Detection of Previous Exposures to Trauma among Juvenile Offenders
By Benjamin Edner, MS., Adrian Kunemund, MS., Brian Glaser, PhD., & Georgia Calhoun, PhD.

Trauma & Juvenile Delinquency

What is trauma?
- Childhood trauma is broadly defined as being exposed to and/or experiencing violent and/or stressful event(s) early in life (Maschi, 2006)

What do we consider to be traumatic?
- Early adverse childhood experiences involving:
  - Physical, emotional, and/or sexual abuse
  - Physical and/or emotional neglect
  - Witnessing domestic violence
  - Experiences of loss/separation

Rates of Trauma in Juvenile Delinquency

- Rates among adjudicated youth
  - 93% of boys and 84% of girls reported previous trauma exposures (Abram et al., 2004)
  - Up to 90% reported traumatic childhood events (Mongeau, et al., 2014)
  - 67.8% averaging 4 or more adverse childhood events and 24.5% averaging 6 or more (Baglivio & Epps, 2014)
  - Prevalence of adverse childhood experiences shown to be 8 times higher than community samples (Koenig et al., 2019; Robertson, Brand, Thompson, & Sava, 2004)

- Among chronic juvenile offenders, approximately 47% experienced childhood trauma; 31.7% demonstrated full criteria for PTSD (Amatya & Barzman, 2012)
  - 93% of youth on probation reported at least 1 traumatic event with up to 12% meeting the criteria for PTSD (Moore, Gaskin, & Indig, 2013)
  - Estimates of up to an average of 14 traumatic childhood experiences for typical juvenile offenders have been reported (Abram et al., 2004)
  - Research indicates a 12% to 82% increase in the probability of offending for each adverse childhood event (Baglivio & Epps, 2014; Fox et al., 2014)
**Trauma Symptom Manifest**

- **Type I**
  - Re-experiencing
  - Avoidance
  - Hyperarousal

- **Type II**
  - Hypoarousal
  - Emotional numbing
  - Dissociation

**Trauma Symptoms in Adjudicated Youth**

- What is different about adjudicated youth?
  - Chronicity of exposure
  - Complex trauma presentation (Developmental Trauma Disorder)
  - Types of adopted defense mechanisms/coping strategies
  - Development of callous-unemotional traits

**Limitations of Symptom Detection**

- Few instruments normed on delinquent populations
- Type I “classic” trauma symptom clusters are commonly evaluated
- Recognition of events as traumatic due to pervasive exposure
- Distrust of authority figures and apprehension towards self-disclosure

**Detection of Previous Trauma Exposures**

**Types of Instruments**

- Trauma Measures
  - Trauma Symptom Checklist for Children (TSCC)
  - Child Reported of Posttraumatic Symptoms (CROPS)
- Behavioral Functioning
- Personality Functioning
  - Minnesota Multiphasic Personality Inventory – Adolescent (MMPI-A)
Trauma Symptom Checklist for Children (TSCC)

TSCC is a 54-item self-report scale designed for trauma symptoms related to sexual abuse and other traumatic events.

+ Anxiety
+ Depression
+ Anger
+ Posttraumatic Stress
+ Dissociation
+ Dissociation Overt
+ Dissociation Fantasy
+ Sexual Concerns
+ Sexual Concerns Preoccupation
+ Sexual Concerns Dissociation

TSCC: Male Profile

TSCC: Female Profile
**Child Report of Posttraumatic Symptoms**

+ The Child Report of Post-traumatic Symptoms (CROPS) is a 26-item self-report questionnaire that screens for post-traumatic symptoms found in the DSM-IV.
+ Total CROPS score
+ Affective Symptoms
+ Somatization/Dissociation
+ Avoidance

**CROPS: Total Score**

<table>
<thead>
<tr>
<th></th>
<th>Combined</th>
<th>Male Offenders</th>
<th>Female Offenders</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Reported Trauma</td>
<td>14.86</td>
<td>14.23</td>
<td>18.7</td>
</tr>
<tr>
<td>Reported Trauma</td>
<td>21.03</td>
<td>17.84</td>
<td>23.58</td>
</tr>
</tbody>
</table>

**57% overall accuracy**
CROPS: Profile

Child Report of Posttraumatic Stress Symptoms

<table>
<thead>
<tr>
<th></th>
<th>Affective Symptoms</th>
<th>Somatization/Dissociation</th>
<th>Avoidance Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Reported Trauma</td>
<td>5.6</td>
<td>0.17</td>
<td>3.48</td>
</tr>
<tr>
<td>Reported Trauma</td>
<td>0.42</td>
<td>0.03</td>
<td>3.05</td>
</tr>
</tbody>
</table>

