

METHODOLOGY PRIMER: BIAS

A 2020 ANNUAL SURVEY OF MUSEUM-GOERS DATA STORY



Bias. It is something that all researchers have to grapple with. And it is unavoidable.

When we field audience research, understanding *and* acknowledging bias is incredibly important. So let's explore two major ways bias affects this work.



1 First, sample bias.

Sample bias happens when a sample doesn't fully represent the public or an audience.



To be blunt, all surveys and methodologies have some degree of sample bias. Blind spots that are unavoidable.



Let's look at the Annual Survey of Museum-Goers.

Because this survey is sent out to the contact lists of museums, it is a classic *sample of convenience*. That means respondents are easy to reach and easy to convince to take the survey. Participating museums send out an email, post to social media, and bam! We have a sample!



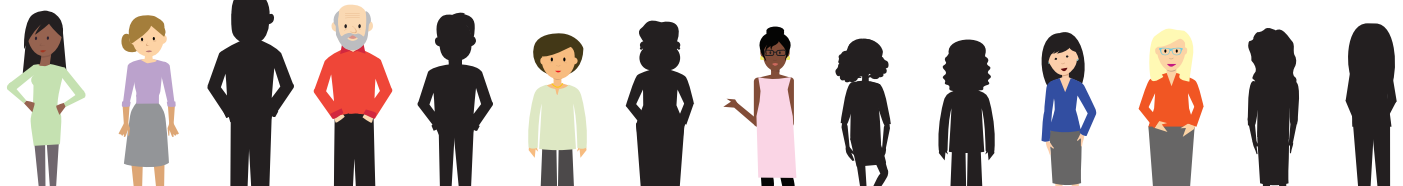
For the Annual Survey of Museum-Goers, our sample thus consists of people who visit museums on a regular basis: a small sliver of the population, but one that it is important for us to know well.

So there is nothing wrong with samples of convenience *provided they are clearly identified as such*. The onus is on us to make sure no one thinks it represents casual museum-goers or non-visitors.



Why?

When broader population samples are run, there is a large percentage of the population that is extremely difficult to survey. Surveys simply never reach them.



In particular, broader population surveys tend to dramatically under-sample three groups:

- 1 Low income and/or low educational attainment households
- 2 The extreme elderly
- 3 Recent immigrants

Typically, researchers mitigate this by weighting their sample. They do this by counting the responses of those who are under-represented more heavily than those who they over-sampled. Theoretically, this should work.

Sampling becomes more complicated when it comes to broader population sampling. To be clear, except for the US Census Bureau, *no one* adequately samples all of the broader population in a representative way. There is a blind spot. A big one: depending on the sample source, a **third to half the population are dramatically under-represented.**

But there are two fundamental problems with this mitigation attempt:

1 The individuals being weighted more heavily may not necessarily be representative of the population they are being assumed to represent. For example, we probably shouldn't assume that a recent immigrant who responds to a survey is going to answer in a similar way to all recent immigrants.

2 Since these under-represented groups are just that, under-represented, that means that only a few responses are inflated to represent a significant portion of a sample.

I'll be honest ...

I'm not comfortable with these assumptions. Instead, I'd rather acknowledge the sampling challenges and admit there are segments of the population that we are not reaching effectively in the research, despite our best efforts.



Thus, when looking at broader population results from any survey, *including mine*, take into consideration how large that blind spot is, and be cautious about assuming the results are truly representative of the broader population.



2 Second, researcher bias. We are going to get a bit personal here.

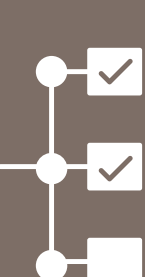
I have biases. I am a human being. It would be foolish to assume that my work is bias free. But that doesn't mean my research is unfair or inaccurate. I work hard to mitigate my biases.



How?

- I acknowledge my biases in the first place, and increasingly share a bias statement in my work
- I admit that my lived experiences have been as a white cis-female
- My values, attitudes, and beliefs skew heavily liberal
- Because the audiences and publics I study include other genders, life stages, people of color, and conservatives, I:
 - Strive to ground my research in evidence
 - Include multiple perspectives (and note when a "side" feels more strongly)
 - Deliberately include diverse backgrounds, characteristics, values, and political ideologies in qualitative work and in the reporting of research results
 - Rely on a small network of advisors from different backgrounds to assess if my findings are fairly represented ... or to call me on it when my bias comes into play

Projects can have biases, too. For the 2020 Annual Survey of Museum-Goers we wanted to assess inclusive attitudes ... with the assumption (bias) that inclusion is a good thing. But we also wanted accurate results, so we acknowledged that bias and strove to develop questions that would accurately assess a variety of attitudes towards inclusion.



So when you look at research, it is important to be critical in many ways, and understanding the different types of bias is a key part of that.

Ask yourself:



Who actually participated in the research?



What may be skewing the results?

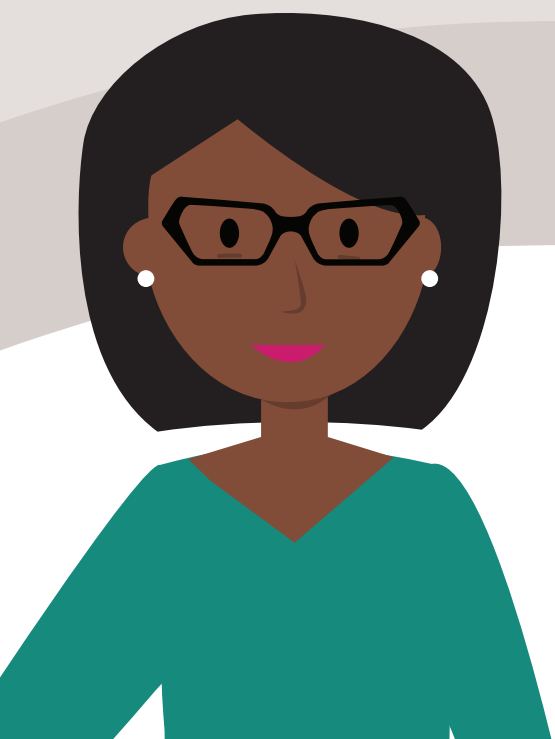


Are the researchers being upfront about who they are sampling?



And are the researchers considering their own biases and striving to mitigate them?

If you can answer these questions in ways that give you confidence, great! And if not, ask some questions. A good researcher will be happy to honestly discuss the role of bias in their research.



Annual Survey of Museum-Goers Data Stories are created by Wilkening Consulting on behalf of the American Alliance of Museums. Sources include:
• 2020 Annual Survey of Museum-Goers
• 2020 Broader Population Sampling
• 2020 Online Pandemic Panel of Museum-Goers (ongoing)
• 2017 - 2019 Annual Surveys of Museum-Goers

*Data Stories share research about both museum-goers (who visit multiple museums each year) and the broader population (including casual and non-visitors to museums).

More Data Stories can be found at wilkeningconsulting.com/data-stories.

