First, sample bias.

Sample bias happens when a sample doesn’t truly represent the public or a specific group. It often occurs when a group is under-represented and the survey results reflect only this group.

Why?

When broader population samples are run, there is a large percentage of the population missing. Thus, when looking at broader population results from any survey, one must take into consideration how large that blind spot is, and be cautious about assuming the results are truly reflective of the population.

To be clear, except for the US Census Bureau, our accuracy of samples at the broader population level is not perfect. There is a small gap. All projects depend on the reporting of individuals, and not all will fill the bias.

METHODOLOGY PRIMER - BIAS

Projects can have biases, too. For the 2020 Annual Survey of Museum Goers we acknowledged the assumption (bias) that inclusion is a good thing. By putting the assumption out there, and striving to mitigate it, we acknowledge the sampling and strive to make the results as robust as possible.

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).

• 2017 – 2019 Annual Surveys of Museum-Goers

• 2020 Broader Population Sampling

Annual Survey of Museum-Goers

Data Stories are created by Wilkening Consulting on behalf of the American Alliance of Museums. Sources include:

Why?

The individuals being weighted more heavily may not necessarily be the most representative of the population.

For example, we probably shouldn’t assume a recent immigrant to answer in a similar way to all others. Recent immigrants are clearly identified as such. Thus, when looking at broader population results from any survey, one must take into consideration how large that blind spot is, and be cautious about assuming the results are truly reflective of the population.

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

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. I admit that my lived experiences have been as a white cis-female. Because the audiences and publics I study include other genders, life stages, people of color, and conservatives, I:

• Rely on a small network of advisors from diverse backgrounds, ages, and experiences
• Deliberately include diverse backgrounds, genders, life stages, people of color, and conservatives
• Strive to ground my research in evidence
• Because the audiences and publics I study include other genders, life stages, people of color, and conservatives, I:
• Acknowledge my biases in the first place, and increasingly work to mitigate them
• Share a bias statement in my work
• Have some degree of sample bias, and acknowledge it in my work

It is something that all researchers have to grapple with.

How?

Sampling becomes more representative as the sample size increases. Theoretically, this is because respondents are easy to find, and the sample is representative of the broader population.

So when looking at broader populations then much of a survey, it is important to have an understanding of how the sample was selected, and the potential sources of bias in the research.

When we field audience research, understanding the fundamental problems with sampling is key. We are going to ask some questions. A good researcher will be happy to discuss the role of bias in their research.

Ask yourself:

Who actually participated in the study?

Are the respondents being representative of the people they are surveying?

Are they comfortable with sharing their own biases and striving to mitigate them?

If you can answer these questions in ways that demonstrate a good level of thought, great and if not ask some questions. A good researcher will be happy to discuss the role of bias in their research.