DEVIANT PEER INFLUENCES IN INTERVENTIONS FOR YOUTH

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Workshop on Social and Environmental Influences and Adolescent Risk Behavior

Support is appreciated from NIMH, NIDA, and DoE.
The Magnitude and Costs in Aggregating Deviant Peers in American Society

1. Mental Health
   * Group therapies, residential milieu; by design
     * 120,000 children/year treated in groups (15% of total)
     * 52% of all expenditures: > $6 billion/year

2. Education
   * Tracking, special ed, in-school suspensions, alternative school
   * Practice is increasing

3. Juvenile Justice
   * Training schools, boot camps, incarceration
   * 93% of all expenditures aggregate youth (> $ 4.6 billion/year)
Goals of Presentation

1. Describe positive peer-group intervention effects
2. Describe adverse peer-group intervention effects
   • Intervention experiments
   • Naturally-occurring in-practice effects
3. Describe moderators of effects
4. Propose general model
5. Suggest recommendations

Findings come from Duke Executive Sessions in Deviant Peer Contagion, funded by WT Grant Fdn and Duke.
Positive Effects in Peer-Group Interventions

1. Good Behavior Game in elementary school
   * Group reward for good behavior in grade 1
   * Kellam (2009)

2. Classroom curricula in social-emotional learning
   * CPPRG (1999)

3. Mean effect sizes are generally positive but modest:
   * Juvenile justice = .07 (Lipsey, 2006)
   * Mental health = .50 (Weisz, 1995)
   * School-based social skills = .55 (Ang & Hughes, 2006)
### Decrement in Mean Effect Size
**When Treatment is Administered in Peer Groups**

<table>
<thead>
<tr>
<th>Administration</th>
<th>Individual</th>
<th>Group</th>
<th>Decrement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juvenile justice (Lipsey, 2006)</td>
<td>0.10</td>
<td>0.07</td>
<td>(30%)</td>
</tr>
<tr>
<td>Court counseling (Lipsey, 2006)</td>
<td>0.12</td>
<td>0.08</td>
<td>(33%)</td>
</tr>
<tr>
<td>Child mental health (Weisz et al., 1987)</td>
<td>1.04</td>
<td>0.62</td>
<td>(40%)</td>
</tr>
<tr>
<td>Child mental health (Weisz et al., 1995)</td>
<td>0.63</td>
<td>0.50</td>
<td>(21%)</td>
</tr>
<tr>
<td>School social skills (Ang &amp; Hughes, 2006)</td>
<td>0.78</td>
<td>0.55</td>
<td>(30%)</td>
</tr>
</tbody>
</table>
Sometimes Peer-Group Interventions Lead to Adverse Effects

- Juvenile Justice (Lipsey, 2006)
  * 42% of group prevention programs
  * 22% of group probation programs

2. School-based social skills training (Ang & Hughes, 2001)
  * 24% of deviant-only groups show adverse effect
  * Only 11% of individual treatments show adverse effect
All-Deviant Peer Groups Worsen Outcomes Beyond Mixed Peer Groups:

Meta-Analysis of Social Skills Training Interventions

(Ang & Hughes, 2001)

* High-risk boys matched and randomly assigned to intervention or control

* Some boys placed in summer peer-group camp

* Boys placed in peer camp for two summers have worse 30-year outcomes than their matched controls
Adverse Effects in Peer-Group Intervention Experiments


* High-risk 11-14-year-olds randomly assigned to peer-group intervention, family intervention, or control

* Adolescents in peer-group intervention have worse 3-year outcomes than other two groups

* Initially modestly-deviant adolescents demonstrate worst impact

* Initially most-deviant adolescents demonstrate no iatrogenic effect
3. The St. Louis Experiment (Feldman et al., 1983)

* High-risk boys randomly assigned to all-deviant or mixed peer groups

* Deviant boys in all-deviant groups get worse

* Deviant boys in mixed groups improve

* Important moderators mitigate adverse effects
Adverse Effects in In-Situ Peer-Group Interventions

1. *In-school suspensions* (Vigdor, 2008)

* Examined all in-school suspensions to 45,000+ NC 6th graders

* This practice places suspended youth with other suspended youths for 15 days

* Sixth graders who happened to be placed in in-school suspension with drug-using peers later showed (net of all controls and compared to other suspended youths):

  2.0 times the risk for drug-use suspension
Adverse Effects in In-Situ Peer-Group Interventions

2. Juvenile incarceration (Bayer et al., 2008)

* Examined all 8,216 adolescents in 169 FL corrections
* Presumed random assignment to cellmates
* Cellmates’ past crime type is a predictor of individual’s post-release crime rates of:
  * drug offenses
  * sex offenses
  * assault
  * larceny
  * burglary

* Effect stronger if prior experience with that crime
* Influence of older peers stronger than younger peers
Adverse Effects in In-Situ Peer-Group Interventions

3. *School-grade composition* (Cook et al., 2008)

* Examined 44,709 sixth graders in 342 schools in NC
* Sixth graders assigned to elementary or middle school
* Assignment policy seems random
* Sixth graders in middle school (with older peers) have:

