Use of Structured Risk/Need Assessments to Improve Outcomes for Juvenile Offenders

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Presentation Overview

- Introduction
- Overview of risk/need assessment approaches
- Selecting a risk/need assessment tool
- Using risk/need assessments to improve outcomes
Introduction to Risk/Need Assessment in Juvenile Offenders
Risk/Need Assessment

- Process of conducting comprehensive evaluation to estimate and manage likelihood of future outcome(s)
  - Incompletely understood
  - Probabilities change across time
  - Interaction between characteristics & situations
Risk/Need Assessment

- Distinct from assessment of one risk factor or one need factor

- Examples
  - Substance use
  - Mental health
  - Psychopathy
Risk/Need Assessment

- Different strategies
  - Unstructured
  - Structured
    - Mechanical
  - Allow for professional judgment
Assessment of Juvenile Offenders

- Special attention and consideration of:
  - Developmental stage and change

Viljoen, Cruise, et al. (2012)
Age-Specific Arrest Rates

2011 Arrests per 100,000 Population

OJJDP (2014)
Developmental Trajectories

Moffitt (1993) Figure 3.
Assessment of Juvenile Offenders

- Special attention and consideration of:
  - Developmental stage and change
  - Protective factors

Viljoen, Cruise, et al. (2012)
Protective Factors

- Any characteristic that reduces the risk of adverse outcome
  - More than the absence of a risk or need factor
- 5 reasons to integrate into risk/need assessment:
  1. Balanced view of juvenile offender

Rogers (2000); de Ruiter & Nicholls (2011); Desmarais et al. (2012)
Protective Factors
Protective Factors

- Any characteristic that reduces the risk of adverse outcome
  - More than the absence of a risk or need factor

5 reasons to integrate into risk/need assessment:
1. Balanced view of juvenile offender
2. Predictive validity
3. Incremental validity
4. Youth (& caregiver) engagement
5. Professional mandate

Rogers (2000); de Ruiter & Nicholls (2011); Desmarais et al. (2012)
Protective Factors

“Treatment is not just fixing what is broken; it is nurturing what is best.”

Seligman & Czikszentmihalyi (2000, p. 7)
Assessment of Juvenile Offenders

- Special attention and consideration of:
  - Developmental stage and change
  - Protective factors
  - Context

Viljoen et al. (2012)
Juvenile offenders are:
- Embedded in multiple systems
- Dependent upon caregiver(s)

Compared to adults:
- Less able to change environments
- More susceptible to peer influence
Assessment of Juvenile Offenders

- Special attention and consideration of:
  - Developmental stage and change
  - Protective factors
  - Context
  - Treatment

Viljoen, Cruise, et al. (2012)
Treatment of Juvenile Offenders

- Address *criminogenic* needs and *treatment* needs

- Reduce recidivism

- Improve functioning
Process of Risk/Need Assessment
Process of Risk/Need Assessment

Adapted from Health Level Seven (2010)
Process of Risk/Need Assessment

Adapted from Health Level Seven (2010)
Process of Risk/Need Assessment

1. Identify
2. Analyze
3. Plan

Adapted from Health Level Seven (2010)
Process of Risk/Need Assessment

Identify → Analyze → Intervene → Plan → Identify

Adapted from Health Level Seven (2010)
Process of Risk/Need Assessment

- Identify
- Analyze
- Plan
- Intervene
- Monitor

Adapted from Health Level Seven (2010)
Process of Risk/Need Assessment

Identify → Analyze → Intervene → Plan → Monitor → Review

Adapted from Health Level Seven (2010)
Process of Risk/Need Assessment

Adapted from Health Level Seven (2010)
Overview of Risk/Need Assessment Approaches
## Evolution of Risk/Need Assessment

<table>
<thead>
<tr>
<th>First Generation</th>
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</thead>
<tbody>
<tr>
<td>Unstructured professional judgment</td>
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</table>

1st Generation

- Unstructured professional judgment

Advantages
- Convenient, flexible
- Inexpensive
- Widely accepted
- Able to inform treatment and management
1st Generation

- Unstructured professional judgment

Disadvantages

- Training and expertise
- Lack of transparency
- Highly susceptible to biases
- Lack of consistency
- Accuracy no better than chance

“Flipping Coins in the Courtroom”

Ennis & Litwack (1974)
### Evolution of Risk/Need Assessment

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2nd Generation

- Empirically-based, comprised of static risk factors

- Advantages
  - Transparent and objective
  - Good reliability and predictive accuracy
  - (Relatively) quick and easy
2nd Generation

- Empirically-based, comprised of static risk factors

Disadvantages
- Atheoretical
- Do not allow for change over time
- Limited identification of treatment targets
- Limited integration of intervention
- Decisions based on group norms
The Problem with Group Norms

- Example: A group of 100 juvenile offenders and 50 recidivate within 5 years.
  - Does this mean that every member of group had a 50% likelihood of recidivism?
The Problem with Group Norms

- Example: A group of 100 juvenile offenders and 50 recidivate within 5 years.
  - Or that half had a 100% and half had a 0% likelihood of recidivism?
The Problem with Group Norms

- Example: A group of 100 juvenile offenders and 50 recidivate within 5 years.
  - Or that 20 had a 100%, 20 had a 75%, 20 had a 50% and 20 had a 25%, and 20 had a 0% likelihood of recidivism?

