Putting RNR into Practice: Utilizing Risk/Needs Assessment Results to Guide Risk Reduction Strategies with Juvenile Justice-Involved Adolescents
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Overview

- Case Example
- Juvenile Risk Needs Assessment 101
- Recent Research on the Evidence Base
- Risk-Needs-Responsivity
- Strategies for Practice Informed by the RNA and RNR research
Case Example - AJ

- 16-year-old biracial
- 8th grade general education student
- Adjudicated by Admission to Criminal Possession of a Firearm
- YLS/CMI overall risk level = Moderate

<table>
<thead>
<tr>
<th>YLS/CMI Domain</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior/Current Offenses/Dispositions</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Circumstances/Parenting</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Employment (Truancy)</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Peer Relations (Delinquent peers; No positive peers)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance Abuse (NOTED AS A STRENGTH)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leisure/Recreation (Limited activities, make better use of time)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personality/Behavior (Poor frustration tolerance, Inadequate guilt feelings)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes/Orientation</td>
<td>X</td>
<td></td>
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</tr>
</tbody>
</table>

Summary of JPO's Findings and Recommendations

- Youth has experienced truancy and low academic performance in one subject; teachers say offense behavior was "shocking/surprising."
- Respondent has issues resolving conflicts without violence to express his feelings
- Parents are lacking adequate supervision to prevent involvement in risk behaviors and minimize his involvement in the offense
- Youth has negative peer associations that are gang-related
- Level of empathy and remorse are inadequate
- Based on I&R, YLS/CMI, and the serious nature of the offense, youth would benefit from a placement within a structured setting while receiving trauma-informed and bereavement therapy, conflict resolution, and appropriate peer association
### Final JPO Recommendation

Out of Home Placement

### Some Questions to Consider

- What factors are driving the recommendation?
- Are findings consistently linked to results of the YLS/CMI?
- Any thoughts on how to challenge and/or work around the placement recommendation?

### Overview of Risk/Needs Assessments
Forensic psychologists indicated almost always using in post-adjudication/pre-disposition (86.1%; Viljoen et al. 2010)

63% of judges and juvenile probation officers reported using RNA to guide case processing in a 2014 survey (Wachter, 2014)

Assessment of needs and responsivity is legally proscribed function of juvenile probation in 10 jurisdictions (Hseih et al., 2016)

**Definition**
- A validated tool to assess a youth’s likelihood to reoffend

**Appropriate Use**
- Transparent method that standardizes data collection process
- Determine overall risk level
- Guide intervention planning

**Inappropriate Use**
- Argue adjudication
- Equating risk level with placement decision
RNA Terms

- **Risk Factor**
  - Anything that is associated with an increased risk for reoffending

- **Two Types of Risk Factors**
  - Static = historical – doesn’t change
  - Dynamic = changeable

- **Protective Factors (Strengths)**
  - Factor that can buffer some risk factors or used to promote overall healthy development

- **Risk Level – How Determined**
  - Actuarial
  - Structured Professional Judgment


- **Risk Principle**
  - Intensity of treatment services should reflect risk level

- **Needs Principle**
  - Interventions should target needs (e.g., dynamic risk factors)

- **Responsivity Principle**
  - Specific = characteristics/circumstances not related to offending but require attention in case planning (e.g., strengths, ability, motivation)
  - General = feature of the intervention or treatment

Central Eight Risk Factors (Andrews & Bonta, 2010)

- **Big Four (r = .26)**
  - Criminal History
  - Antisocial Attitudes
  - Antisocial Associates
  - Antisocial Personality

- **Moderate Four (r = .17)**
  - Education/Employment
  - Family/Marital Status
  - Leisure Recreation
  - Substance Abuse

- **Criminogenic Needs**
  - Dynamic factors that are functionally related to criminal behavior

- **Non-criminogenic Needs (r = .03)**
  - Dynamic factors that have little to no functional relationship to criminal behavior
Notice that emotional distress and/or psychiatric problems are identified as responsivity factors!

Factors that can interfere with treatment targeting dynamic criminogenic needs!

