

Validity and Reliability

Validity is an important concept in survey/opinion research. Without validity you have meaningless data/results and have wasted a great deal of time and money. *Validity refers to the degree to which a survey questionnaire accurately reflects or assesses what the researcher is attempting to measure or assess.* Be cautious when someone tells you a survey is valid for your organization, what they were trying to measure or assess are not likely the same as what you want to measure or assess. Surveys are marketed using promises of "industry norms" to compare your results with. Weigh carefully the value of such comparisons against the almost certain lack of fit with your culture, philosophy and way of managing. Our customers comment that it is often difficult to benchmark one hospital against another in the same hospital system. 360° executive, manager, or employee feedback questionnaires are particularly prone to validity issues. Where possible we ask the supervisor and self respondent to answer the same set of questions rating them for importance. A good diagnosis of your organization or an individual is not likely to come from a generic instrument with lots of normative comparisons. This is why custom surveys are more frequently used than "off-the-shelf" surveys for employee opinion surveys, but this is not the case for 360° feedback.

Reliability is the extent to which a survey yields the same result on repeated trials. Reliability centers on the accuracy of the survey questionnaire in repeated use. Constructing a soundly developed survey is the first and most important step in achieving both validity and reliability. If survey construction is sound, we have found it repeatable between administrations as well as when take by other persons. One example of this is when we demonstrated the reliability between repeated employee administration and that of healthcare secret shoppers, the mean scores when displayed on a line graph were parallel and overlapping.

The good news is that demonstrating validity is relatively easy, compared to reliability. The validity of a survey questionnaire relies first and foremost on reliability. If the questionnaire cannot be shown to be reliable, there is little reason to discuss validity. *There are no statistical tests for validity.* When a survey is "validated" it means that the researcher has come to the opinion that the survey is measuring what it was designed to measure. Validity is an opinion; nothing more.

The following method, one approach, can be used to improve the validity of the survey. It is fast, costs little and you'll get immediate and valuable feedback you can use to improve your questionnaire.

1. Identify several people at varying levels and departments to complete the survey as respondents.



2. Give them a "final" copy of the survey and say something like, "Please complete this survey as if you were a real respondent. You can just make up the answers. Feel free to ask me any questions while you're completing it". If it's an Internet survey, have them take it on the Internet.
3. If they ask a question about the survey, that indicates a defective item. Real respondents will not have an opportunity to ask questions.
4. Then provide them with information about what you are trying to measure and ask them to compare the questionnaire to your criteria. Is everything being measured? Are there things being measured that don't relate to the criteria?
5. Modify all items that were mentioned. Then begin the process again with a new group of respondents, and continue until there are no questions or changes in content. Usually, you'll be done after two or three cycles of "pretend respondents".

The above process can be accomplished on the Internet by providing ample text boxes for comments as the progress through the survey and space for comments about how well the survey meets the measurement criteria.

There are three major types of validity:

- Content validity determines if the survey items are representative of the topic being measured.
- Criterion-related validity relies on statistical analyses rather than judgments as in content validation.
- Construct validity attempts to understand what is being measured by examining the relationship between constructs (an abstract idea used as an explanatory concept--such as motivation or satisfaction).