
Is the PRC survey reliable?

Reliability is the degree to which a measure will produce the same result every time. A ruler is inflexible; its demarcations do not vary. When we use it to measure a block of wood, for example, it produces the same result every time. Likewise, a good survey question should produce the same response from a respondent each time it is asked.

Therein lies the challenge. Unlike a ruler and a block of wood, reliability is tough to measure in survey research. One could “measure twice” by asking the same question a second time in the same survey. But, if you ask the question twice in close proximity, a respondent is likely to simply remember what they said the first time and repeat it to be consistent. This gets us no closer to determining reliability. If the repeated question is asked later, after other questions to minimize the simple remembered parroted response, “time” is introduced as a variable. A person’s opinion might change as the result of those intervening questions and would therefore produce different results; this would not question the reliability of the measure but the permanence of the opinion.

To this end, there are two good ways to test the reliability of a survey question.

1. The first way is to simply include different measures designed to measure the same aspect. Instead of asking one question on nursing care, one would ask three or four, each focused on a different aspect of that care—call light response, explanation of tests, understanding and caring, for example. We would expect that these questions would be correlated; therefore a patient’s responses to them become a good measure of the reliability that these questions actually measure nursing care.
2. The second way to measure reliability is to compare like sub-samples. One could divide up the sample into theoretically similar sub-groups and run analysis of variance on them. PRC has performed analysis of variance (or ANOVA) and other statistical tests to verify that our measures are consistent over various assumed standard subgroups. For example, we have demonstrated that our measures are stable across:
 - Hospital Bed Size
 - Metropolitan vs. Rural Hospitals
 - Region of the Country
 - Primary vs. Tertiary Facilities

Establishing reliability is a journey and not a destination. One must be vigilant to assure that yesterday’s measure is still accurate tomorrow. PRC takes that mission seriously and is constantly testing data both for individual hospitals as well as nationwide to verify its measurement tool is reliable. After all, it is difficult to have confidence in data, let alone act on it, if the tool is not reliable.

