

Norwegian Panel of Public Administrators

2025, Sixth Wave

Methodology report

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BACKGROUND

In this report we describe the procedures of data collection in the sixth wave of The Norwegian Panel of Public Administrators. We describe technical aspects of data collection as well as the representativity of survey respondents when compared with its population.

The Norwegian Panel of Public Administrators is an internet-based survey of public administrators. The panel includes administrators from ministries and their underlying directorates and agencies.¹

The Norwegian Panel of Public Administrators (NFP) is a collaboration between the University of Bergen (UiB), the University of Oslo (UiO), the University of Agder (UiA), The Arctic University of Tromsø (UiT), the Norwegian University of Technology and Science (NTNU), the Institute for Social Research (ISF) and the Norwegian Research Centre (NORCE). UiB is the data controller on behalf of the other institutions. NFP is a part of the Digital Social Science Core Facility (DIGSSCORE) at UiB. The panel is affiliated with the Norwegian Citizen Panel (NCP), The Norwegian Panel of Elected Representatives (PER), and the Norwegian Panel of Journalists (NJP). ideas2evidence is responsible for the implementation of the survey, including recruiting participants and distributing surveys to respondents.

The sixth wave was fielded in November and December of 2024.

TECHNICAL ASPECTS OF THE SURVEY

SOFTWARE

The web-based research software Confirmit (now part of the company Forsta) 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 servers, 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 Norwegian Panel of Public Administrators.

PILOT AND OVERALL ASSESSMENT

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

RANDOMIZATION PROCEDURES

NFP has an extensive use of randomization procedures. The context of each randomization procedure may vary², 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 The term "agencies" includes what in Norwegian is called "tilsyn", "etat", "institutt" etc. Note that some directorates are called agencies in English.

² 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()`³ is a key function, in combination with `Math.floor()`⁴. 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. Since, for example, 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 Confirmit⁵:

```
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;
}
```

³ Please see following resource (or other internet resources): https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Math/random

⁴ Please see following resource (or other internet resources): https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Math/floor

⁵ Code collected from Mike Bostock's visualization: <https://bostocks.org/mike/shuffle/>

THE POPULATION

The target population was employees of the Norwegian central government. Central government is understood as ministries (excluding political leadership) and their underlying agencies (directorates and supervisory authorities). The target population excludes regional or local branches, or branches of the underlying organization with extensive operational rather than administrative duties. According to the Norwegian Agency for Public and Financial Management, the central government consists of 72 entities, 16 of which are ministries, which had a combined employee count of 22,167 in 2020.⁶⁷ While the long-term goal of the panel is to recruit bureaucrats/public administrators from all governmental levels (municipal, regional, and state), this was determined to be out of scope for the first six waves.

PREVIOUS WAVES OF RECRUITMENT

Existing panel members were recruited in wave 1 through 5. Table 1 outlines a short summary of these previous recruitment efforts. Note that there are some differences between the recruitment processes. For a detailed description of each recruitment process, please refer to the respective methodology reports.

Table 1: Information on recruitment

	Population size	Gross sample	Gross adjusted	Net recruited	Mode	Contacts	Response Rate ⁸
Recruitment 1 (wave 1)	≈23 000	≈23 000	-	2279	Snowball method, personal email	2	≈10 %
Recruitment 2 (wave 2)	≈23 000	7 734	7 658	603		4	7.9 %
Recruitment 3 (wave 3)	≈22 000	9 090	8 948	1 557	Personal email, opt-in form	3	17.5 %
Recruitment 4 (wave 4)	≈22 000	426	419	153		3	36.5 %
Recruitment 5 (wave 5)	≈22 000	746	739	162	Personal email	3	21.4 %

DATA COLLECTION

RESPONSES OF EXISTING PANEL MEMBERS

Wave 6 collected data from existing members of the panel, recruited in wave 1, 2, 3, 4, and 5.

