Risk Assessment in Juvenile Justice: Enhancing Decision-Making, Case Planning, and Service Delivery

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Some slides removed – not for distribution
WHAT DO WE KNOW TODAY?
RECENT DEVELOPMENTS
Developmental Appropriateness: The Adolescent Brain

**ANATOMY OF A TEENAGER'S BRAIN**

**THE BIRDS AND THE BEES LOBE**

- Rebellion Center
- Superturbo Rebellion Center
- Memory for Music
- Memory for Chores, Homework, etc.
- Love for Parents
- Synth for Drugs
- Synth for Sex
- Ability to be Seen in Public with Parents
- Prone to Bousing
- Self Image
- Fitting in Gland
- Internet/Phone Addictions
- Every Episode of the Simpsons
- Indestructibility Cortex
- Slam Door Reflex
- Car Keys Craving
- Ability to be Seen in Public with Parents

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There is emerging consensus on characteristics of effective programming for young offenders:

- Punitive sanctions without effective services do not have a significant effect on re-offending (Gatti et al., 2009).
- Mixing low-risk youth with more delinquent youth can make them worse (42% in group prevention programs & 22% in probation programs) (Lipsey, 2006).
- When services are matched to youth’s level of risk and their “delinquency-producing” (criminogenic) needs, the lower the chance of offending.
- The goal is to have the right services for the right youth.
Benefits of Avoiding Incarceration of Youth Per Dollar Invested (Aos, 2006)

- For every $1.00 spent on the following services, taxpayers save:
  - Functional Family Therapy: $28.34
  - Multisystemic Family Therapy: $28.81
  - Multidimensional Treatment Foster Care: $43.70
  - Adolescent Diversion Project: $24.92
  - Juvenile Boot Camps: $0.81
  - Scared Straight: -$477.75 (NET LOSS)
Matching Youth to Services Based on Criminogenic Needs = Reduction in Reoffending (Vieira et al., 2009)

Match based on # of Services Given in Response to a Youth’s Criminogenic Needs

% Re-offended

- Poor Match
- Med Match
- Good Match

Risk/Need
Developmental Appropriateness: Risk Changes Across Adolescence, For Most

Life-course persistent or Chronic Offenders: 6% - 8%

Adolescent-Limited Offenders: > 60%
PENNSYLVANIA’S INTEGRATION OF SCIENCE AND BEST PRACTICES INTO JUVENILE JUSTICE
Balanced & Restorative Justice

“...to provide for children committing delinquent acts programs of supervision, care, and rehabilitation which provide balanced attention to the community, the imposition of accountability for offenses committed, and the development of competencies to enable children to become responsible and productive members of the community.”
Underlying goals:

- Implementation of evidence-based practices
- Ongoing commitment to data collection, analysis, & research
- Continuous quality improvement in every aspect of the system.
Principle 1:

- Assess risk/needs using actuarial instruments

Use assessments to guide case decisions using statistically valid tools to describe the who, the what, and the how.
Probation’s Adoption of Structured Decision-Making

- RAI
  - pretrial detention decisions
- MAYSI-2
  - mental health screening
- YLS/CMI
  - dispositional and case planning; institutional planning
What Risk Assessment Does

- **Risk** = risk for serious delinquent or violent offending

- A *risk for reoffending or violence assessment tool* is an instrument developed to help answer the question: “Is this youth at relatively low or relatively high risk for reoffending or engaging in violent behavior?”

- Some, also address “What is possibly causing the youth to be at low or relatively high risk for reoffending?”
Assessment Drives Decision-Making

Risk Assess & MH screen

Diversion

Probation

Confine

Family Services

Substance Abuse Treatment

Mental Health

Life Skills

Reduce Re-Arrest?
MH Screening’s Objective

- High prevalence of MH problems in Juvenile Justice

- Triage--To identify at intake youth who may be in crisis (suicide risk, risk of acute emotional problems, risk of in-custody anger-aggression)

- MH screening tools...
  - Provide staff (and mental health staff) a “first look” at intake
  - Offer a view of the youth’s current emotional state
  - Useful for triage, but are not diagnostic
  - Should not be used to plan long-range treatment

- Creates data base for system and resource planning
MAYSI-2
Massachusetts Youth Screening Instrument-2nd version

