



Family Medicine

Research Study Design 101 for Primary Care

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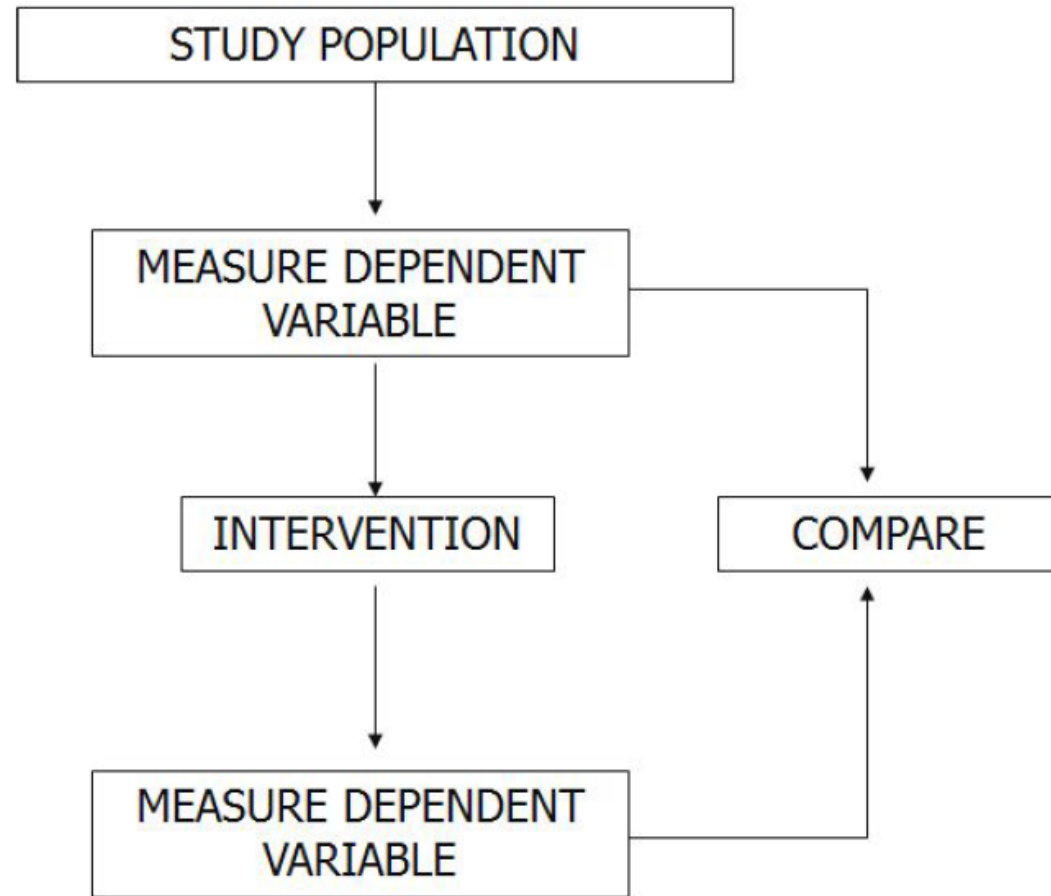
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Pre-post interventional research design

Cost	Can be expensive
Time	Varies (Relatively short)
Research Question	Test an intervention (pilot) When you have a small target population
Viewed as	Generally weak especially if effect is minimal
Variant	Double pretest design
Examples	CHAP-EMS pilot study

