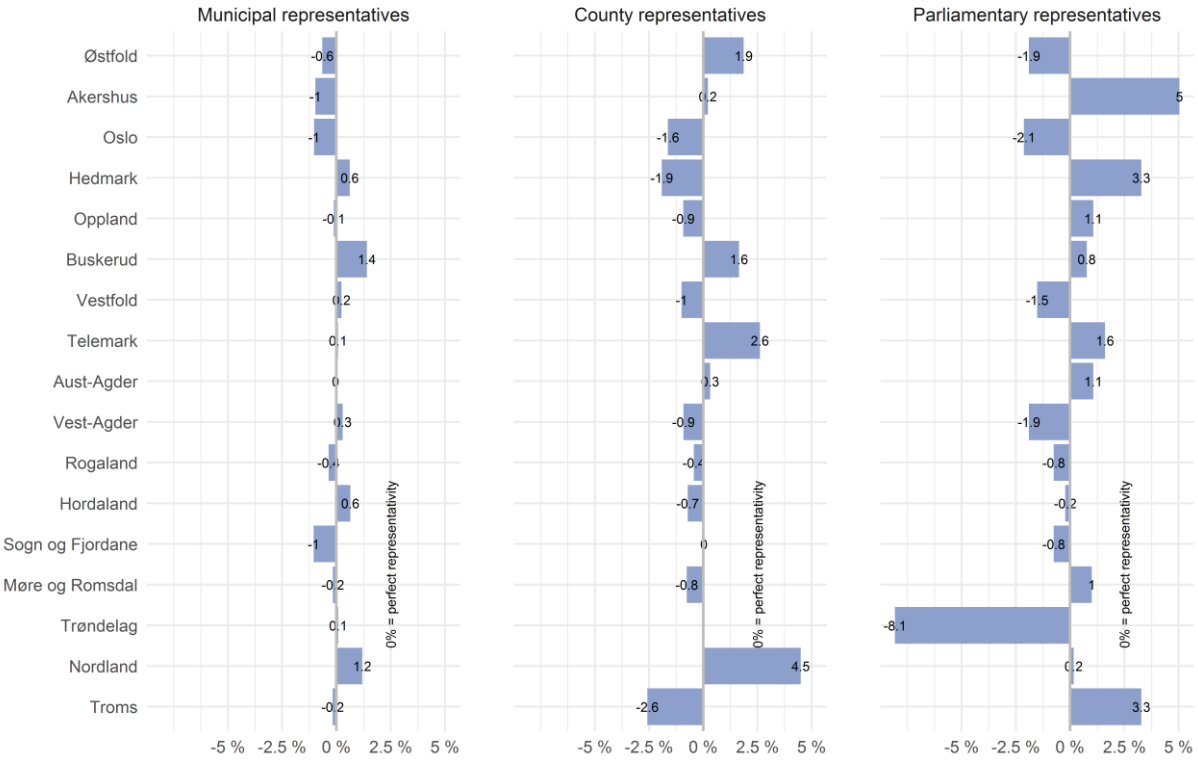


Figure 5 compares the distributions in the panel and the population by county.[8] While the municipal representatives to a large degree are on par with the population, the spread is larger at the county and parliamentary level. An important explanation for this is that the N is lower at the country and parliament level, and consequently more fluctuating. However, there is no systematic pattern where a certain regions are underrepresented or overrepresented across administrational levels.

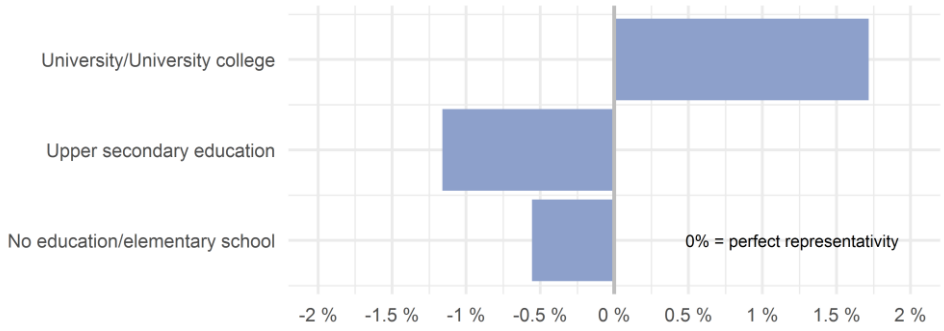
Figure 5: Representativity of counties



[8] Please note that the distribution is calculated by head counts. It does not take into account that the municipal councils vary in size and form.