Of the 4,413 invites that were distributed to existing panel members, 39 opted out. 1,696 respondents completed the questionnaire, while 143 incomplete responses are kept as part of the survey data as these respondents completed a certain amount of the questionnaire before exiting. 321 incomplete responses were excluded from the final data set due to lack of data, and 81 complete responses were excluded due to being screened out from the survey based on their responses leaving them ineligible to participate as they had left the population either as retired or not working at a ministry or agency anymore.

⁶ Utviklingen i antall arbeidsforhold i stats- og sentralforvaltning 2019-2020. DFØ-notat 2021:02. <https://dfo.no/rapporter/utviklingen-i-antall-arbeidsforhold-i-stats-og-sentralforvaltningen-2019-2020>

⁷ In 2024 there were actually 88 entities, 17 of which were ministries, but employee data for this period was found lacking. Organisering av virksomheter og ansatte i staten. DFØ. <https://dfo.no/nokkeltall-og-statistikk/organisering-av-virksomheter-og-ansette-i-staten>

⁸ Based on net recruited / adjusted gross sample (opt-out excluded).

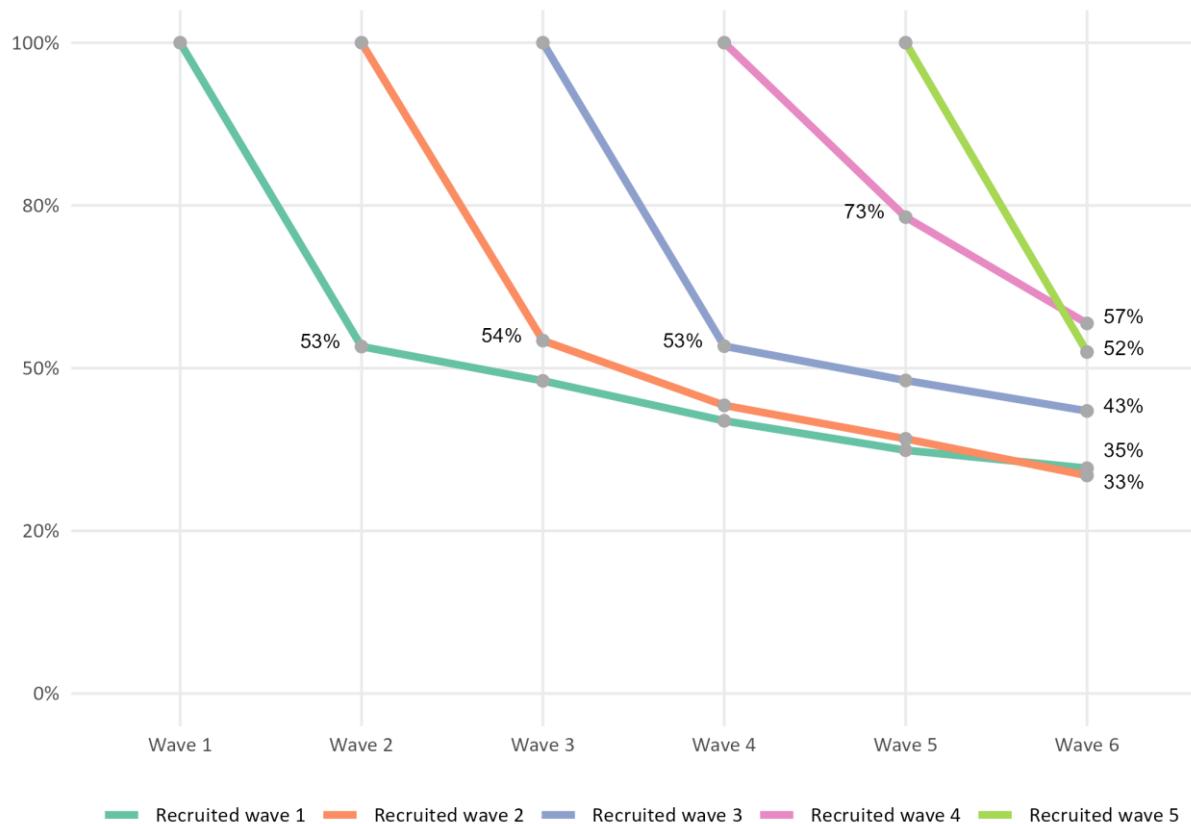
Table 3: Number of responses and response rates for existing panel members by various stages of data collection