  * increased odds of any suspension by 2.2
  * 190% more infractions
  * double the rate of violence
  * increased odds of drug infraction by 3.8
  * worse end-of-grade test scores

* Patterns continue through at least ninth grade
4. Grade retention as influence on others (Muschkin et al., 2008)

* Policy to end “social promotion” haphazardly applied in NC
* So, sixth grade classrooms pseudo-randomly vary in proportion of retained students
* Effect on the non-retained sixth graders is significant on:
  * drug use infractions
  * violence
  * end-of-grade test scores
* Example: 20% retained peers increases infractions by 200%

5. School itself (Jacob & Lefrgen, 2003)

* Days when school is in session, violent crimes increase and non-school property crimes decrease
Is Peer Influence Reciprocal?

1. *Metropolitan Area Child Study* (Boxer et al., 2006)
   Sixth graders randomly assigned to groups with randomly varying deviance levels
   * Children in groups with more aggressive peers became more aggressive
   * Children in groups with less aggressive peers became less aggressive

2. *Fast Track* (Lavallee et al., 2006)
   First graders randomly assigned to intervention groups or control, with groups varying haphazardly in deviance
   * Positive effects of assignment to intervention, but moderation
   * Children in groups with more aggressive peers benefited less
   * Children in groups with less aggressive peers benefited more

   * 37 middle schools randomly assigned to universal intervention or not
   * Students in intervention became more similar to each other
Universal Group Intervention “Homogenizes” Individual Norms for Aggression (MVPP, 2008)
Moderators: Factors Likely to Increase Deviant Peer-Influence Effects in Interventions

1. Characteristics of Peers
   
   1. Slightly older
   2. Slightly more deviant
   3. Likely to interact outside of intervention setting

2. Characteristics of Participants

   1. Early adolescent age
   2. Moderately deviant
   3. Not yet committed to deviant behavior
   4. “Susceptible” to peer influence
Moderators: Factors Likely to Minimize Deviant Peer-Influence Effects in Interventions

3. Characteristics of Leaders

1. Experienced and well-trained
2. Constant monitoring of youth and “hot spots”

4. Characteristics of intervention programs

1. Behavioral approaches
2. Positive reward structures for desired behavior
3. Little time for unstructured group interaction
4. Promoting a cultural norm of non-deviance
5. Short duration
Model of Peer-Group Intervention Effects

**Total Intervention Effect** = \((T - \Gamma - \mathcal{I}) + \sum (\mu_i \cdot \mathcal{I})\)

\(T\) = Therapy Effect, \(\Gamma\) = Group Context Effect, \(\mathcal{I}\) = Deviant Peer-Group Effect, and \(\mu_i\) = Moderator Factors
Model of Peer-Group Intervention Effects

Total Intervention Effect = \((T - \Gamma - I) + \sum (\mu_i \times I)\)

\(T\) = Therapy Effect, \(\Gamma\) = Group Context Effect, \(I\) = Deviant Peer-Group Effect, and \(\mu_i\) = Moderator Factors
Model of Peer-Group Intervention Effects

Total Intervention Effect = (T – Γ – I) + Σ (μi * I)

T = Therapy Effect, Γ = Group Context Effect, I = Deviant Peer-Group Effect, and μi = Moderator Factors
Model of Peer-Group Intervention Effects

Total Intervention Effect = \((T - \Gamma - I) + \sum(\mu_i \times I)\)

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Recommendation 1: *Ineffective programs, placements, and treatments that aggregate deviant peers should be avoided whenever possible.*

* Residential schools
* Training schools
* Boot camps
* Scared Straight
* Guided Group Interaction
* Wilderness camp
* Gang Resistance Education And Training Program
* Midnight Basketball
* “Hang-outs” and unstructured community centers
* Non-structured after-school programs
Recommendation 2: Effective Alternatives to Deviant Peer-Group Placement Should Be Encouraged.

* Individual therapies
  * Functional Family Therapy (FFT)
  * Multisystemic Therapy (MST)
  * Multi-dimensional Treatment Foster Care (MTFC)
* Therapeutic courts
* Individualized early prevention programs and discipline practices
  * High/Scope Perry Preschool Project
  * Fast Track and LIFT
  * Positive Behavior Intervention and Support (PBIS)
* Programs that bring high structure to universal youth
  * 4H, Boys and Girls Clubs, scouts, church activities
  * School-based extracurricular activities
* Job Corps and individual skills training
* Efforts to disperse gangs, rather than increase their cohesiveness
Recommendation 3: When Placement With Deviant Peers is Inevitable, Specific Measures Should Be Implemented to Minimize Adverse Impact.

* Avoid placing most highly susceptible youth (i.e., slightly delinquent early adolescents)
* Do not place deviant youth with older, more deviant peers or peers with similar problems from the same community
* Employ experienced leaders and provide training
* Create highly structured environments with little free time
* Monitor behavior closely
* Keep placements to short duration

* The record should include description of placement environment.

* The record should include description of types of peers.

* Evaluate impact through rigorous designs.