## Is the PRC survey valid?

In a word, yes. Validity is the extent to which an indicator measures what it is intended to measure. Individual questions and the overall survey instrument can be assessed for validity through a number of ways:

The simplest and most widely-used test for establishing validity is the **concept or face validity** test. This test does not involve any mathematical analysis; instead, it involves evaluating whether there is a clear logical or theoretical connection between the concept being measured and the variable itself. This process is done through a variety of key techniques: looking for double-barreled questions that ask about two or more distinct ideas; examining the response options for distinction and coverage of the breadth of possible responses; and identifying any vague language in the question. In the end, though, face validity really comes down to the "eye test." At a glance, does the survey get at the core concepts one wants to measure? At PRC, our Survey Design Team is entrusted with this task.

Predictive or external validity uses mathematical analysis and tests a question or an instrument by checking the results it produces against external data. We can say that an instrument has validity when the predicted result of the indicator matches known evidence. While this might sound like the easiest or most obvious way to evaluate a survey, it can be a challenge. For example, we can compare collected data with the data collected from the same hospital in the previous year, or data collected at the same time, but from a different hospital; but both of these would carry external variables that would make a simple comparison for validity extremely difficult. Despite these difficulties, however, there are some mathematical tests that will give an indication of data validity. These tests examine the data for the presence of past patterns and relationships that indicate valid data are still in place.

Convergent or internal validity uses mathematical analysis and compares different measures in the same instrument to see if they produce the same result. If different measures in the same instrument produce a similar result, then each indicator is considered a valid measure of the concept in question. For example, within a specific study, we can test the validity of various nurse-aspect questions against the "Overall Quality of Nursing Care" question since we would expect that all nursing questions are going to be interrelated. Examining the results of these interrelated measures allows us to establish the validity of the indicators, supposing the results are similar. There are a number of tests—such as correlations and factor analysis—that we will often employ to establish whether any battery of questions is producing valid data.

The challenge with answering questions about validity is that different audiences have different expectations for the specificity of responses. You never want to overwhelm an audience with too much detail any more than you want to patronize an audience that wants a deeper discussion. Always remember that PRC is here to help you find the best way to alleviate concerns.