	Response	Cumulative Responses	Response Rate	Cumulative Response Rate
Invitation (13th of November)	675	675	20.2 %	20.2 %
1st reminder (18th of November)	514	1189	15.4 %	35.6 %
2nd reminder (22nd of November)	340	1529	10.2 %	45.8 %
3rd reminder (27th of November)	137	1666	4.1 %	49.9 %
3rd reminder – SMS (27th of November)	173	1839	5.2 %	55.1 %

Wave 6 was the fourth wave of NFP where SMS was deployed as a contact method. This wave the SMS reminder yielded a greater number of responses compared to the usual email reminder, with 1.1 percentage points separating them. Wave 6 resulted in a cumulative response rate of 55.1 percent; an increase compared to the 43.3 percent observed in wave 5.

RESPONSE OF EXISTING PANEL MEMBERS OVER TIME

Figure 2: Wave-to-wave retention of existing panel members

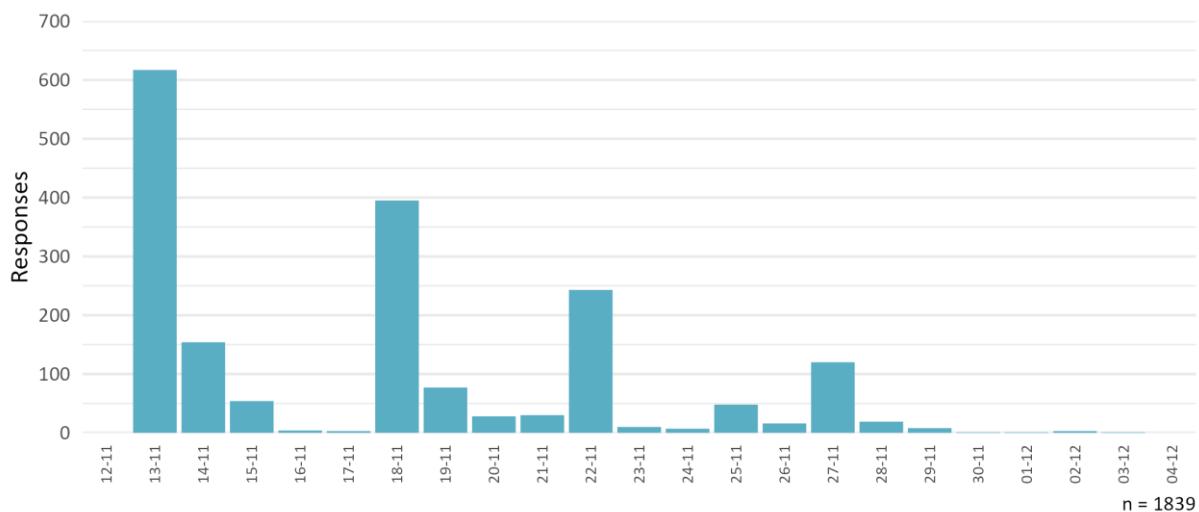


Wave-to-wave retention indicates how many respondents participated in each wave in relation to how many were initially recruited. Figure 2 shows that 53 percent of the respondents recruited in the first wave participated in wave 2, and now 35 percent remain in wave 6. A similar trend can be seen for those recruited in wave 2 and 3. Those recruited in wave 4 seem to have a higher initial retention rate, however, compared to previous waves, but also to respondents recruited in wave 5. In other DIGSSCORE panels, such as The Panel of Elected Representatives, we observe a pattern where retention drops sharply in the wave following recruitment, before stabilizing and descending slowly in future waves. We are starting to see the same pattern materialize for NFP participants.

OVERALL RECRUITMENT AND RESPONSES

The overall data collection among public administrators resulted in 1,839 survey responses among panel members. The data collection period occurred in November and December 2024 and closed on the 2nd of December. Figure 3 outlines when survey responses were collected.

