

Norway 2023 Technical Document - CATI

Sampling

A mobile only sample was used to complete 800 telephone surveys. 80% of the interviews were completed using a mobile sample generated using pure Random Digit Dial (RDD) procedure, while the remaining 20% utilizes a stratified random sample from a list of mobile numbers with known region information in order to target respondents from certain regions to form a more balanced sample.

Target Population/Coverage: Adult population (15 years of age or older) who have mobile phones for personal calls. It excludes business phone numbers. The coverage error (percentage of target population not accessible for sampling) is expected to be less than 4%.

Stratification: For the RDD mobile sample, the sampling frame was explicitly stratified by 2 mobile service providers in the market, and allocation across the strata was proportional to their market shares. For the listed mobile sample, the sampling frame was explicitly stratified by five regions, the allocation is based on the expected number of completes that can be achieved from the RDD mobile sample.

Sample Selection: In the case of mobile RDD mobile, sample of specified size was drawn using pure Random Digit Dial (RDD) procedures within each stratum. All sampled mobile phone numbers were pre-screened for working status. In the case of listed mobile sample, sample of specified size was drawn using simple random sampling method within each stratum.

For respondents reached on mobile, there was no random selection, just confirmation that they were 15 or older to participate in the survey.

For the purpose of data collection, the total initial sample was split into random subsamples (replicate samples) and released sequentially based on the progress of interviewing in different strata. The goal was to release an optimum amount of sample each time to achieve a high response rate while completing the targeted number of interviews within the field period.

Data Collection: March 20, 2023 – April 22, 2023

AAPOR3 response rate: 7%

Weighting: The sample data were weighted to minimize bias in survey-based estimates. The weighting procedure was formulated based on the sample design and was carried out in multiple stages. A probability weight factor (base weight) was constructed to account for unequal selection probabilities. At the next step, the base weights were post-stratified to adjust for non-response and to match the weighted sample totals to known target population totals obtained from country-level census data. The standard demographic variables used for post-stratification are: age, gender, education, and region.

Design Effect: 1.87

Margin of error: $\pm 4.7\%$ (95% confidence level)

Population sources used for constructing weights were based on the following:

Age, Gender, Region: Statistics Norway, 2023 population estimates

Education: Statistics Norway

Age	SAMPLE_UNWTD	SAMPLE_WTD	TARGET
15-24	6.5	11.5	14.4
25-34	12.4	16.0	16.7
35-44	16.6	16.3	15.9
45-54	21.4	17.4	16.2
55-64	18.3	15.8	14.7
65+	24.9	23.0	22.1
Education	SAMPLE_UNWTD	SAMPLE_WTD	TARGET
Lower Secondary and Below	5.6	18.6	24.1
Upper Secondary	32.6	41.9	39.3
Tertiary short and long	61.8	39.5	36.6
Gender	SAMPLE_UNWTD	SAMPLE_WTD	TARGET
Male	51.5	49.2	50.2
Female	48.5	50.8	49.8
Region	SAMPLE_UNWTD	SAMPLE_WTD	TARGET
Oslo	12.9	12.8	13.1
Vestlandet	20.6	20.1	20.4
Midt-Norge	13.5	14.1	13.6
Nord-Norge	8.5	9.3	8.9
Eastern Norway	30.6	30.2	30.3
Sorlandet including Telemark	13.9	13.5	13.6