Evidence-Based Programs: Why should we care and what does it matter?

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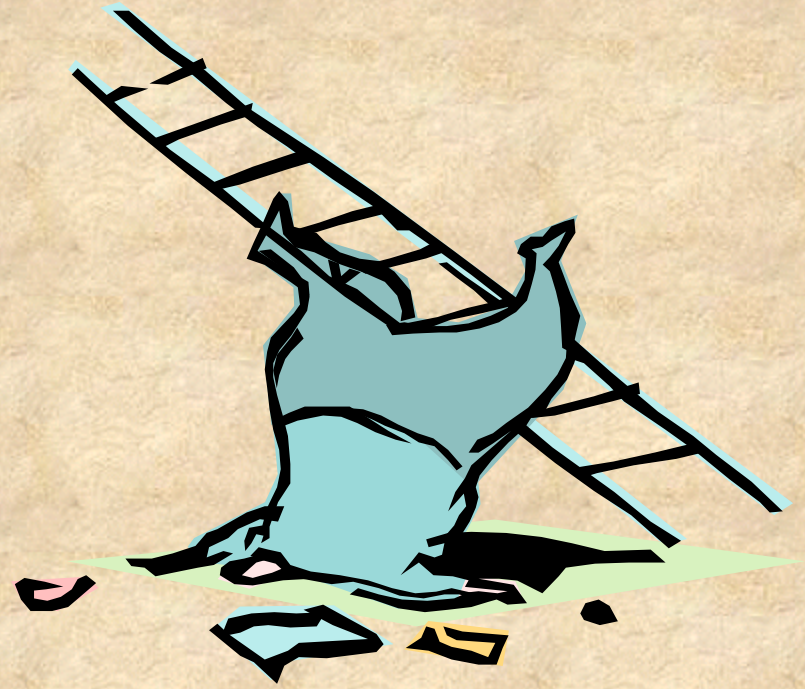
Why Evidence-Based Standards

- What principles should guide intervention selection?
  - Should being an expert be enough?
  - Should even experts be required to use accumulated knowledge in their decision-making?
- Should there be proof that an intervention will work?
  - What happens if it fails?
  - What happens if things get worse?
- If we know it works for one person, should that be enough to have us use it for all people?
  - Are all people alike in the factors that make a treatment effective?
  - Are there differences between people that might make an intervention effective for one group and detrimental to another?

Why Evidence-Based Standardsin Child Welfare



- Evidence is necessary in social science is not unlike evidence in court: you will only succeed if you read the previous work (cases) in your area and apply the findings
- Because in child welfare — like medicine— the outcomes are critical

History of Evidence-Based Standards

- The evidenced-based medicine movement began in 1970's with the work of Archie Cochrane, a British epidemiologist.
- He merged the work of statistics, engineering and science to base medical judgments.
- Cochrane's movement changed the locus of the expertise from the clinician to science
  - This move was to reduce human biases and error
  - Cochrane was aware that practioners have "hindsight biases" that tend to have us remember when we are successful far more than when we fail
  - Placebo effect predicts considerable change in many treatments
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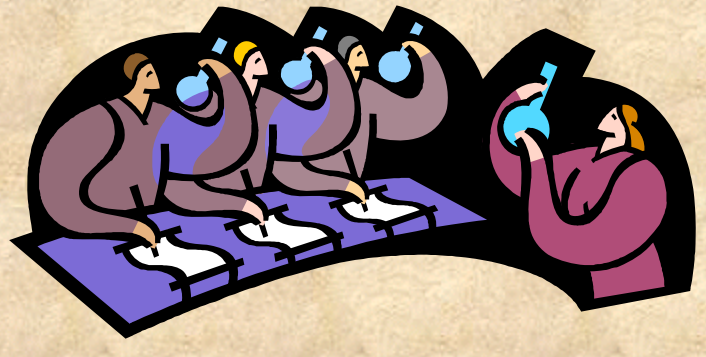
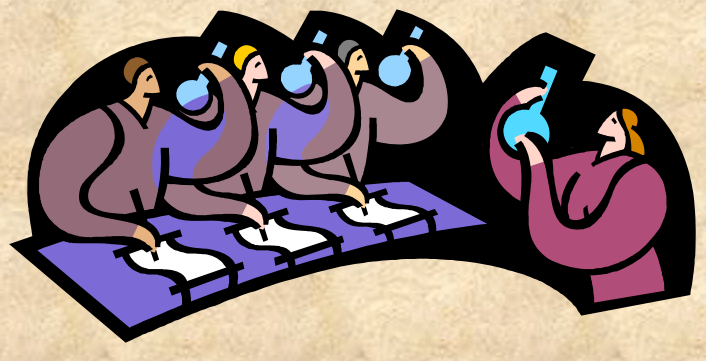
What are Evidence-Based Standards?