Figure 3: Responses by date



We attempted to reach 4,413 panel members by individual email invitations, and 41.5 percent responded. However, our address list does not make up the whole population of public administrators. As noted above, approximately 22,000 persons were employed by the central government in 2020. Therefore, nearly 10 percent of public administrators in the central government participated in wave six of NFP.

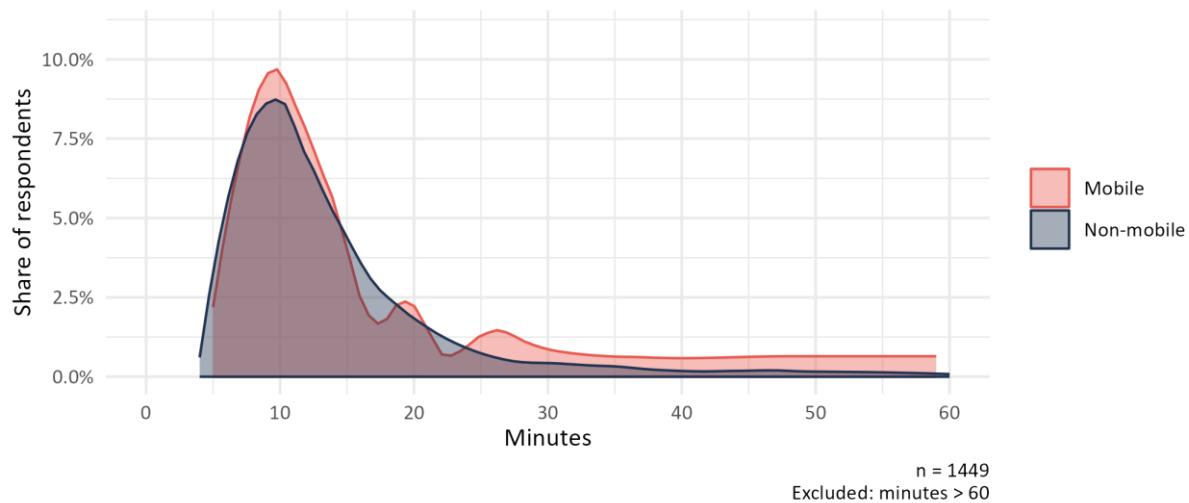
PLATFORMS

The questionnaire was made accessible for data input via mobile devices. 10.4 percent of survey respondents who completed the questionnaire used a mobile device. This is a much lower number than is observed for the Norwegian Citizen Panel (usually around 50%, see the documentation report for each wave for specifics), and for the Panel of Elected Representatives (28 percent in wave 8). The low share of respondents using mobile devices is not surprising however, as much of the contact information is comprised of work e-mails and the panel is directed to respondents in their function as employees in the state administration.

TIME USAGE

In the survey invitation, the respondents were presented with an estimated time of 10-15 minutes for filling out the questionnaire. When calculating average time spent, we account for respondents leaving the questionnaire open to complete the survey later. This idle time causes an artificially high average for completing the survey. To reduce noise in the data, respondents using more than 60 minutes are excluded from the calculation. Doing so results in an average response time of 13.7 minutes (table 4).

Figure 4: Time usage of survey respondents



On average, mobile device respondents spent less time than respondents using non-mobile devices, but just marginally. The difference between these groups is approximately the same as in the Norwegian Citizen Panel questionnaires, but an important difference is that the number of mobile device users in NFP is significantly smaller. Therefore, less emphasis should be put on the time difference in table 4.

