

Check Your Understanding

Types of Experimental Designs



Experimental Designs

- Notation R, X, O, A B C D
- Pre-experimental (no control threats)
 - Single group posttest only
 - Single group pretest posttest
- Quasi-experimental (some control)
 - Nonequivalent groups posttest only
 - Nonequivalent groups pretest posttest
- True experimental (most control, RCT)

Notations

• A X O
• A O X O

• A X O
B O

• A O X1 O
B O X2 O
C O X3 O

• R B
A X O
O

• Control group vs comparison group (BAU)
A O X1 O
R B O X2 O



How to decide which exp design is used

- 1st are there different groups of participants formed by researcher?
 - Yes = experimental
 - No = nonexperimental
- 2nd Is researcher in control of the IV? (who gets it and how much)
 - Yes = experimental
 - No = nonexperimental
- 3rd How many groups did researcher form? A, B, C, D etc
 - Not number of locations from where Ps were recruited from, but did the researcher form treatment/comparison groups once they were recruited
- 4th Did researcher randomly assign groups to treatment/control?



Draw the Design & Name it

- 2 groups randomly assigned to treatment and control with one pre & one posttest before and after intervention
- 4 groups (2 treatment, 2 comparison) with one pre & one posttest
- Two groups (1 treatment, 1 control) with an intervention and 2 posttests
- 2 groups randomly assigned to treatment and comparison group with pre and posttest



Answers

- 2 groups randomly assigned to treatment and control with one pre & one posttest before and after intervention **Randomized pretest posttest**

R A O X O
B O O

- 4 groups (2 treatment, 2 comparison) with one pre & one posttest

Nonequivalent groups pretest posttest

A O X1 O
B O X1 O
C O X2 O
D O X2 O

- Two groups (1 treatment, 1 control) with an intervention and 2 posttests
Nonequivalent groups posttest only

A X O O
B O O

- 2 groups randomly assigned to treatment and comparison group with pre and posttest **Randomized pretest posttest**

R A O X1 O
B O X2 O