According to the OJJDP Blueprints Program, based on the available evidence, there are three program types:

- Model Programs
- Promising Programs
- Favorable Programs

What are Evidence-Based Standards?



Studies get the designation based on the types of studies that have been done to evaluate a specific intervention. The studies that are most common are:

A randomized controlled trial

A controlled trial without randomization

A cohort study

Case studies

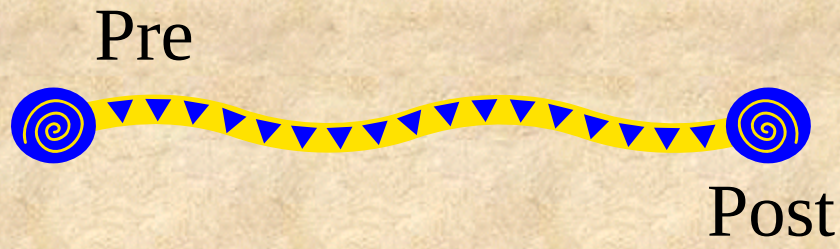
Randomized Controlled Trials

- Participants randomly assigned to either an intervention or control group.
  - The randomization eliminates bias in who gets what treatment
  - Differences between people are random in the different groups, so should not systemically affect the results
- Gold standard

Controlled Trials-Without Randomization

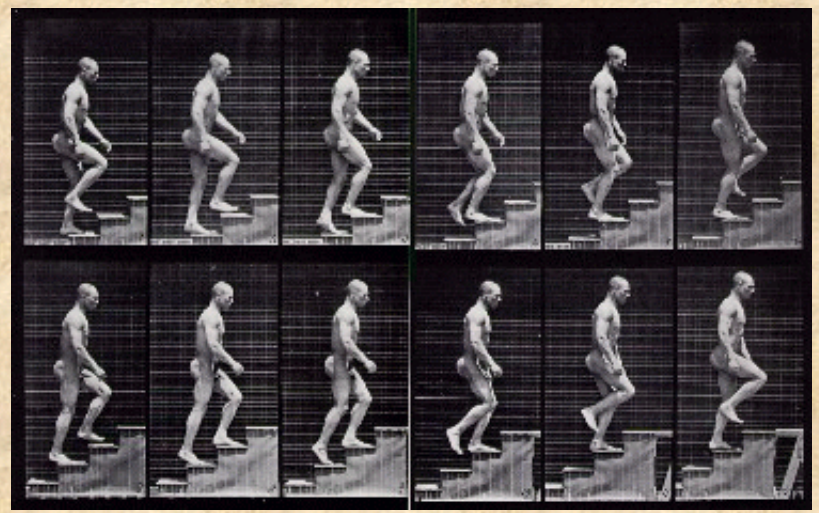
- Participants assigned to either intervention or control group.
- Not randomly assigned to groups.
  - Without randomization there may be a bias in treatment selection

Cohort Study



- Participants (the cohort) complete the intervention only
- Measures are taken pre- and post-treatment
  - Does not account for changes (+/-) over time or for variability in symptoms over time
- Design may be necessary for ethical reasons

Single Case Designs



- Involve repeated measurement of a single subject in different conditions over time.
- Most acceptable at early stages of treatment development

Necessary Conditions for a Model Program

- Participants must be either randomly assigned to the treatment and control conditions.
- Participants must be comparable at baseline (or any differences should be critically addressed)
- There should not be significant problems with attrition and there should not be differences in attrition between intervention and control groups.
- There should be a significant and lasting effect for the intervention.

Necessary Conditions for a Model Program

- No Contamination: Contamination is when something happens to either intervention or control group (but not both) to skew the results.
- The study results should have been independently replicated.

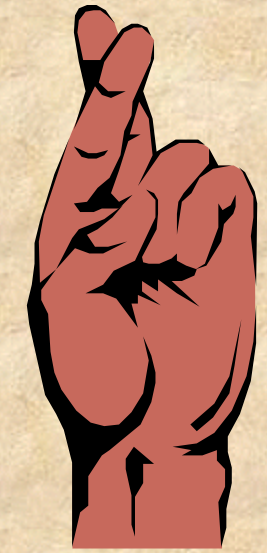
Necessary Conditions for a Promising Program

Similar to model programs although lacking in some significant way. For example,

- Not independently replicated
- Not tested with randomization

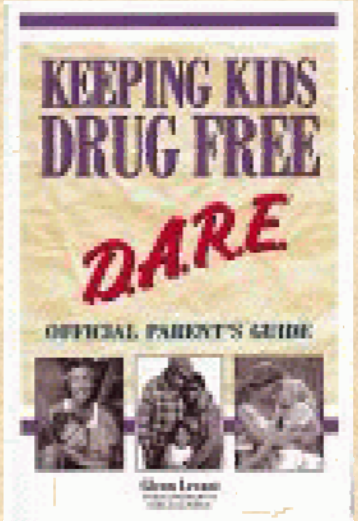
Necessary Conditions for a Favorable Program

