

Topic #7

OBSERVATIONAL DESIGNS

In the context of this class, we will define observational research designs as research methodologies in which the researcher observes, records, and quantifies (i.e., "scores") ongoing behavior.

Consequently, in the context of this definition, observational designs can be either experimental or nonexperimental. That is, we can have observational designs in which we manipulate variables since we are defining them in terms of the data collection protocol.

The manner in which the data are collected is the defining characteristic of observational designs or research.

- The data collection procedure forfeits some degree of control.

Some Important Issues in the Use of Observational Designs

1. Sampling of observations—must be randomized or nonsystematic.
2. The observer as a test—must meet all the psychometric requirements of a good test, that is, he/she must be:
 - a. reliable—scorer and test-retest
 - b. valid
 - c. standardized
 - d. objective
3. When there is more than one observer, observer characteristics (experimenter effects) become a possible extraneous variable and must be controlled:
 - a. train raters to standardize
 - b. build into design as a moderator variable
 - c. select for good observers
4. Levels of observation
 - a. **naturalistic/complete observation**—research conducted in such a way that the participants' behavior is disturbed as little as possible by the observation process (e.g., observing shoppers at the mall or deer from a tree stand).

- b. **observer-participant**—observations are made such that there is no interaction, but the participants are aware of the observer's presence.
 - c. **participant-observer**—researchers participate in naturally occurring groups and record their behaviors (e.g., "end of the world" cult and cognitive dissonance).
 - d. **complete participant**—observations made within the observer's own group (e.g., reports of Aggie life by student journalists with the Battalion). The observer is completely immersed in the activities being observed because he/she is part of the group.
- These four levels fall along a continuum from the least intrusive/reactive (naturalistic observation) to the most intrusive/reactive (complete participant).
 - *Potential Problems*
 - A. intrusiveness
 - B. reactivity
 - C. issues of privacy
5. Offline (e.g., video tape and later watch and code tapes) vs. online observation (e.g., sitting in the same room with research participants [assessment centers]).
- Advantages and disadvantages; trade-offs pertaining to:
 - a. measurement
 - b. levels of observation—reactivity, intrusiveness, and privacy issues
 - c. post-administration consent, especially in protocols with teams and groups where one person declines, etc.

QUESTION

Can we make causal inferences from observational designs? And if we can, how strong will they be?