

Topics for discussion 3

Chapters 3

How to construct a good research design

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1. What is the “**pre-experimental design**”?

1. This kind of design are not really considered model experiments because they do not account for extraneous variables which may have influenced the results. The internal validity of such a design is also questionable.

Can you think of any examples?

2. The most commonly used forms are described as the following page.

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2. Compare the “one shot case study” and the “one-group pretest-posttest design” and the intact group design.

1. X (some experimental instruction or treatment) T (some sort of test)
(neither valid nor generalizable)
2. T1 (pretest) X (treatment) T2 (posttest)
Measure the gains, without controlling groups, the claims can't be justified.
3. G1 (group 1) X (treatment) G2 (group 2)
vs. G1 G2 (no treatment)
Preexisting differences

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3. What is the use of the pre-experimental design?
Can it also be a “sound” study or research?

1. To have the experiment serve as a pilot study.
2. Child language acquisition study, ethnographic study, etc.

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4. What is the “true experimental design”?

A true experiment should have the following qualities:

1. a control group,
2. Ss are randomly selected and assigned to the groups, and
3. a pretest is administered to capture the initial differences between the groups.

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5. What is the “quasi-experimental design”?

1. It might compromise between true experimentation and the nature of human behavior
2. For instance, time-series design (repeated measure)
T1 T2 T3 X T4 T5 T6
T1 X T2 T3 O T4 T5 X T6 etc.

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6. What is the “EX POST FACTO design” ?

1. From what is done and see the relationship, correlation, rather than determine the cause-effect relation between variables.

2. Most commonly seen types: correlational designs, criterion group designs.

T1 T2;

G1 T1 vs. G2 T1