YLS/CMI 2.0 (Hoge & Andrews, 2011)

- Standardized inventory that combines both actuarial and clinical decision principles
- Age range is 12-17 years
- 42 item checklist format across 8 different domains
- Risk outcomes focus on general offending with specific sections to define risk management issues
- Acceptable inter-rater reliability (.61 to .85 for subscales and .82; .75 for overall risk need score)
- Positive evidence of concurrent validity (positive correlation with CD symptoms, PCL:YV)
- Weighted mean effect size r = .25 for violent recidivism across 5 studies comparing YLS/CMI to PCL:YV; Edens et. al., 2006) AUC = .64 in Schwalbe (2007) meta-analysis

Short and Long-Term Recidivism in Serious Juvenile Offenders (Olver, Stockdale, & Wong, 2012)

| Table 3 | Predictive Accuracy of the YLS/CMI: Overall Sample |
|-----------------|-------------------|-----------------|
| Recidivism group | Base rate (%) | AUC | 95% CI |
| Total recidivism (n = 297) | | | |
| General | 73.9 | 0.67 | (0.60, 0.74) |
| Neurotic | 79.7 | 0.67 | (0.60, 0.74) |
| Violent | 43.5 | 0.67 | (0.50, 0.82) |
| Adolescent (n = 148) | | | |
| General | 58.0 | 0.67 | (0.50, 0.82) |
| Neurotic | 56.6 | 0.67 | (0.50, 0.82) |
| Violent | 58.7 | 0.67 | (0.50, 0.82) |
| Adulthood recidivism (n = 148) | | | |
| General | 56.9 | 0.67 | (0.50, 0.82) |
| Neurotic | 52.6 | 0.67 | (0.50, 0.82) |
| Violent | 51.6 | 0.67 | (0.50, 0.82) |

Note: All predictive accuracy statistics significant p < .05. M. A. AUC = area under the curve; CI = confidence interval.

Moderate to high predictive validity both at the short-term and long-term

AUC values above .70 are a general benchmark of a tool’s validity
Different risk groups had different survival rates (time to new conviction)

What About Gender and Race?

- **Gender**
  - Studies are mixed using total risk scores to predict recidivism (Schwalbe et al., 2008; Olver, Stockdale, Wormith, 2014; Shepherd, Luebbers, & Dolan, 2013)

- **Race**
  - While higher scores can be found among youth of color, predictive validity does not vary (Olver et al., 2014; Barnes et al. 2016)
  - No evidence of test bias for either the SAVRY and YLS/CMI (Perrault, Vincent, & Guy, 2017)
  - Race effects were found for items (i.e., differential impact) Static > Dynamic

What Accounts for Predictive Validity?

- **DYNAMIC FACTORS ARE BETTER RECIDIVISM PREDICTORS!!!!**
  - Dynamic risk factors added incremental validity to static/historical factors in predicting violent and non-violent recidivism (Clarke, Peterson-Badali, & Skilling, 2017; Vincent, Perrault, Guy, & Gershenon, 2012) and time to new offenses for males (Cuevas, Wolff, & Baglivio, 2019)
  - Personality/behavior, substance abuse, peer relations, negative/criminal peers (any recidivism), attitudes/orientation (mixed) (Perrault et al., 2017)
**YLS/CMI in Nebraska (Weiner et al., 2017)**

- 6,158 juvenile probationers rated on the YLS/CMI (5/2007–11/2015)
- YLS/CMI Total Risk and Risk levels significantly predicted probation failures (did not successfully complete first probation and/or returned to probation)
  - \( r = .29 \) total score, \( r = .26 \) risk level
- Gender differences (level) but no impact on predictive validity
- No difference in predictive validity across White, Black, and Hispanic adolescents

**Big 4 in Nebraska?**

- Education/employment,
- Family Circumstances/Parenting,
  - Personality/Behaviors,
- Prior/Current Offenses,
- Peer Relations,
- Substance Abuse showed strongest effect in predicting probation failures
- Not consistent with the Big 4!

