



Survey Response Rates

When conducting surveys, it is important to ensure that the results are as useful and meaningful as possible. One important way to do that is to make sure that the people who respond to the survey represent the overall population of interest. While having a high response rate can help to maximize this representativeness, it is one piece of a more complex picture.

How is the response rate calculated?

Generally, the response rate is calculated by taking the total number of people who responded to the survey and dividing it by the total number of people eligible to complete the survey.

There can be some subjectivity in defining who is considered “eligible” from the population. For instance, in most student surveys, the total number of people considered eligible is all students in the selected grades/classes/schools in which the survey is administered. In some cases, this is restricted to the students who were present on the day the survey was administered or the students whose parents consented to them participating (with either active or passive consent).

What is a good response rate?

While there are often thresholds discussed for what is considered a “good” response rate, any response rate below 100% (which is rarely possible), has the potential to introduce error.

Therefore, rather than identifying a specific threshold, it is important to consider the data itself within the context of how it will be used. The following questions can guide you in this consideration:

- **How similar is the group who responded to the overall population?** This is one of the most important questions to consider. You can have a high response rate and yet miss an important group of students, or you can have a low response rate that closely represents your student characteristics. Groves (2006) identified that there is not necessarily a connection between the nonresponse rate and nonresponse bias and there is no minimum response rate below which a survey estimate is necessarily biased and no response rate above which it is never biased. By answering this question, you will be able to determine which parts of your population are represented by the data, and which are not, and this will help you ensure that you are transparent in your messaging about the results of the data.
- **How will you be using the data?** If you are using the data to identify whether or not a phenomenon is present in your community, such as whether or not bullying is an issue in your schools, the response rate is less important in answering that question. On the other hand, if you are trying to identify the specific rate of underage alcohol use in your community, then the response rate, along with the representativeness of your survey respondents, are more important to consider. A lower response rate can be associated



with a larger margin of error, so you need to be more careful in your statements around the data.

- **How consistent is your response rate over time?** If you are planning to look at data over time, it is important to consider how comparable the respondents are over time. If your response rate goes up or down drastically, you may not be comparing apples to apples anymore. In this case, you would need to revisit the representativeness question and identify who is or is not included in the responses at each time point.
- **How easy is it to detect the issue you are measuring?** If you are trying to measure a phenomenon that is relatively rare, such as use of cocaine among students, it is important that you have enough respondents to determine whether there is actually a pattern of use versus one or two individuals reporting use. This is even more important if you are hoping to disaggregate the data in any way, such as by grade or gender or school, or if you are trying to look at small changes over time. If you have a phenomenon that is more common, such as drinking Coke, then the likelihood that error or chance is affecting the proportion of students in your specific survey who say they drink Coke is relatively low.

What do I do if I am not satisfied with my response rate?

In the last 20 years, survey response rates have decreased across different types of surveys (e.g., mailed surveys, phone surveys, web surveys) (Mathematica, 2016). Due to this decrease, consumers of data are often having to figure out how to use data with a lower response rate than they had hoped for or experienced in the past. Some potential strategies you can use include:

- **Be upfront about the limitations to your survey.** All surveys have limitations and it is important to be clear about the limitations of your survey, including the response rate and who was or was not included. Acknowledging the limitations does not undermine the quality of your data; it provides essential context for your audience to understand the data and increases your credibility as the author of products using the data.
- **Report what you confidently can.** If you can confidently report results for middle school students, but not high school students, then share what you can about middle school students. Alternatively, if you are able to more confidently report themes, rather than precise numbers, that can still be useful. For instance, if you could say that male respondents tended to drink alcohol more frequently than female respondents did, it will still be informative, even if you are not able to report the exact rate for each group with confidence.
- **Look for themes across data sources.** Look at other data you have access to, such as school disciplinary records, law enforcement data, healthcare data, or qualitative data, alongside your student survey data to try to tell a story. This can help you confirm patterns or themes, or add context to the results you are seeing in your survey results.

References



Czajka, J.L. & Beyler, A. (2016). *Declining response rates in federal surveys: Trends and implications*. Mathematica Policy Research. Washington DC.

Groves, R. M. & Heeringa, S. (2006). Responsive design for household surveys: Tools for actively controlling survey errors and costs. *Journal of the Royal Statistical Society Series A: Statistics in Society*, 169, 439-457.

Glossary

- **Response rate:** Response rate refers to the number of people who completed your survey divided by the number of people who make up the total sample group.
- **Margin of error:** The margin of error (+/-) gives a measure of statistical uncertainty. Adding and subtracting the margin of error from an estimate gives a range with a certain level of confidence that the true population value falls within that range. In survey data, we often use margins of error for a 90% or 95% confidence level.
- **Nonresponse bias:** Nonresponse bias is the bias that results when respondents differ in meaningful ways from nonrespondents.