<table>
<thead>
<tr>
<th>100% likelihood</th>
<th>75% likelihood</th>
<th>50% likelihood</th>
<th>25% likelihood</th>
<th>0% likelihood</th>
</tr>
</thead>
</table>
The Problem with Group Norms

- Example: A group of 100 juvenile offenders and 50 recidivate within 5 years.
  - We do not know where *this* juvenile offender falls within group of juvenile offenders who received given score.
### Evolution of Risk/Need Assessment

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<td>Consideration of dynamic factors &amp; criminogenic needs</td>
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3rd Generation

- Empirically-based and include wider variety of factors
  - Dynamic risk factors and criminogenic needs
### “Central Eight”

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Criminogenic Need</th>
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<tbody>
<tr>
<td>History of criminal behavior</td>
<td>Build alternative behaviors</td>
</tr>
<tr>
<td>Antisocial personality pattern</td>
<td>Problem solving skills, anger management</td>
</tr>
<tr>
<td>Antisocial cognition</td>
<td>Develop less risky thinking, increase prosocial thinking</td>
</tr>
<tr>
<td>Antisocial peers</td>
<td>Reduce association with criminal others, increase prosocial peers</td>
</tr>
<tr>
<td>Family and/or marital discord</td>
<td>Reduce conflict, build positive relationships</td>
</tr>
<tr>
<td>Poor school and/work performance</td>
<td>Enhance performance, rewards</td>
</tr>
<tr>
<td>Few leisure or recreation activities</td>
<td>Enhance outside involvement</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>Reduce alcohol and drug use</td>
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*Tarnes (2013) Table 3, developed based on Andrews (2006)*
3rd Generation

- Empirically-based and include wider variety of factors
  - Dynamic risk factors and criminogenic needs

Advantages

- Transparent
- Sensitive to change over time
- Good reliability and predictive accuracy
- Theoretically sound
- Identification of treatment targets
3rd Generation

- Empirically-based and include wider variety of factors
  - Dynamic risk factors and criminogenic needs

Disadvantages

- Repeated administration required to detect change
- Potentially shorter shelf life
- More time consuming
- Decisions based on group norms
- Limited integration of intervention
## Evolution of Risk/Need Assessment

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<td>Fourth Generation</td>
<td>Integration of case management</td>
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4th Generation

- Integration of risk management, treatment targets and modalities, and assessment of progress

- Advantages
  - Transparent
  - Sensitive to change over time
  - Good reliability and predictive accuracy
  - Theoretically sound
  - Allow for professional judgment
  - Incorporates intervention
4th Generation

- Integration of risk management, treatment targets and modalities, and assessment of progress

Disadvantages
- Repeated administration required to detect change
- Potentially shorter shelf life
- More time consuming
- More training and expertise
- Smaller research base
Risk/Need Assessment in the U.S.

- Increased requirement and use of structured risk/need assessment in U.S.
- Many different tools available
- Varying in:
  - Evidence
  - Intended population
  - Intended outcome
  - Content
  - Approach
  - Length
  - Cost

Viljoen et al. (2010)
Selecting a Risk/Need Assessment Tool
Selecting a Risk/Need Assessment Tool

Answer the following questions:

1. What is the evidence?
2. What is your outcome of interest?
3. What is your population?
4. What is your setting?
5. What are the costs?

Desmarais & Singh (2013)
1. What is the evidence?

- No one instrument produces *most* reliable and *most* accurate risk/need assessments

- Some evidence of superiority as a function of:
  - Subgroup
    - Age
    - Sex/gender
    - Race/ethnicity
  - Outcome
    - Delinquency vs offending vs violations
    - Type of offending (any, violent, sexual)
    - Timing (adolescent, early adult, adult)

*Baird et al. (2013); Hoge et al. (2012); Olver et al (2009); Schwalbe (2007, 2008); Thompson & Stewart, (2005); Thompson & McGrath (2012); Viljoen, Mordell, et al. (2012)*
Additional Considerations

- Generalizability of research studies to use in practice
  - Research assistants ≠ professionals
  - Time
  - Resources
  - Training
- Allegiance effects
  - Better performance in studies conducted by tool author
- Fidelity
  - Use of tool as designed and intended

Desmarais & Singh (2013)
2. What is your outcome of interest?

- Some instruments designed for and perform better in assessing likelihood of particular outcomes
  - General vs specific form of adverse outcome
  - Context or setting of behavior
  - Timing of behavior
- Some instruments more/less relevant to intervention
  - Prediction vs. management
  - Item content and composition
Item Content & Composition

- Static vs. dynamic factors
  - Historical vs. static factors
  - Stable dynamic vs. acute dynamic factors
- Criminogenic vs. treatment needs
- Distal vs. proximal factors
- Risk vs. protective factors
3. What is your population?

- Some instruments developed for specific populations
  - Youth on probation
  - Youth in secure settings
  - At-risk youth
- Some instruments perform better for some subgroups
- Limited evidence of predictive validity for other subgroups
4. What is your setting?

