Validity  by: Dr. Sue Roe DPA, MS, BSN, RN

There are many important terms holistic nurse researchers must be comfortable with. **Validity** is one of those terms. From a research design perspective, having a valid study means that it accurately measures a specific concept or concepts the researcher is attempting to measure. For example, one study might be determining whether aromatherapy coupled with massage decreases mental fatigue.

In designing the study, the researcher will first determine face validity. Face validity is how a measure or procedure appears "on the face of it". For instance, does this seem to be a worthwhile study? Is it well designed? Are the methods for collecting data reasonable?

The researcher will also need to ensure *external* and *internal* validity. Having *external* validity means the study results can be generalized across other populations, settings, outcomes, times, and treatments. This can apply to quantitative and qualitative research designs.

*Internal* validity deals with the accuracy of results. Is there sufficient evidence to substantiate the results? The focus is on controlling for possible confounding variables so the only factor(s) that affect the dependent variable is the independent variable. The question posed in internal validity is, "might there be an alternative reason for what was observed and/or for the results of the study?" There can be threats to internal validity. These might be bias or effects of the testing instruments used.

Internal validity offers confidence. In our example, this researcher will have high internal validity if it is found that aromatherapy coupled with massage decreased mental fatigue rather than confounding variables such as changes in nutrition or sleep habits.

Validity extends to statistics, and in particular, the validity of testing instruments. Here validity has a similar purpose - does a testing instrument measure what it claims to measure? Taking our example one-step further, let's say this researcher decides she will use a fatigue scale to measure the sample's perception before and after the treatment of massage and aromatherapy. She will need to understand three types of test validity:

1. **Content Validity**: Content validity is the extent to which a testing instrument reflects the specific and intended scope of content. For example, did the scale selected by the researcher cover all possible dimensions of fatigue?

2. **Criterion Validity**: Criterion validity, also referred to instrument validity demonstrates accuracy by comparing it with another measure or procedure deemed valid. There are two types of criterion validity: Concurrent validity is accomplished when a testing instrument, such as the one selected by our researcher, is benchmarked with another fatigue scale measuring the same concepts and the result is a high correlation. Predictive Validity occurs when results from a testing instrument are able to predict future designated outcomes or results.

3. **Construct Validity**: Construct validity seeks agreement between a theoretical concept and a specific measuring device or procedure. For example, in our study, the fatigue scale selected (or developed) should measure fatigue as it was defined for this study. It cannot measure other concepts such as sleep deprivation or stress. Construct validity has two sub-categories: Convergent validity and discriminate validity. Convergent validity means an agreement that the concepts expected to be related are in fact related. Discriminate validity is the reverse. There should be no relationship among concepts, which theoretically should not be related.
A Few Sources: