Lecture 21: Finish Program Evaluation

Outline

- Review
- Lipsey and Wilson (1993)
- Interventions that Harm

General Conclusions

- Across studies there is evidence that well-developed programs seem to have some positive effects.
- “We thus believe that a strongly favorable conclusion about the efficacy of well-developed psychological treatment is justified by the results of meta-analytic investigation” (Lipsey & Wilson, 1993, p. 2000)
Surefire Paths to Success (p. 428)

- What to do if you want to see that your program works? Some ideas…rely on testimonials and capitalize on regression artifacts
- “Human courtesy and gratitude being what it is, the most dependable means of assuring a favorable evaluation is to use voluntary testimonials for those who have had the treatment” (p. 426)

Regression Toward the Mean

- Extreme Scores at one time are not likely to be as extreme on a second testing.
- (Reichardt, 1999, p. ix): *Regression to the mean is as inevitable as death and taxes.*
- Why? Two sets of scores are never perfectly correlated.
- Take the 32 people who scored 60 or worse on Exam 1. What was their average gain from Exam 1 to Exam 2? 10.55 points! What about those 37 people who scored 87 or better? What was their average difference? A loss of 4.39 points.

A Selected List of Potentially Harmful Therapies

**Psychological Treatments that Cause Harm**

Lilienfeld (2007)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Potential Harm</th>
<th>Source of Evidence</th>
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</thead>
<tbody>
<tr>
<td>Critical Incident Stress Debriefing (CISD)</td>
<td>Heightened Risk for PTSD</td>
<td>Randomized Control Trials</td>
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<tr>
<td>Scared Straight Interventions</td>
<td>Exacerbation of Conduct Problems</td>
<td>Randomized Control Trials</td>
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<tr>
<td>DARE</td>
<td>Increased ATOD Use</td>
<td>Randomized Control Trials</td>
</tr>
<tr>
<td>Boot-camp Interventions</td>
<td>Exacerbation of Conduct Problems</td>
<td>Meta-Analysis</td>
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Critical Incident Stress Debriefing

- An intense “therapy” session 24 to 72 hrs after a traumatic event. Usually in a group setting.
- Effect size: $d = -.11$ for PTSD symptoms (Control Group Lower!)

Scared Straight Programs (Petrosino et al. 2003)

- Controlled Random Trial in 1982 showed that participants in experimental group were more likely to be arrested (Finckenauer, 1982)
- Meta-analysis revealed that intervention increased odds of offending about 1.7:1
Drug Abuse and Resistance Education

- General Features: Uniformed Police teach school kids about risks of drug use and teach social skills.
- Many null-effects reported in the literature
- Some studies have shown that these programs may actually increase alcohol and other drug use (Werch & Owen, 2002)

Bootcamp Interventions

- A meta-analysis showed little overall effects (9 positive, 8 iatrogenic, and 12 null effects)
- Several highly publicized deaths which seem to be a consequence of violence or physical restraint

When Interventions Harm...

See Dishion, McCord, & Poulin (1999)

Cambridge-Somerville Youth Study (McCord, 1978)

- Richard Clark Cabot started the project in 1935.
- Matched pairs where one boy was randomly assigned to treatment. (N = 506)
- Treatment began in 1939 when the boys were between 5 and 13.
- A short-term follow-up yielded no evidence for treatment effects (Powers & Witmer, 1951)
- Between 1975 and 1976, McCord was able to follow-up 480 men (but 48 of those were dead). She mailed questionnaires to participants and received 54% back from the Treatment Group and 60% back from the Control Group.
- She also obtained official records

Subjective Evaluations..... (McCord, 1978, p. 287)

- In what ways (if any) was the Cambridge-Somerville project helpful to you?
- 11 failed to comment and 13 said it had not been helpful. Two thirds said it was helpful. (n = 113)
  - "Helped me have faith and trust in other people"
  - "Helped prepare me for manhood"
  - "Better insight on life in general"
  - "I probably would be in jail"
  - "My life would have gone the other way"

Were There Differences in Adult Criminal Behavior?

<table>
<thead>
<tr>
<th></th>
<th>Treatment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Record</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Minor</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Serious</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

100 120 140
0 20 40 60 80 100

Treatment Control
Potential iatrogenic Effects. Men who had been in treatment....
(McCord, 1978, p. 288)

• Were more likely to commit (at least) a second crime.
• Were more likely to show signs of alcoholism.
• Were more likely to show signs of serious mental illness.
• Tended to have occupations with lower prestige.
• Tended to report that their work was not satisfying.
• Important: The side effects that seem to have resulted from treatment were subtle (p. 288).

Dishion et al. (1999) – Adolescent Transitions Program

• Parent Focus: Parenting Skills
• Teen Focus: Prosocial Goals and Self-Regulation using peer reinforcement
• Both lasted 12 weeks
• Randomly assigned 119 high risk youth to four conditions:
  – Parent Focus
  – Teen Focus
  – Both Parent and Teen “Hypothesized as Optimal”
  – Attention Placebo Group
• Also recruited a control group (n = 38)

Dishion et al., 1999, p. 757

• “The combined parent and teen focus intervention programs did not reduce risk for substance use and delinquency, as hypothesized.”

• “Unfortunately, more complete long-term analysis revealed that negative effects were associated with the teen focus curriculum.”

Dishion et al.

• “In short, aggregating peers, under some circumstances, can produce short- and long-term iatrogenic effects on problem behavior.”

• Caveat: Such effect may not generalize to treatments for depressed youth (pure cases).

• “Early adolescence is an especially vulnerable time for peer effects on social development, at least for children at high risk for delinquency.”
Post-Script – Meta-Analysis

• Weiss et al. (2005) conducted a meta-analysis of 18 studies on the group treatment of antisocial youth
• They found little evidence that group-based approaches are associated with iatrogenic effects. This is an OVERALL EFFECT.
• The possible exception might be programs of interventions geared to early adolescents (Lilienfeld, 2007)