- Favorable Programs are just what the name implies:
  - Programs with some evidence of effectiveness, but lacking the scientific rigor to make them model or Promising

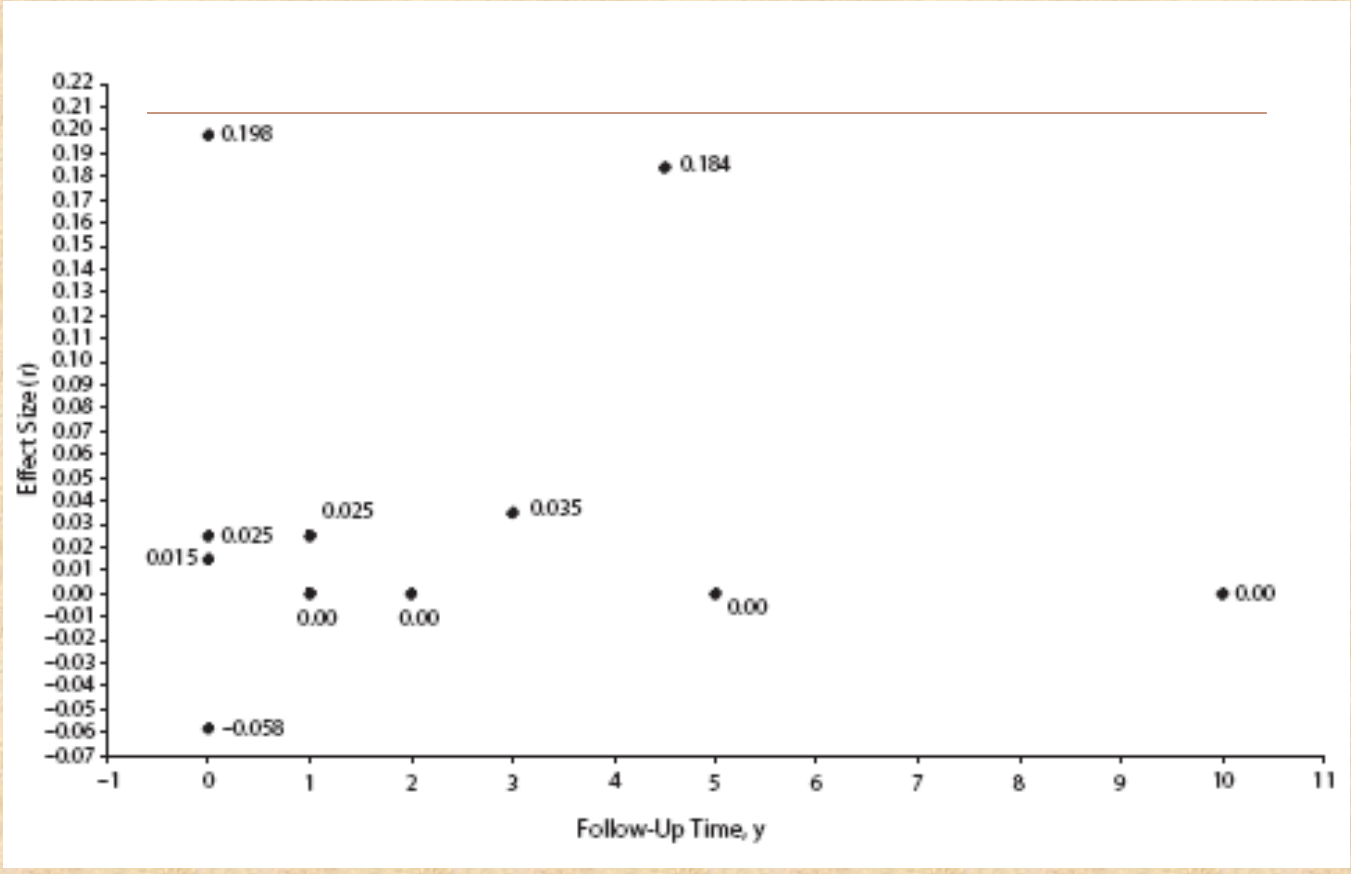


What Happens Without Evidence: An Example

- DARE: Drug and Alcohol Resistance Education
- Implemented in junior high and middle schools throughout the country
- $750 Million federal dollars a year spent on DARE
- Targets future drug and alcohol use
- Implemented before it was tested



What Happens Without Evidence: DARE



Investigative Reporting

- What do you need to know about a program to best help your client?

Important Questions

- Variations in People, Settings and Outcomes
- Who is being studied? What subgroups were included?
- In what settings did the study take place?
- What outcomes is the study measuring? Are they consistent with the program's aim?
- Have the results been replicated?
- Were participants randomized? If not, what controls were in place to ensure that groups were equivalent?