- 52 yes-no items, youth answers—paper-and-pencil or on laptop with earphones (MAYSIWARE)
- Given to every youth at intake, in 1-2 hours after entry
- Easy for non-MH staff to use and understand
- 5 minutes for youth responses, 10 minutes overall
- Wide use nationally
  - 42 states through detention or juvenile corrections
  - About 25 states in juvenile corrections
- Over 60 studies on validity and utility
- NYSAP provides technical assistance and support, including 40 hr/week “MAYSI Helpline”
Youth Level of Service/
Case Management Inventory

42 Risk Items
8 Domains
- Family
- Attitude/orientation

+ Strengths

Items rated present/absent using interview
+ all available info
Strengths of the YLS/CMI

- Use of risk factors based on delinquency research
- Developmental approach (dynamic)
- Not jurisdiction-specific
  - Not incumbent on users to establish local predictive validity
- Includes a method for assessing youth’s strengths
Considerable research evidence by independent parties ~ Evidence-based Assessment

- Inter-rater reliability
  - 11 studies ICCs range .72-.97 in the field & in research

- Predictive Validity
  - > 10 studies from various jurisdictions
  - Predicts equally well for boys & girls; violent & non-violent offending

- Generalizability to African-American population (V2.0)

- Norms for correctional settings (V2.0)

- Predicts institutional misbehavior
Case Management: Risk-Needs-Responsivity (RNR)

- **Risk** – Match the intensity of the intervention with one’s level of risk for re-offending
  - Tells us ‘Who’ to target
  - Useful for level of supervision/intensity of services/placement & disposition

- **Need** – Target criminogenic needs (or dynamic risk factors)
  - Tells us ‘What’ to target
  - Provide only services for areas where youth have the highest needs

- **Responsivity** – Match the mode & strategies of services with the individual
What Risk Assessments Do NOT Do

- NOT prescriptive
- These types of general risk assessments are NOT appropriate for identifying risk for sexual offending
- NOT mental health assessments
  - They also do not identify potential mental health problems in need of an assessment
- Typically do NOT include items that are unrelated to future offending, like “well-being needs” (e.g., special education, depression, trauma)
What Adoption of These Tools Led to..

- Adoption of a value toward structured decision making and the use of risk level
- Polices about different supervision levels
- Training in motivational interviewing
- Standardized case plan
- Service matrix (in some jurisdictions)
- Quality assurance data reports & data to aid resource allocation
RESEARCH WITH THE YLS/CMI IN PA: THE MACARTHUR FOUNDATION’S RISK ASSESSMENT IN JJ IMPLEMENTATION STUDY
Risk Assessment Implementation in JJ Study in PA: Funded by MacArthur Foundation (Vincent et al., 2012)

<table>
<thead>
<tr>
<th>YLS/CMI</th>
<th>Site 1</th>
<th>Site 2</th>
<th>Site 3</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk-Level (n)</strong></td>
<td>116</td>
<td>194</td>
<td>82</td>
<td>393</td>
</tr>
<tr>
<td>Low</td>
<td>36.2%</td>
<td>54.9%</td>
<td>40.2%</td>
<td>46.3%</td>
</tr>
<tr>
<td>Moderate</td>
<td>56%</td>
<td>30.6%</td>
<td>54.9%</td>
<td>46.1%</td>
</tr>
<tr>
<td>High</td>
<td>7.8%</td>
<td>5.2%</td>
<td>4.9%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>
Inter-rater Reliability

- The degree to which independent test administrators agree in their scoring of test data.

- When inter-rater agreement is high, that means the tool is NOT subjective
YLS/CMI ICC\textsubscript{1} Values in PA Sites

- Part IV
- Total Score
- Prior and current offenses
- Family circumstances/parenting
- Education/employment
- Peer relations
- Substance abuse
- Leisure/recreation
- Personality/behavior
- Attitudes/orientation

- Total Score: 0.83 (excellent)
- Personality/behavior: 0.55
Dispositions Before Implementation of YLS/CMI

OOH = all types – detention, shelters, inpatient, etc.
Decrease in Use of Probation; Increase in Consent Decree After YLS/CMI