CROPS: Male Profile

Child Report of Posttraumatic Stress Symptoms

<table>
<thead>
<tr>
<th></th>
<th>Affective Symptoms</th>
<th>Somatization/Dissociation</th>
<th>Avoidance Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Reported Trauma</td>
<td>5.21</td>
<td>3.77</td>
<td>3.67</td>
</tr>
<tr>
<td>Reported Trauma</td>
<td>8.04</td>
<td>4.55</td>
<td>3.39</td>
</tr>
</tbody>
</table>

CROPS: Female Profile

Child Report of Posttraumatic Stress Symptoms

<table>
<thead>
<tr>
<th></th>
<th>Affective Symptoms</th>
<th>Somatization/Dissociation</th>
<th>Avoidance Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Reported Trauma</td>
<td>6.12</td>
<td>4.7</td>
<td>3.23</td>
</tr>
<tr>
<td>Reported Trauma</td>
<td>10.52</td>
<td>6.34</td>
<td>4.39</td>
</tr>
</tbody>
</table>

CROPS Accuracy

Total Score – 64.2% Accuracy
CROPS Accuracy

Behavior Assessment System for Children, 2nd Edition

The BASC-2 is a multidimensional approach to evaluating the behavior and self-perceptions of children and adolescents.

BASC-2: Profile

BASC-2: Male Profile
BASC-2: Profile

Personal Adjustment

Relations with Parents | Interpersonal Relations | Self-Esteem | Self-Reliance
---|---|---|---
No Reported Trauma | 47.3 | 54.3 | 55.25 | 46.73
Referred Trauma | 42.62 | 51.08 | 52.41 | 44.13

BASC-2: Male Profile

Personal Adjustment

Relations with Parents | Interpersonal Relations | Self-Esteem | Self-Reliance
---|---|---|---
No Reported Trauma | 48.47 | 53.44 | 55.64 | 45.9
Referred Trauma | 42.19 | 51.11 | 52.48 | 43.53

BASC-2: Female Profile

Personal Adjustment

Relations with Parents | Interpersonal Relations | Self-Esteem | Self-Reliance
---|---|---|---
No Reported Trauma | 45.08 | 55.94 | 54.49 | 48.3
Referred Trauma | 43.08 | 52.08 | 51.5 | 45.59

BASC-2 Accuracy

Summary of Canonical Discriminant Functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Eigenvalue</th>
<th>% Variance</th>
<th>Cumulative %</th>
<th>Canonical Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Trauma</td>
<td>0.08</td>
<td>41.97</td>
<td>41.97</td>
<td>0.8</td>
</tr>
<tr>
<td>Trauma</td>
<td>0.06</td>
<td>19.73</td>
<td>61.71</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Interpretation:
- If the canonical discriminant function is used for analysis,
- The function is significant for both groups.

Structure Matrix

<table>
<thead>
<tr>
<th>Function</th>
<th>Trauma</th>
<th>No Trauma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relations with Parents</td>
<td>0.08</td>
<td>0.06</td>
</tr>
<tr>
<td>Interpersonal Relations</td>
<td>0.06</td>
<td>0.08</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>0.06</td>
<td>0.08</td>
</tr>
<tr>
<td>Self-Reliance</td>
<td>0.06</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Note: The structure matrix shows the correlation between the canonical discriminant functions and the original variables.
BASC-2 Accuracy

Minnesota Multiphasic Personality Inventory – Adolescent (MMPI-A)

+ The MMPI-A is a self-report instrument designed to aid in the assessment of a wide range of clinical conditions.

Clinical Scales
+ Hypochondriasis
+ Depression
+ Hysteria
+ Psychopathic Deviate
+ Masculinity/Femininity
+ Paranoia
+ Psychasthenia
+ Schizophrenia
+ Social Introversion

MMPI-A: Profile

MMPI-A Accuracy

Summary of Canonical Discriminant Functions

- Baseline characteristics: 68.1% Accuracy
- MMPI-A: Profile
- MMPI-A Accuracy
Traditional Trauma, Behavior, and Personality measures can generally differentiate juvenile offenders with reported trauma histories. Accuracy is low but statistically significant. Instrument modification and/or trauma measures specific for adjudicated youth are warranted to improve accuracy. Therapy and service allocation could work in tandem with juvenile offender-specific trauma instruments to inform appropriate evidence-based treatments.

Questions?

References

References

- Kerig, P. K., Bennett, D. C., Chaplo, S. D., Modrowski, C. A., & McGee, A. B. (2016x). Numbing of positive, negative, and general emotions: Associations with tra...