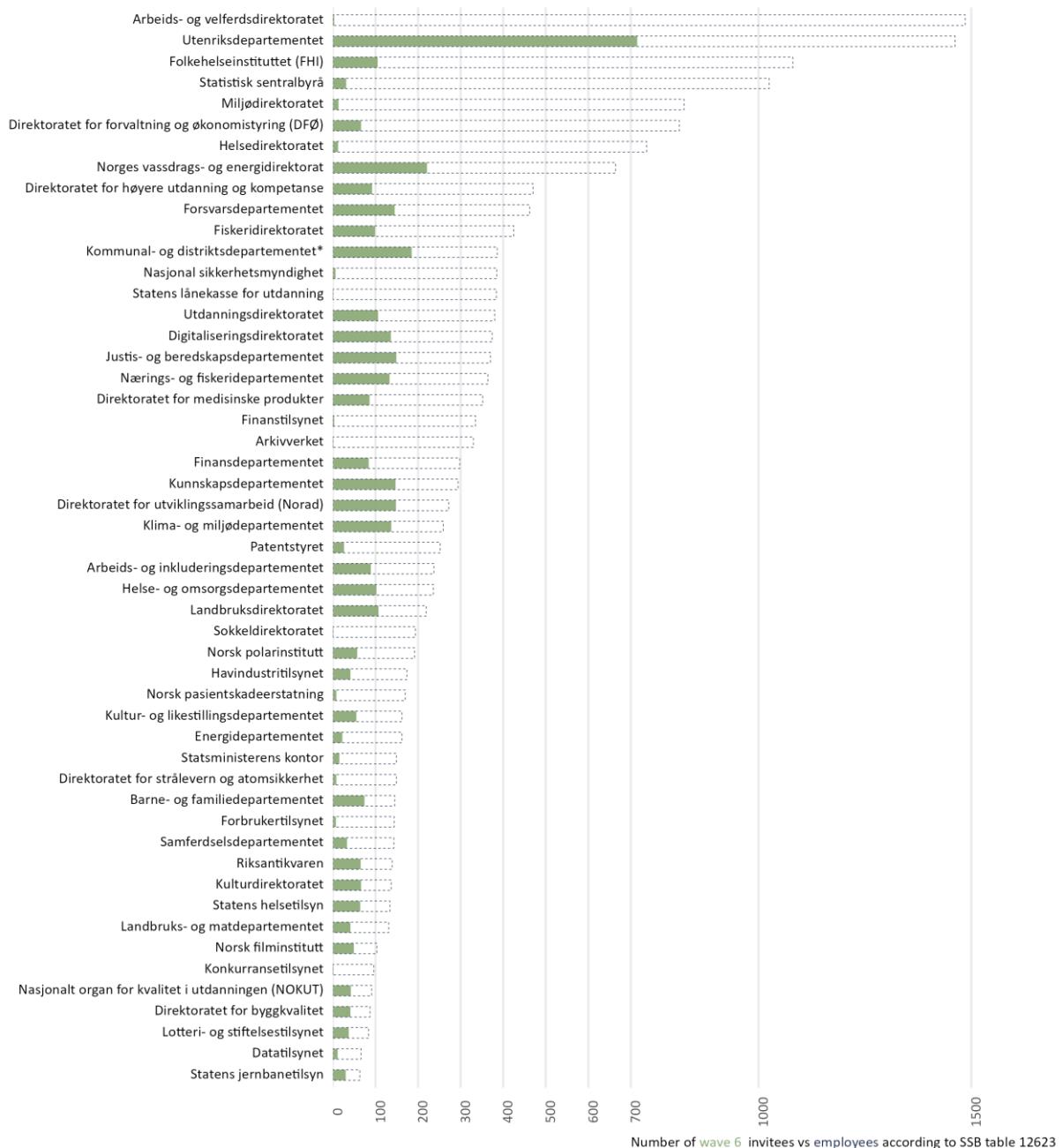
Table 4: Average time spent on questionnaire (minutes)

All	
All users	13.7
Non-mobile users	13.8
Mobile device users	13.5

REPRESENTATIVITY

In this section, we examine how well different demographics are represented in the panel, compared to their representation in the panel population (as defined in the chapter “The Population”).

Figure 5: Invited compared to number of employees by organization⁹



*In 2024, Kommunal- og distriktsdepartementet underwent a reorganization upon which the Digitaliserings- og forvaltningsdepartementet was established. Since the latest data from SSB is from 2023, they are shown as one ministry here.

