Opinions and Lifestyle Omnibus Service Methodology

One of the key strengths of the Opinions and Lifestyle Omnibus Service is our robust methodology. We run the only random-probability based omnibus service in Great Britain. The survey methodology is the same as that used for a number of our National Statistics publications, and ONS produces a number of National Statistics using Opinions and Lifestyle Survey data.

This robust methodology achieves a level of data quality that cannot be matched by the random location quota-based sampling approaches used by many other omnibus providers.

Scope

The survey covers all adults (those aged 16 and over) living in private residences in Great Britain.

The Sampling Frame

Like many other ONS social surveys, we use the Royal Mail's Postal Address File (PAF) of small users as our sampling frame. The PAF is the most comprehensive address database in the UK. It is updated every three months and contains approximately 26 million addresses.

Our sample covers the whole of Great Britain, excluding the Isles of Scilly and Scottish Highlands and Islands.

Sampling

The sample is stratified by region; the proportion of households with no car; the proportion of households where the household reference person is in the National Statistics Socio-Economic Classification (NS-SEC) categories one to three and the proportion of people aged over 65 years.

We select 67 postal sectors with probability of selection proportional to size. 30 addresses are randomly chosen from with each selected postal sector to give an initial sample of 2,010 addresses for each month that the survey runs.

When the interviewer visits the address, they determine the composition of the household and randomly select one person aged over-16 using a Kish grid. To preserve the random nature of the sample the interviewer will only interview the selected respondent. Proxy interviews (where another household member answers questions on behalf of the selected respondent) are not permitted on this survey.

Fieldwork

Letters are sent to all of the selected addresses in advance of the interview, to notify respondents that they have been selected and to give a brief account of the survey. The interviewing period last for four weeks and begins in the first week of the calendar month.

Our interviewers are all trained to carry out National Statistics surveys. They are instructed to make up to eight calls to an address if necessary, on different days of the week and at different times. Interviews are conducted using Computer Assisted Personal Interviewing (CAPI). For sensitive modules or questions, we can give the respondent the opportunity to self-complete sections of the questionnaire.

As with all National Statistics social surveys, we carry out quality checks on the fieldwork. Recall interviews are conducted with a sub-sample of respondents. These make sure that the correct respondent has been interviewed and that the responses given to questions are consistent.

Response Rates

The small user's PAF includes some addresses that fall out of scope of the survey, such as empty properties and businesses. These ineligible addresses usually make up about 8% of the sampled addresses.

The survey response rate is calculated as a proportion of the eligible addresses only. The Opinions and Lifestyle Survey usually achieves between 50%-60% response.

Weighting

Weighting factors are applied to the data. As a result of interviewing one person from each household, the likelihood that an individual is selected differs for households of different sizes. The probability of selection is inversely proportional to the household size. The **individual design weight** (wta) accounts for these unequal selection probabilities. It is calculated by dividing the number of adults in the household by the average number of adults per household.

Once the initial design weights have been produced, the data are calibrated to ONS population totals to produce **calibration factors** for each case. The method uses a standard calibration approach that produces weights which adjust to more than one margin.

The **individual analysis weight** (INDWGT) is calculated for each case by multiplying the rescaled individual design weight by the calibration factor. Despite the considerable efforts made by survey interviewers to maximise response rates, a proportion of the individuals selected either refuse to take part or cannot be contacted. The **individual analysis weight** compensates for some of the non-response bias and ensures that the cases gross up to ONS population totals of age-group by sex and Government Office Region.

Sometimes a module may collect information at a household level rather than an individual level. In these cases the appropriate unit of analysis will be the household rather than the individual. In these cases the design weight is not needed as each household has an equal probability of being selected.

The **household weight** (HHWGT) is the product of the household calibration factor and the household rescaled design weight. Ideally this design weight would be the total number of households in the population divided by the number of responding households in the sample. However as the total number of households in the population is not known, the ratio is estimated by dividing the total number of people in the population by the number of people in the responding households.

The design weight (wta) and the individual analysis weight (INDWGT) are included as standard to Omnibus Service clients. The household weight (HHWGT) can be included upon request.

Standard Errors

The Opinions and Lifestyle Survey is a sample survey and thus estimates are subject to sampling variability. The size of the sampling variability is dependent upon a number of factors, including:

- Sample size
- Effects of stratification
- Effects of clustering
- Effects of weighting

The impact of these varies for different estimates. Standard errors give an indication of the amount that a given estimate can be expected to deviate from the corresponding true population value.

We supply standard errors that account for each of the above factors, known as **complex standard errors**. The **design estimation factor** (DEFT) measures the effect of the sample design on the standard error. This is the ratio of the complex standard error to the standard error that would be associated with a simple random sample design without these design features.

Contact us

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