- Information and time available to complete assessment
- Staff training and background
- Assessment and prediction time frame
- Evidence supporting use of tool in that setting

Desmarais & Singh (2013)
5. What are the costs?

- Costs associated with
  - Training
  - Materials
  - License
  - Integration with existing records or IT system
- One-time and/or ongoing

Desmarais & Singh (2013)
Using Risk/Need Assessments to Improve Outcomes
Ultimate Goal

- Improve outcomes for juvenile offenders through:
  - Increased standardization, consistency, and transparency of risk/need assessment
  - Better match between juvenile offenders’ individual needs and intervention
  - Reduced risks associated with over- or under-intervening
  - Better communication within and between agencies
  - Monitoring of juvenile offenders’ individual progress
  - Promotion of youth and caregiver involvement
  - Population surveillance
Improving Outcomes

- Accurate and reliable risk/need assessments do not improve outcomes
- Must be:
  - implemented with fidelity
Successful Implementation

- Steps to successful implementation in practice:
  1. Prepare
  2. Establish stakeholder and staff buy-in
  3. Select and prepare the risk assessment tool
  4. Prepare policies and essential documents
  5. Training
  6. Implement pilot test
  7. Full implementation
  8. Ongoing tasks for sustainability

Vincent, Guy, & Grisso (2012)
Successful Implementation

- Tasks for sustainability
  - Staff, organizational, and legislative level accountability
  - Booster training every six months
  - Data monitoring for use of risk/need assessments in decision-making and outcomes
  - Regular assessment of fidelity, inter-rater reliability, and validity

Vincent, Guy, & Grisso (2012)
Improving Outcomes

- Accurate and reliable risk/need assessments do not improve outcomes

- **Must be:**
  - implemented with **fidelity**
  - communicated to others
Communicating Assessment Results

- Completing the form and/or report ≠ communication
  - Must be communicated within and between agencies

- Opportunities for stakeholder engagement
  - Youth
  - Caregivers
  - Practitioners
  - Probation staff and supervisors
  - Judges and attorneys
  - Etc.
Communicating Assessment Results

- Recommended practices
  - Be explicit
  - Know your target audience
  - Qualify limitations of assessment
  - Contextualize the risks and needs
  - Describe plausible scenarios and contingencies
“Improper risk communication can render a risk assessment that was otherwise well-conducted completely useless or even worse, if it gives consumers the wrong impression.”

Heilbrun, Dvoskin, Hart & McNiel (1999, p. 94)
Improving Outcomes

- Accurate and reliable risk/need assessments do not improve outcomes

- Must be:
  - implemented with fidelity
  - communicated to others
  - integrated with case management
Integration with Case Management

- Risk-Need-Responsivity Model
  - Best practice for assessing and treating offenders
  - Framework for linking risk assessment with case management

- Improved outcomes with adherence to:
  1. Risk principle
  2. Need principle
  3. Responsivity principle

Andrews & Dowden (2006); Andrews & Bonta (2010); Lowenkamp et al. (2006)
Risk Principle

- Match level of risk
  - Higher risk $\rightarrow$ more resources
  - Lower risk $\rightarrow$ fewer resources
- Over-intervening $\rightarrow$ increase adverse outcomes
  - Increase risk factors, criminogenic needs, and treatment needs
  - Reduce protective factors
Need Principle

- Address **individual** risk factors and criminogenic needs factors relevant to risk of target outcome*

Examples
- Substance use
- Mood
- Attitudes

*With juvenile offenders, also attend to treatment needs.*
Responsivity Principle

- Take into account factors that can affect intervention outcomes
  - Examples
    - Intellectual functioning
    - Developmental stage, maturity
    - Mental health symptoms
    - Learning style
    - Motivation
    - Gender
  - Build upon individual strengths
Case Management

- Consider all components of the risk assessment
- Identify and balance short-term and long-term goals
  - Those of the court, system, assessor, youth, caregiver
- Use stepwise, integrated approach that targets and prioritizes individual risks and needs
  - Step 1 – Stability
    - Focus on (critical) treatment needs
  - Step 2 – Improve functioning and reduce risk
    - Focus on risk factors and criminogenic needs
**Additional Considerations**

- Given his/her level of functioning (cognitive and mental health), maturity, and motivation:
  - What structures and supports need to be in place?
  - What are the urgent/critical issues?
  - What do we work on now to provide the foundation for future progress?
  - How do we measure:
    - improvements or success?
    - setbacks or failure?
Improving Outcomes

- Accurate and reliable risk/need assessments do not improve outcomes

- Must be:
  - implemented with **fidelity**
  - communicated to others
  - integrated with case management
  - reviewed and amended over time
Review and Amendment

- Both the assessment and plan have a shelf-life
- Identify and implement mechanism and timeline for review
  - Modify as necessary
- Not necessary to start from scratch
  - What has changed (for better or worse)?
  - What is the same?
  - What do we need to do differently?
Thank you!

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  Lab website: [www.ncsuforensicpsychology.com](http://www.ncsuforensicpsychology.com)