Quick Study: Research

Randomized Controlled Trial: Randomized Controlled Trials are studies that measure the effect of an intervention by randomly assigning groups or individuals to either an intervention group or a control group. These are difficult to do in social work practice because it could be considered unethical to withhold treatment to people who need it in order to make a “control group.”

Quasi-Experimental Design: Commonly used in social science research - this type of research is typically identified as being void of randomization of either subjects or treatment and/or the lack of comparison groups. Yet, there is still an attempt to isolate the treatment. As an overarching goal, the body of quasi-experimental research attempts to answer questions such as: “Does a treatment or intervention have an impact?” and “What is the relationship between program practices and outcomes?”

Single Subject Design: Research where the subject serves as his/her own control, rather than using another individual/group. Ex. A medical social worker wants to see if texts improve medical compliance to treatment in diabetic patients. They start with a baseline measure of compliance, text clients daily for a month while measuring compliance, then stop texting and measure compliance again.

Retrospective Design: Retrospective design. In a retrospective design, participants are asked to retrospect (literally, to “look back”) and try to remember what they were like at an earlier time point. For example, researchers could ask teenagers about how they were disciplined as young children.

Cross-sectional Design: In a cross-sectional design, researchers collect data at a single point in time from participants of different ages. For example, researchers might hypothesize that people become more traditional in their attitudes and more resistant to social change as they get older. To study this, they might get participants in their 20s, 40s, and 60s to complete a measure of traditionalism and then test whether there is a positive correlation between age and traditionalism.

Longitudinal Design: In a longitudinal design, the same people are measured at different ages. For example, researchers could follow the development of babies with developmental delays.

Cross-sequential Design: A cross-sequential design is a combination of cross-sectional and longitudinal designs. At the first time point, groups of people from several different ages are measured. If the design were to stop there, it would be a simple cross-sectional design, but these groups are then followed over time.
Validity: the degree to which the tool measures what it claims to measure

- **Internal Validity:** the confidence that can be placed in the cause-and-effect relationship in a study
- **External Validity:** the extent to which an effect in research can be generalized to other populations, settings, and treatment variables
- **Concurrent Validity:** the extent to which the results of a particular test, or measurement, correspond to those of a previously established measurement for the same construct. Ex: You want to make sure that the test accurately measures what it is supposed to measure. One way to do this is to look for other tests that have already been found to be valid measures of your construct, administer both tests, and compare the results of the tests to each other.
- **Predictive Validity:** involves testing a group of subjects for a certain construct, and then comparing them with results obtained at some point in the future. Ex. You want to predict the risk factors for High School Drop out. You create a survey for 10th graders then look at high school drop out rates of the surveyed students so see if the results predicted dropping out.

Reliability: the overall consistency of a measure. Higher reliability indicates a measure will produce statistically similar results under consistent experimental conditions. Ex. If two different social workers administer the same interview to a client, do they get the same results.