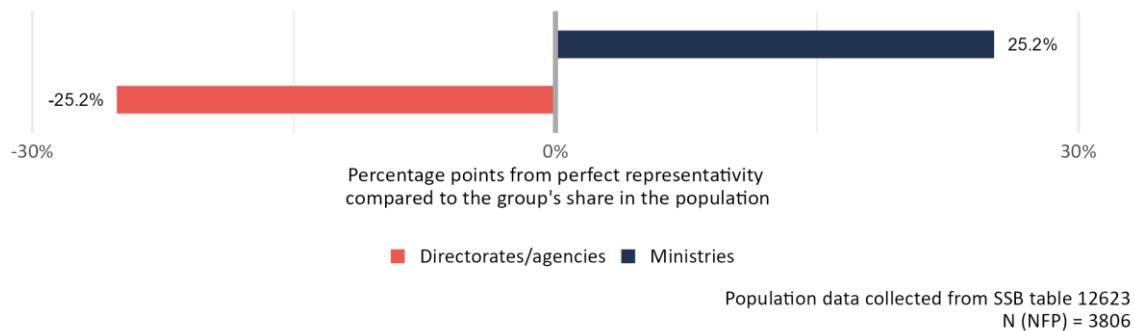
The gross sample of invited public administrators does not perfectly mirror the target population. While a portion of employees in most organizations have been invited in the 6 waves of the panel, there is a large discrepancy between the total number of employees and the number of invitees (Figure 5). In some cases, the discrepancy has been intended. Some organizations have extensive operational duties, and rather small administrative duties, and are intentionally not targeted for recruitment. This includes agencies such as Tolltaten (customs), Mattilsynet (Food Safety Authority), and Statens Vegvesen (Public Roads Administration).

⁹ Due to anonymity considerations, organizations with 60 employees or fewer are not displayed, but are counted in the representativity analysis. The following organizations are not displayed: Vegtilsynet, Dagligvaretilsynet, Kunst i offentlige rom (KORO), Medietilsynet, Norsk Akkreditering, Kulturtanken – Den kulturelle skolesekken Norge, Norsk Nukleær dekommisjonering, and Statens havarikommisjon.

In the following analyses, we have excluded these organizations, as the population statistics published by Statistics Norway do not differentiate between employees with administrative and operational duties. This procedure for calculating representativeness is slightly different compared to the previous waves. Whereas the previous procedure differentiated between organizations where the number of invitees closely matched the number of employees, the recruitment strategies in both wave 4 and 5 have been quite limited in scope compared to the preceding three waves, leading to a situation where essentially no organization would fulfill this criterion. As such, representativeness is calculated for all organizations where at least one respondent is employed and the abovementioned exclusion criterion is not fulfilled.

After applying this exclusion criterion, the target population has 5,260 employees at the ministry level and 13,132 employees at subordinate directorates/agencies.¹⁰ 28.5 percent of the target population were employed by ministries, 71.4 in directorates/agencies. In our net sample, 2,046 respondents (53.8 percent) were employed by ministries and 1,760 (46.2 percent) by directorates/agencies, leaving us with an overrepresentation of respondents employed by ministries.

Figure 6: Representativeness of administrative levels



On both administrative levels, ministries and directorates/agencies have an overrepresentation of respondents above 50 years of age (Figure 7). As a result of this, both levels have an underrepresentation of respondents aged 40 years or less.

Figure 7: Representativeness of administrative level by age

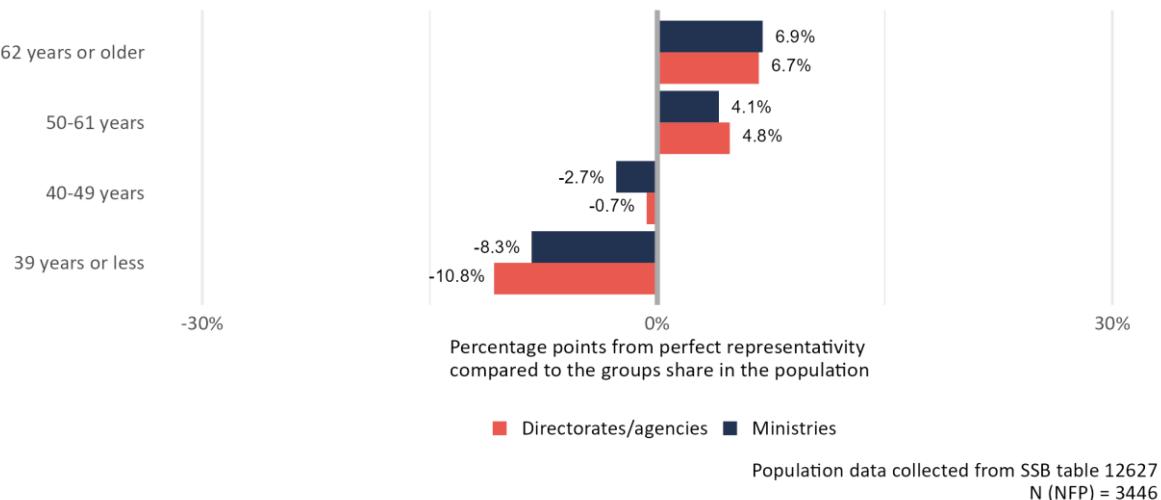
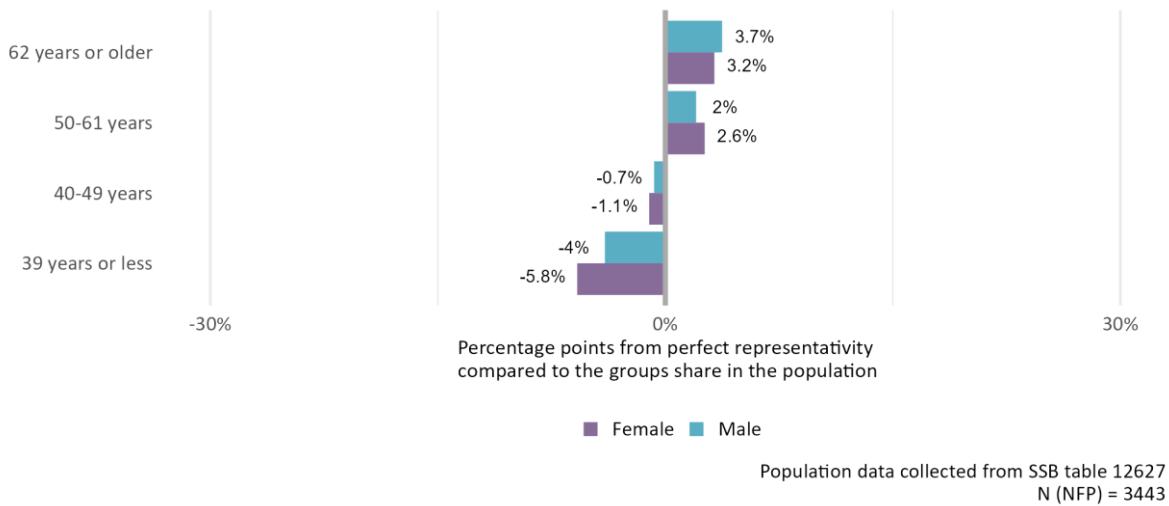


Figure 8 shows how the proportion of men and women in the panel compares to the proportion in the target population. There is a clear overrepresentation of respondents 50 years and above, regardless of gender. As we

¹⁰ According to SSB table 12623.

have already seen, younger employees are underrepresented. Female employees are more underrepresented than their male colleagues.

Figure 8: Representativity of men and women by age



Lastly, we turn our focus to the level of education. As in all DIGSSCORE panels, higher education levels are overrepresented among the respondents. However, the education level among public administrators is generally, and naturally, higher than among the general public. Most public administrators at ministries and directorates/agencies have university/university college education of more than four years. This is true for 71 percent of public administrators at ministries in the target population, and 57 percent at directorates/agencies. In NFP, public administrators with the highest level of education are overrepresented at both ministries and agencies/directorates (Figure 9), with the greatest overrepresentation at directorates/agencies.

Figure 9: Representativity of administrative level by education

