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Today’s Topics

• Adolescent development

• Cessation of criminal activity ("desistance")

• Designing an evidence-informed juvenile justice system
We are in the middle of a “sea change” in the orientation of juvenile justice.
Developmental Science and Juvenile Justice

Neuroscience + Behavioral science

Conclusion: there is an extended period of adolescence

- **U.S. Supreme Court decisions**
  - Roper (death penalty)
  - Graham (life without parole – homicide)
  - Miller (life without parole – nonhomicide)
  - Montgomery (retroactive)

- **Policy and practice changes**
  - Statutory changes in age boundaries for jurisdiction and services
  - Reduced number of adolescents entering the “front door” of the juvenile justice system
  - Reduced reliance on institutional care
  - Promotion of interventions that promote developmental progress
Different Parts of the Brain Develop at Different Times

Executive Function
- reasoning
- problem solving
under development

The last part of the brain to mature (at about 24 years old)

Frontal Lobe
- judgement
- impulse control
- emotions

Parietal Lobe
under development

Occipital Lobe
visual processing

Temporal Lobes
hippocampus - long-term memory
amygdala - emotional center

Cerebellum
supports higher learning
- math, music, advanced social skills
under major development

- numbers
- processing sensory input
- language
- analytical abilities
Adolescence is a Time of Increased Sensation Seeking and Low Impulse Control

Source: Steinberg (2013)
Committee Charge: To assess the implications of advances in behavioral and neuroscience research for the field of juvenile justice and the implications of such knowledge for juvenile justice reform.
National Academy of Sciences Panel on Juvenile Justice: Findings

• Findings from behavioral research line up with findings from brain scans in biological research

• Adolescents differ from adults and children in three important ways:
  o lack mature capacity for self-regulation in emotionally charged contexts
  o have a heightened sensitivity to proximal influences such as peer pressure and immediate incentives
  o show less ability to make judgments and decisions that require future orientation
Proposed Goals of the Juvenile Justice System

Promoting Accountability
Ensuring Fairness
Preventing Re-offending
About the study: Multi-site, seven-year study that regularly interviewed 1,354 serious adolescent offenders as they transitioned to early adulthood.
The “natural course” for juvenile offenders is to commit less crime as time goes on.
Self-Reported Offending Over 7 Years
Drop in offending within first year

- High stable: 10%
- Drop-off: 21%
- Late Onset: 12%
- Mid stable: 31%
- Lowest: 26%
Proportion of Each Offending Pattern Type in Each Crime Group

Violent Crime
Property Crime
Weapons Charge
Drug Charge
Other

Persisters
Late Onset
Desisters
Mid stable
Low stable
Number of arrests per days in the community (e.g., 1 arrest in 121 days in community = .008, 1 arrest in 65 days in the community = .015, 3 arrests in 183 days in community = .016)
Institutional stays in secure facilities do little, if anything, to reduce future criminal offending.
Probation vs. Placement in Secure Facility
Unadjusted comparison of re-arrest rate

Mean Yearly Rate of Re-Arrest, by Placement Status

- Probation: 0.63
- Placement: 1.20
Finding: When youth with similar characteristics were matched and compared, there were no significant differences in their rates of re-arrest.
Effect of Length of Stay on Re-arrest

**Finding:** For intermediate lengths of stay (i.e., 3-13 months), holding youth for an additional 3 months does not appear to reduce re-arrest.
A large proportion of serious adolescent offenders do not receive appropriate community-based services.
Rates of Mental Health Disorders Past Year

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
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<tbody>
<tr>
<td></td>
<td>28%</td>
<td>47%</td>
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- **Percent Rates of Mental Health Disorders Past Year**
  - **African American**
    - Major Depression: 3.7%
    - PTSD: 1.9%
    - ADHD (ever): 4.4%
    - High Anxiety (ever): 2.3%
  - **Caucasian**
    - Major Depression: 4.5%
    - PTSD: 2.3%
    - ADHD (ever): 4.3%
    - High Anxiety (ever): 5.6%
  - **Hispanic**
    - Major Depression: 5.1%
    - PTSD: 5.6%
    - ADHD (ever): 6.4%
    - High Anxiety (ever): 4.5%
  - **African American**
    - Major Depression: 10.6%
    - PTSD: 12.2%
    - ADHD (ever): 14.8%
    - High Anxiety (ever): 9.3%
  - **Caucasian**
    - Major Depression: 14.3%
    - PTSD: 12.7%
    - ADHD (ever): 12.2%
    - High Anxiety (ever): 8.7%
  - **Hispanic**
    - Major Depression: 14.8%
    - PTSD: 16.5%
    - ADHD (ever): 12.2%
    - High Anxiety (ever): 9.3%
High Rates of Substance Use Disorders
Past Year Diagnoses

Some substance use diagnosis:
- Males: 37%
- Females: 35%
Link between Mental Health and Offending

• Youth offenders *do* have a higher rate of mental health and substance use problems compared to the general youth population.

• However, mental health problems rarely *cause* crime. They can *interfere* with rehabilitation.

• Mental health treatment alone is unlikely to have a strong effect on crime. It needs to be integrated with treatment for risk factors (e.g., substance use disorders) and support other needs (e.g., job training, education completion).
Are serious youth offenders with a diagnosed substance use problem getting services?

<table>
<thead>
<tr>
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<th>Adult Institution Setting</th>
<th>Juvenile Institution Setting</th>
<th>Community</th>
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<tbody>
<tr>
<td>% receiving service</td>
<td>55%</td>
<td>61%</td>
<td>30%</td>
</tr>
<tr>
<td>Average intensity of sessions</td>
<td>1 every 13 days</td>
<td>1 every 3 days</td>
<td>1 every 47 days</td>
</tr>
</tbody>
</table>

*Diagnosed at baseline as having substance use problem in the past year*
Meeting the Juvenile Justice Challenge
The Evidence-Based Juvenile Justice System

Prevention Programs

- Arrest
  - Counsel & release
  - Diversion; Informal probation
  - Probation
  - Incarceration

Risk assessment and risk-based dispositions

Needs assessment; match program to criminogenic needs

Evidence-based disposition matrix

Level of Supervision

- Counsel & release
- Diversion; Informal probation
- Probation
- Incarceration

Intervention Programs

- Program A
- Program B
- Program C
- Program D
- Program E
- Program F

Recidivism Outcomes

- T%
- U%
- V%
- W%
- X%
- Y%
- Z%

Minimize reoffending

Effective programs; assessed against evidence-based practice guidelines

Total Reoffense Rate
The essential platform for use of these tools:
Well-developed data systems that track juvenile characteristics, service, and outcomes
Program Types and Average Reduction in Recidivism

- Control approaches
  - Discipline
  - Deterrence
  - Surveillance

- Therapeutic approaches
  - Restorative
  - Skill building
  - Counseling
  - Multiple services

Percent Reduction in Recidivism from .50 Baseline
Keys for Effective Programming

• Use a “therapeutic” approach aimed at internalized behavior change (vs. external control, deterrence)

• Recognize that within a therapeutic category, some program types are more effective than others (e.g., Cognitive Behavioral Therapy, mentoring, family therapy)

• Deliver services in adequate amounts and quality (proper dose)

• Have an explicit treatment protocol and procedures for monitoring adherence

Effects are largest for high-risk offenders
Thank You

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