

Types of Experimental Design

- Completely Randomized Design - when ALL experimental units are randomly assigned to a treatment (ALL drawn out of a big hat)

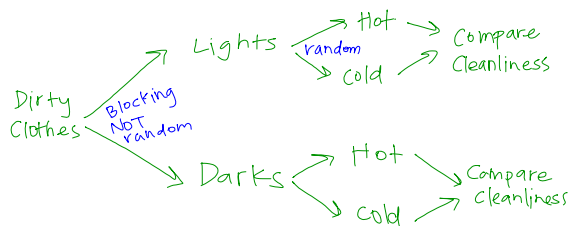
- Block Design - purpose: controls to reduce variability

1st: divide experimental units into Blocks (groups that share characteristics that might affect the outcome)

2nd: randomly assign experimental units to treatments WITHIN EACH BLOCK.

3rd: compare the results WITHIN EACH BLOCK.

ex: Does new detergent work better in hot or cold H₂O?



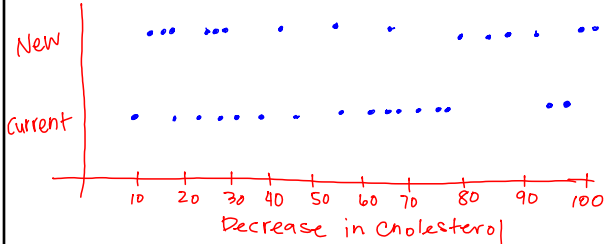
- Matched Pairs Design: special kind of block design where we use blocks of 2 experimental units

→ pair 2 similar people together & randomly assign one treatment to each

OR if possible, give each person both treatments, but randomly assign order.

Cholesterol Activity

Completely Randomized:



Matched Pairs:

