

Bias

- S e l e c t i o n
- U n d e r c o v e r a g e
- R e s p o n s e
- N o n r e s p o n s e

Vocab/Extras

- D o u b l e v s . S i n g l e B l i n d
- C o n f o u n d i n g V a r i a b l e
- C o n t r o l G r o u p
- P l a c e b o , P l a c e b o E f f e c t
- E x p e r i m e n t v s . O b s e r v a t i o n a l S t u d y

Treatment imposed, cause and effect relationship

Sampling Methods

- S i m p l e R a n d o m S a m p l e
- S t r a t i f i e d S a m p l e
- C l u s t e r S a m p l e
- S y s t e m a t i c S a m p l e
- C o n v e n i e n c e S a m p l e

3 Write-Ups

- Slips of Paper
- Calculator
- Random Digit Table

not SRSs because not every group is possible

Why random assignment?

In Sampling: Allows us to generalize to the population

In Design: Reduces bias to any confounding variables that might have an effect on the **response variable**.

Experimental Design

- C o m p l e t e l y R a n d o m i z e d D e s i g n
- B l o c k D e s i g n
- M a t c h P a i r s D e s i g n

We block to reduce sources of variability

Choose similar blocks, apply each treatment to each block

- R a n d o m i z a t i o n
- C o n t r o l
- R e p l i c a t i o n
- B l o c k i n g