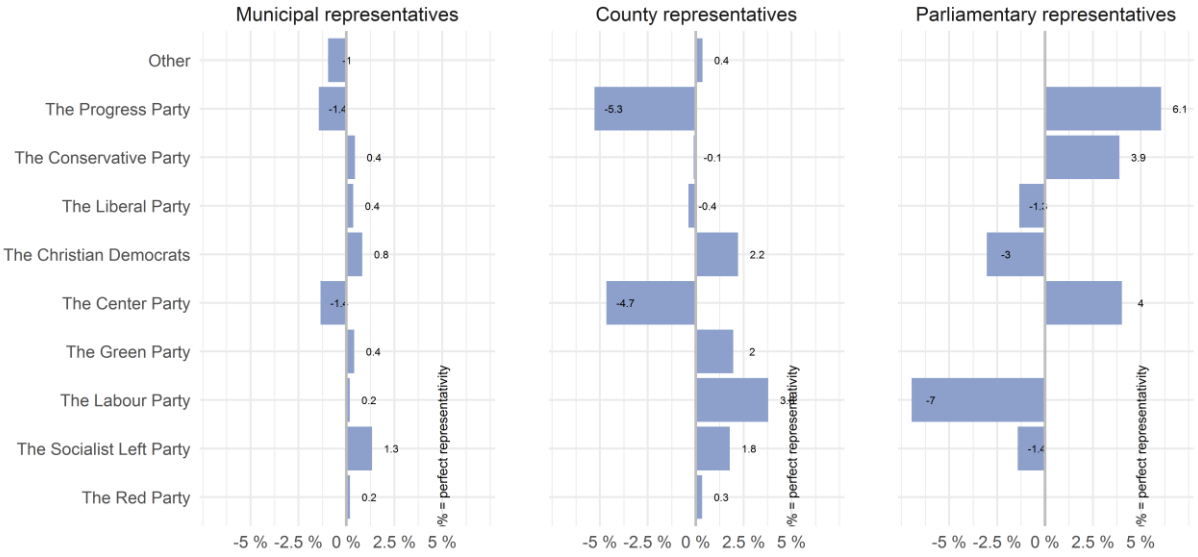
As in the Norwegian Citizen Panel, the panel members typically have a higher level of education compared to the population of elected representatives. However, the underrepresentation of lower education groups and overrepresentation of respondents with university/university college degree is not as prominent as in the panel of citizens.

Figure 6: Representativity of education



A final comparison between the panel and the population is done by party affiliation.. Note that the calculations are done by head counts. It does not take into account how the council seats are allocated in the different municipalities and counties. Also note that there is a number of parties elected at the municipal and county level that are compiled into a group of "others". The figure below is based on parties that are represented in parliament.

Figure 7: Representativity of parties



The municipal and county level has a slightly different distribution of parties compared to the parliamentary level The Labour Party and The Christian Party are underrepresented in the panel compared to the composition of the parliament parliament. At the same time, they are overrepresented at the county level and on par with the population amongst municipal representatives. The opposite is true for the Progress Party and the Center Party. They are overrepresented in the panel amongst parliamentary representatives but underrepresented at the local levels of administration.

The figure does not display a systematic under or overrepresentation of a given party. Neither does it show a systematic under or overrepresentation on the classic left-right party axis. However, there is a tendency that parties with support in the rural compared to more urban areas, such as the Center Party and the Progress Party, are underrepresented in the panel compared to the population of representatives.