**Risk Assessment in Practice**

- Juvenile probation officers can achieve acceptable inter-rater agreement supporting documentation of risk estimates in the field (Vincent, Guy, Fusco, & Gershenon, 2012)
- Greater shift in decision-making (more consistent with RNR); establishing supervision level based on risk; greater focus on dynamic needs and matching to treatment (Guy et al., 2014; Vincent et al., 2012)
SPJ and Shift to Management

- Field-based implementation of the SAVRY associated with changes in case management and placement (Vincent, Guy, Gershon, & McCabe, 2012)
  - 50% reductions in placement
  - 30% reductions in maximum supervision level
  - Maintained good match between service intensity and high risk ratings
  - No significant increase in re-offending

- Consistent with the RNR (Risk-Need-Responsivity) model (Andrews & Bonta, 2010)

Implementation Matters

- Most JPOs indicated that RNA was helpful in guiding case planning but preferred some level of discretion (Guy et al., 2014)

- Vincent et al. (2016) Across six jurisdictions RNA implementation adherence varied (four strong, 1 fair, and 1 poor). Strong sites . . .
  - Decrease in restrictive dispositions
  - Decreases in placement rates
  - Greater use of lower supervision levels
  - Greater match between risk level and service referrals


- YLS/CMI risk/needs incorporated into a service matrix/graduated response sanctions

While the YLS is being included in the PIDs, consistent feedback indicated that the PIDs are not regularly read and valued by all probation officers and that the YLS is not being used consistently and effectively to guide the development of a case plan. Nebraska has made a

Lancaster County Juvenile Probation demonstrates a commitment to the use of the YLS/CMI in both policy and practice. However, the results of this review identified significant opportunities to improve the utility of the tool across the system, starting with enhancing its key role as the foundation for effective case planning and case management. As previously mentioned, judges have historically not relied on the YLS risk score to inform their dispositions. Neither has staff consistently translated the primary risk domains from the YLS into a targeted, effective and measurable case plan. However, a Service Recommendation Matrix based on the YLS has
RNA Results – Risk Levels Matter

Dynamic Factors Matter More Than Static

Tools Don’t Tell Us How To Intervene

To Summarize

Moving Beyond Predictive Validity to Case Planning

Needs + Case Plan = Better Outcomes

- 30.7% overall RNA needs/case plan match
  - Recidivism rates were lower when needs were matched to an appropriate service in 5 out of 6 YLS/CMI domains (Peterson-Badali, Skilling, Haqanee, 2014)

- Higher match rate significantly predicted recidivism reduction (25% well matched versus 75% not well matched; Vieira et al., 2009)

- Needs/match rate better predict or recidivism reduction for males compared females (Vitopoulos et al., 2012)
Underprescription more common in both low and moderate/high risk youth.

### Table 2: Appropriateness of Service Referral by SAVRY Identified Need Area (N = 386)

<table>
<thead>
<tr>
<th>Need area</th>
<th>No need</th>
<th>Need present, n (%)</th>
<th>Total, n (%)</th>
<th>Good service match, n (%)</th>
<th>Overprescription, n (%)</th>
<th>Underprescription, n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disruptive behavior problems</td>
<td>132 (84.7)</td>
<td>253 (55.7)</td>
<td>385 (99.4)</td>
<td>179 (45.9)</td>
<td>99 (29)</td>
<td>167 (45.9)</td>
</tr>
<tr>
<td>Emotional stability concerns</td>
<td>184 (92.5)</td>
<td>220 (48.5)</td>
<td>404 (100)</td>
<td>197 (49.8)</td>
<td>101 (25)</td>
<td>105 (26.2)</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>258 (93.2)</td>
<td>157 (60.8)</td>
<td>415 (100)</td>
<td>206 (74.2)</td>
<td>14 (5.1)</td>
<td>85 (54.1)</td>
</tr>
<tr>
<td>Felony/pointing problems</td>
<td>269 (84)</td>
<td>177 (54)</td>
<td>446 (100)</td>
<td>224 (63.5)</td>
<td>37 (10.3)</td>
<td>107 (69.4)</td>
</tr>
<tr>
<td>Education</td>
<td>131 (81.6)</td>
<td>164 (41.6)</td>
<td>395 (100)</td>
<td>194 (49)</td>
<td>78 (19.8)</td>
<td>121 (30.4)</td>
</tr>
<tr>
<td>Negative peer relations</td>
<td>82 (31.3)</td>
<td>303 (78.7)</td>
<td>385 (100)</td>
<td>148 (38.4)</td>
<td>37 (10)</td>
<td>200 (51.6)</td>
</tr>
</tbody>
</table>