OR = .20

OOH = all types – detention, shelters, inpatient, etc.
Out-of-Home Placement Rates Before YLS/CMI

- Any placement during study
- Placed immediately after disposition

Pre-YLS

Column1
No Change in Out-of-Home Placement Rates After YLS/CMI

<table>
<thead>
<tr>
<th>Any placement during study</th>
<th>Placed immediately after disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-YLS</td>
<td>Post-YLS</td>
</tr>
<tr>
<td>100%</td>
<td>10%</td>
</tr>
<tr>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td>70%</td>
<td>10%</td>
</tr>
<tr>
<td>60%</td>
<td>10%</td>
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<tr>
<td>50%</td>
<td>10%</td>
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<tr>
<td>40%</td>
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<td>20%</td>
<td>10%</td>
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<tr>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>0%</td>
<td>10%</td>
</tr>
</tbody>
</table>
..But Making Sound Decisions Based on Risk
Decrease in Use of Maximum Levels of Supervision After YLS/CMI

<table>
<thead>
<tr>
<th>% At Supervision Level</th>
<th>Pre-YLS</th>
<th>Post-YLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Reporting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intensive</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Levels</th>
<th>Pre-YLS</th>
<th>Post-YLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Reporting</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Minimum</td>
<td>10%</td>
<td>10%</td>
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<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Maximum</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Intensive</td>
<td>10%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Service Referrals Assigned by Risk Level

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Median # Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>1</td>
</tr>
<tr>
<td>Moderate</td>
<td>1.5</td>
</tr>
<tr>
<td>High</td>
<td>4</td>
</tr>
</tbody>
</table>

$p < .003$
Reoffense Rates (New Petitions) in One Site Before YLS/CMI

<table>
<thead>
<tr>
<th></th>
<th>Non-Violent</th>
<th>Violent</th>
<th>Violations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-YLS OR</td>
<td>.47</td>
<td>.47</td>
<td>.42</td>
</tr>
<tr>
<td>Column1 OR</td>
<td>.48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Decrease in Reoffense Rates (New Petitions) After YLS/CMI

<table>
<thead>
<tr>
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<th>Post-YLS</th>
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</thead>
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<tr>
<td>Non-Violent</td>
<td>OR = .47</td>
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<tr>
<td>Violations</td>
<td>OR = .42</td>
<td></td>
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</tbody>
</table>
QUALITY IMPLEMENTATION AND BUY-IN IS ESSENTIAL
The Implementation Process is Crucial

- Obtain Buy-In
- Select Tool & Build Policies
- Train Staff Case Management
- On-going Reassess & Data Tracking
Services Attended
Before and After Sound Implementation

Mean # Services Attended

Pre-Imp
Post-Imp

Low
Moderate
High

0
0.5
1
1.5
2
2.5
3
3.5
4
Change in Placement Rates Before and After Implementation – no Judge Buy-In

<table>
<thead>
<tr>
<th></th>
<th>Pre-YLS</th>
<th>After YLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any placement during study</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Right after referral or dispo</td>
<td>20%</td>
<td>10%</td>
</tr>
</tbody>
</table>
SO... TO REVIEW
GOOD IMPLEMENTATION OF A RISK ASSESSMENT CAN LEAD TO....
Increase in “Diversion”

OR = 0.20

OOH = all types – detention, shelters, inpatient, etc.
Decrease in Placement Rates if Rates Start Relatively High (LA example)

- OR = 0.56
- OR = 0.37
Decrease in Use of Maximum Levels of Supervision

% At Supervision Level

Pre-YLS

Post-YLS
Increase in Use of Community Services for High Risk Youth

![Bar chart showing median number of services referred to youth with different levels of risk: Low, Moderate, High. The chart indicates a significant increase in services referred to high-risk youth, with p < .003.](image-url)
Possible Reduction in Reoffending

<table>
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<th>Post-YLS</th>
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<td>Non-Violent</td>
<td>OR = .48</td>
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Conclusions

- Adoption of valid risk assessment & screening tools is an evidence-based practice.
- Risk assessment tools can conserve resources and improve outcomes for youth, while decreasing confinement rates and still protecting public safety.
- Without quality implementation the benefits will not be realized.
- Pennsylvania is a national leader in this effort.