

Step Four**Assess the Validity of Your Findings** — *Quantitative Methods*

Validity refers to the accuracy of the data collected through your survey: did the survey collect the information it was designed to collect? It is the responsibility of the evaluator to assess the factors that may affect the accuracy of the data and present those factors along with results. Threats to validity of surveys usually fall in one of the following categories:

- *Response rate.* As mentioned above, when small percentages of respondents return surveys, the potential for bias must be acknowledged. Even when using the strategies discussed earlier in Step 2 (see Box 1), you may not obtain an adequate response rate. If resources allow, you can assess the degree of bias somewhat with follow-up interviewing or surveying of nonrespondents. For instance, if you suspect that those who responded were biased in the favorable direction, you could conduct a phone survey with a random selection of 10% of your respondents with a few simple questions to explore the extent of bias.
- *Low completion rate of specific sections of surveys.* If many respondents do not complete certain sections of the survey, you will have to question the findings of that part of the survey. For instance, respondents may not finish the survey, leaving final sections or pages blank. To avoid this problem, keep your surveys as short as possible. For electronic surveys, provide a “progress bar” that tracks the percentage of questions completed as the respondent proceeds through the survey.
- *Low completion rate of questions.* Even if you have a respectable response rate, you may have questions that are left blank by a number of respondents. There are several reasons why respondents do not answer particular questions. They may not find a response that applies to them, the question format may be confusing, or they do not understand the question. The best strategy for avoiding this problem is to carefully pilot your questions. If your survey asks questions that are sensitive or threatening, your best strategy for getting responses is to conduct an anonymous survey.
- *Socially desirable responding.* Sometimes respondents are embarrassed to answer questions truthfully. If possible, avoid using questions that ask people to disclose information that may be embarrassing or threatening. This challenge may occur if your survey asks respondents to report health behaviors such as drinking, drug use, or even dietary habits. If you must ask such questions, providing anonymity may enhance the accuracy of responses. You may be able to find published studies that estimate the extent to which people in general overestimate or underestimate certain health behaviors (such as daily calorie consumption).

You cannot *prove* validity. You must build your case for the credibility of your survey by showing that you used good design principles and administered the survey appropriately. After data collection, you assess the shortcomings of your survey and candidly report how they may impact interpretation of the data.

Surveys allow you to collect a large amount of quantitative data, which then can be summarized quickly using descriptive statistics. This approach can give you a sense of the experience of participants in your project and can allow you to assess how closely you have come to attaining your goals. However, based on the analysis given for each table on pages 15 and 16, you may notice that the conclusions are tentative. This is because the numbers may describe what the

respondents believe or feel about the questions you asked but they do not explain *why* participants believe or feel that way. Even if you include open-ended questions on your survey, only a small percentage of people are likely to take the time to comment.

For evaluation, the explanations behind the numbers usually are very important, especially if you are going to make changes to your outreach projects or make decisions about canceling or continuing your efforts. That is why most outreach evaluation plans include a combination of qualitative and quantitative methods.