Note. Percentages for columns were calculated using different denominators. A criminogenic risk area being present (or absent) and the rates of good service matching are reflected in the percentage of youth out of the entire sample (N = 386). The percentage of youth with overprescriptions includes only youth who had the need area absent, whereas underprescription is the percent of youth who had the need area present. SAVRY = Structured Assessment of Violence Risk for Youth.

Underprescription more common in both low and moderate/high risk youth.

### Table 1: Lithodipine Treatment of Criminogenic Need Domains to Treat Low-Scored Mental Health Needs

<table>
<thead>
<tr>
<th>Criminogenic need area</th>
<th>N of needs</th>
<th>Other need area</th>
<th>Total area</th>
<th>Criminogenic need area</th>
<th>Mental health needs</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>289</td>
<td>81.5%</td>
<td>242</td>
<td>288</td>
<td>16.3%</td>
<td>0.068</td>
</tr>
<tr>
<td>Injury</td>
<td>163</td>
<td>47.5%</td>
<td>106</td>
<td>149</td>
<td>45.7%</td>
<td>0.023</td>
</tr>
<tr>
<td>Substance use</td>
<td>181</td>
<td>61.9%</td>
<td>105</td>
<td>204</td>
<td>42.2%</td>
<td>0.023</td>
</tr>
<tr>
<td>Violence</td>
<td>122</td>
<td>20.7%</td>
<td>76</td>
<td>141</td>
<td>34.9%</td>
<td>0.023</td>
</tr>
<tr>
<td>Level</td>
<td>144</td>
<td>33.6%</td>
<td>85</td>
<td>202</td>
<td>34.2%</td>
<td>0.023</td>
</tr>
<tr>
<td>Crime</td>
<td>124</td>
<td>27.9%</td>
<td>120</td>
<td>146</td>
<td>29.9%</td>
<td>0.023</td>
</tr>
<tr>
<td>Education</td>
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</table>

Matching mental health needs did not impact recidivism reduction after accounting for criminogenic need match (McCormick, Peterson-Badali, & Skillings, 2016).

### Let’s Unpack the McCormick Study a Bit Further

- Adolescents with mental health needs had higher YLS/CMI total scores
  - Educ, Sub Abuse, Per/Beh, Leisure/Rec
- Adolescents with mental health needs were no more likely to reoffend compared to those without mental health needs
  - Those who received MH treatment were no less likely to reoffend compared to untreated group
- Level of criminogenic needs match predicted lower recidivism but MH treatment match did not!
Having BOTH NEEDS treated resulted in significant reductions in recidivism.
### Case Planning Recommendations (Hoge, 2016)

- Use a structured RNA tool
- Observe RNR
- Consider a youth’s developmental level when setting case plan goals
- Incorporate strengths and protective factors
- Establish a positive relationship with youth
- Engage youth – find out what matters to them
- Use evidence-based interventions
- Review progress at regular intervals

### Program Delivery – RNR isn’t just for Probation Officers! (Hoge, 2016)

- Program culture should reflect RNR principles
- Staff competence in RNR principles should also be evaluated
- Program must be committed to quality controls

### Challenges to Comprehensive Use of RNR (Hoge, 2016)

- Skepticism in rehabilitation goal
- Fragmentation across the system – failure for cross-system collaboration
- Resistance to change
- Economic challenges
- Don’t yet have a clear evidence base on responsivity factors and strengths
- Non-holistic and does not stress a youth’s overall well-being (see Von Damme et al., 2017)
Don’t Overlook Systems Issues

- Implementation is an Ongoing Process
- Quality Assurance
- Ongoing staff training
- Rater fidelity

http://www.modelsforchange.net/publications/346

Q&A

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