

Singapore 2023 Technical Document

Sampling

A mobile-only sample was used to complete 1,000 telephone surveys.

Target Population/Coverage:

Adult population (15 years of age or older) who have mobile phones for personal calls or live in households with landline. It excludes business phone numbers. The coverage error (percentage of target population not accessible for sampling) is expected to be less than 2%.

Stratification: The mobile sampling frame was implicitly stratified by 9 mobile service providers in the market. For mobile sample, allocation across the strata was proportional to their market shares in terms of the count of mobile numbers they can possibly generate.

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

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: August 11, 2023 – January 21, 2024

AAPOR3 response rate: 1%

Weighting: The sample data was 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 correct 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.

Design Effect: 1.99

Margin of error: $\pm 4.4\%$ (95% confidence level)

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

Age, Gender, Ethnicity, Housing: Population and Population Structure (Statistics on Singapore's population are compiled by the Singapore Department of Statistics) for 2021

Education: Census of Population 2020

Age	SAMPLE_UNWTD	SAMPLE_WTD	TARGET
15-24	13.3	14.2	13.0
25-34	34.3	18.9	17.0
35-44	26.3	18.8	17.1
45+	26.1	48.1	53.0
Education	SAMPLE_UNWTD	SAMPLE_WTD	TARGET
Secondary or less	20.4	46.4	51.4
Polytechnic, professional, university	79.6	53.6	48.6
Sex	SAMPLE_UNWTD	SAMPLE_WTD	TARGET
Male	62.6	52.3	48.6
Female	37.4	47.7	51.4
Ethnicity	SAMPLE_UNWTD	SAMPLE_WTD	TARGET
Chinese	56.3	73.4	75.4
Malays	10.2	13.2	12.9
Indians	20.3	9.5	8.6
Others	13.2	3.8	3.1
Housing	SAMPLE_UNWTD	SAMPLE_WTD	TARGET
1-2 Rooms	8.1	5.1	4.4
3-4 Rooms	42.3	44.8	46.3
5+/Exec	21.3	25.7	25.8
Private/Landed	26.1	22.1	21.3