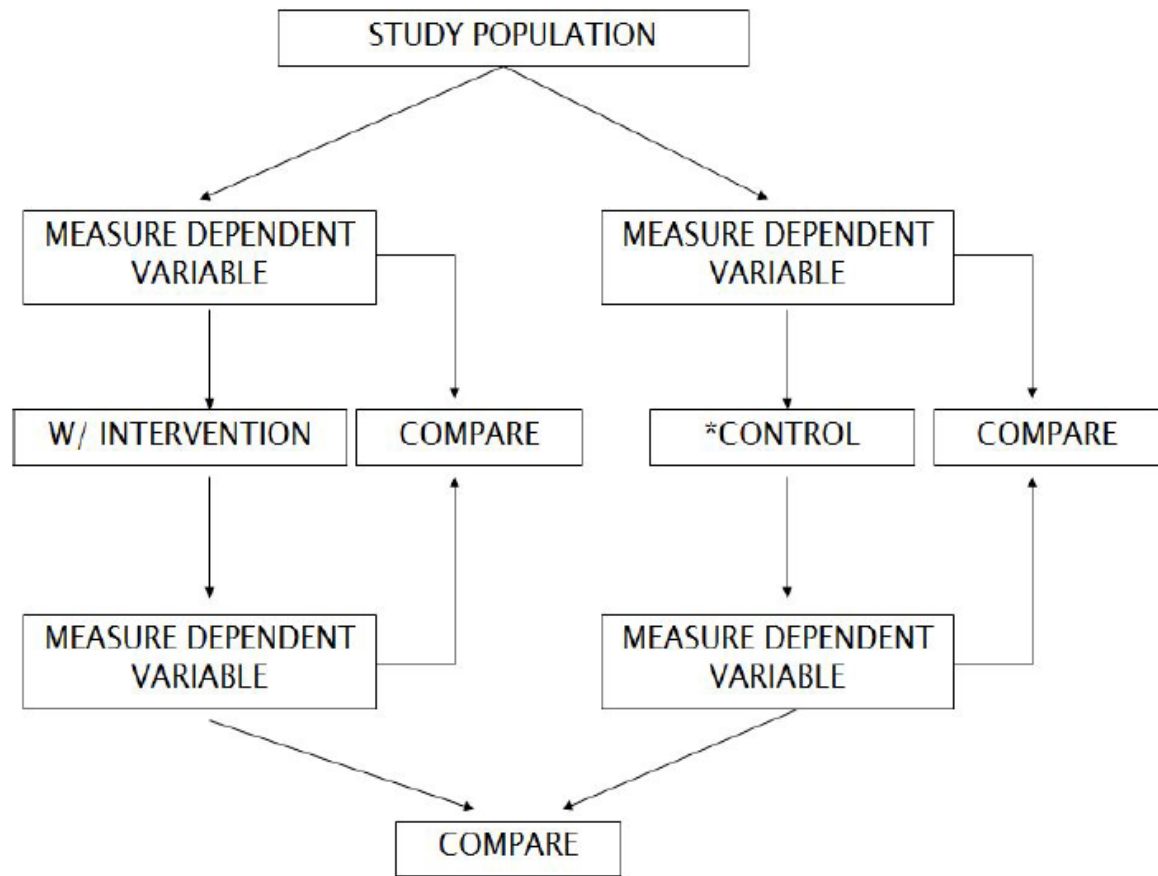


Threats to Validity

History	Something other than intervention happens between first and second measurement and affects outcome
Maturation	Participant improvement over time regardless of intervention
Testing	People get better at the test regardless of the intervention
Instrumentation	Changes in scorers or observers
Statistical regression	High scorers tend to come down
Selection of subjects	The way individuals are selected into intervention and control group affects outcome
Drop-out	Reasons individuals who drop out before second measure differ between groups
Selection-maturation interaction	Selection of groups may interact with their maturation, regardless of intervention
John Henry effect	Participants in control group working harder because they know they are being compared

Quasi-Experimental/Non-Equivalent Group Designs(NEGD)

Cost	Can be expensive
Time	Same as an RCT
Research Question	Test an intervention
Viewed as	Better than one-group design
Other Info	Just missing random assignment Compensate by matching
Variant	Double pretest design Dummy Control
Examples	Lecture vs. Counselling vs. Video vs. Pamphlet...



Multiple Ways to Approach Research Questions



What do you see?



Group exercise

- Groups of 2-4
- Share your research questions – choose one per group (15 minutes)
 - What design would be suitable?
 - Pro's and con's?
- Share back (10 minutes)
 - What did you consider in your choices?



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