

A quick guide to Voices4all National Representation – how to sample and weight data including ethnicity, sexual orientation and disability.

How we sample

In order to collect a nationally representative survey sample we ensure that we have quotas in place that mirror the demographic profile of the nation – the current quotas are based on the latest data available to us (which in this case combines the 2011 Census, 2017 ONS data and disability prevalence estimates 2002/03 to 2011/12 - Apr to Mar).

Please see our full quota list on the next page

When carrying out fieldwork we stick as closely as possible to these quotas, but keeping them exact is often restrictive from a cost and time perspective. This is why, once a sample is collected, we might weight individual subgroups (gender, age, region, SEG, sexual orientation, ethnicity and disability) to make them adequately representative of the UK population.

Essentially, we want to avoid giving over-represented demographics a bigger voice than they should have, and likewise amplify any under-represented demographics to the right level.

A hypothetical example – we run a nationally representative study and end up with more respondents living in London than we should have (we only needed 260 and ended up with 300), we could potentially see very different views from these respondents compared with those of people living in the rest of the UK. If we were to use the data 'as is' then any analysis we did from this would be building hypotheses with a London-skewed world view. For this reason, we would weight the data to give the right balance. Over-represented demographics are also down weighted to deliver a fully balanced sample.

Best practice when weighting/balancing a sample:

It is important to note, however, that weighting can also distort data if best practice isn't followed. We seek to weight by a factor of no more than 1.5 to maintain quality and the integrity of the data we supply:

A simple example of 'good weighting':

- We know 18-24 year olds represent 11% of the adult UK population.
- In a typical sample of 2,000 this equates to 220 people.
- If we only collect interviews with 180 18-24 year olds we would weight each of these responses by a factor of 1.22 to create a weighted sample with 220 18-24 year olds.

The above is a perfectly acceptable example of weighting

Now let's look at a less successful example of weighting:

- As above we know 18-24 year olds represent 11% of the adult UK population or 220 people in a sample of 2,000.
- This time we only collect 110 interviews
- We now have to weight each response by a factor of 2 essentially doubling someone's viewpoint. This is less successful because we are still working with only 110 respondents and any response biases within that relatively small sample will be amplified

How to use the current voices4all approach to nationally representative UK surveys which are inclusive of ethnicity, sexual orientation & disability:

Below are our recommended target quotas for an adult Nat Rep 2,000 sample, along with the minimum sample sizes required to keep the weighting factor at or below our maximum recommendation of 1.5.

			Per 2,000 Nat Rep sample	
	Quota Group	Population Incidence	Sample - Target	Sample - Minimum
Gender	Male	49%	980	657
Gender	Female	51%	1020	683
	18-24	11%	220	147
	25-34	17%	340	228
A = 4	35-44	20%	400	268
Age	45-54	16%	320	214
	55-64	15%	300	201
	65+	21%	420	281
	North East	4%	80	54
	North West	11%	220	147
	Yorkshire and the Humber	8%	160	107
	East Midlands	7%	140	94
	West Midlands	9%	180	121
Region	East of England	9%	180	121
-	London	13%	260	174
	South East	14%	280	188
	South West	8%	160	107
	Wales	5%	100	67
	Scotland	9%	180	121
	Northern Ireland	3%	60	40
SEG	ABC1	55%	1100	737
SEG	C2DE	45%	900	603

Sexual	Heterosexual	98%	1960	1313
Orientation	LGB	2%	40	27

	White British	82%	1640	1099
	All Other White	5%	100	67
Ethnicity	Mixed	2%	40	27
Lumercy	Asian	7%	140	94
	Black	3%	60	40
	Other	1%	20	13

Disability	At least one impairment	20%	400	268
	No impairment	80%	1600	1056

It is important to remember that when sampling you must pay attention to how the data is falling out within the quota groups. Ending up with a balanced sample requires the correct set up (as detailed above) but also care and consideration when issuing invites. If you or your fieldwork partner just set the quotas, send out a huge bunch of invitations and let it run it is likely you will not be able to achieve the desired outcome. That said, it should also not be too hard, and our support is here to help you. If required, we can demonstrate a successful delivery of the above sample within 24-48 hours.

If you have any further questions or requests please contact one of your voices4all partners.