Risk Assessment for Juvenile Offenders in Texas

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Texas Juvenile Probation Commission

2008 Data Coordinators’ Conference
Topics Covered

- Goals of the Assessment
- Where we have been
- What we have found
- Where we are going
Goals

• To develop an assessment that identifies which juveniles referred are most at risk for subsequent delinquent behavior.
• To determine which offenders need substantial intervention services and which will likely not re-offend even without many services.
• To determine which factors best predict numerous or severe subsequent offenses.
Where We Have Been

• Other Assessments Examined
• Juveniles Studied for the Assessment
• Initial Sample v. In Depth Sample
• Counties Studied
• Definition of Risk
• Method for Developing the Assessment
• Factors Analyzed
Other Assessments Examined

• Youth Level of Service/ Case Management Inventory (YLS/ CMI)
• Juvenile Assessment & Intervention System (from the National Council on Crime & Delinquency)
• Assessments being used by:
  – Washington State
  – Orange County, CA
  – Oregon
  – Arizona
  – North Carolina
Why Not Use an Existing Assessment?

- Costs associated with copyrighted instruments
- Existing assessments not validated for the Texas population
- Some take lengthy time to administer
- Others are only intended for adjudicated juveniles
Juveniles Studied for the Assessment

- Initial sample was 68,584 juveniles referred to local juvenile probation departments in Texas in CY 2003
- Juveniles were tracked in both the adult and juvenile systems for three years
- Subsequent offense data available
- No referrals from out of state
In Depth Sample

• Same parameters as initial sample, but additional information collected from case folders
• Review of case folders provides more in depth information but limits size of sample
• Estimated size is approximately 2,900
Information from Case Folders

- School information
- Substance abuse
- Child abuse
- Mental health
- Family criminal, substance abuse, and mental health history
- Parental supervision
- Victim information
- Risk & protective factors
Departments & Counties Sampled for Risk Assessment

Status as of November 13, 2008

- Completed, 24 departments, 38 counties
- Scheduled, 2 departments, 2 counties
- Not scheduled, 6 departments, 7 counties
Definition of Risk

• Number of subsequent referrals to a juvenile probation department
• Number of subsequent arrests as an adult
• Any subsequent referral or arrest for a violent felony offense
• Current violent felony offense
Developing the Assessment

• Measuring risk
• Collecting a representative sample
• Gathering data on specific factors that might be related to risk
Measuring Risk

• Examine the number and type of juvenile referrals/ arrests 3 years from date of 1st referral to juvenile probation in 2003
• Include arrests as a juvenile and adult
• Make allowance if juvenile sent to TYC or certified on 1st offense
Measuring Risk

- Arrests for violent felony offenses (murder, attempted murder, rape, robbery, aggravated assault) weighted more

- Arrests for runaway, truancy, and class C misdemeanors weighted less
Representative Sample

- Minimum number of cases from small counties; sufficient number from large counties
- Sample initially divided into two risk levels
- Ensure sample adequately accounts for different risk levels and gender
- All regions of the state included
- Both urban and rural departments included
Collecting Data Related to Risk

- Most from electronic data submissions from local juvenile probation departments
- Adult arrest data from the Texas Department of Public Safety
- Some information from other state agencies
- In-depth information from case folders
- Determine which factors best predict risk
Factors Analyzed

- Demographics
- Criminal history
- Current offense
- School
- Mental health & Substance abuse
- Family
- Risk & protective factors
- Treatment
Demographic/ Child Factors

• Age at current referral
• Gender
• Ethnicity
• Peer associations
• Aggressive behavior
Criminal History

- Prior referrals
- Severity of offenses
- Prior adjudications
- Prior detentions
- Age at first referral
Offense Factors

• Severity of offense (violent, property, felony, misdemeanor, etc)
• Gang related
• Weapon involved
• School related
• Victim (gender, age, relationship)
School

- Attendance
- Behind grade
- Special education
- At-risk of dropping out of school
- Suspended or expelled
- Disciplinary referrals
- Alternative education program
Mental Health & Substance Abuse

- Contact with public mental health system
- DSM diagnosis
- Suicide ideation and attempts
- Length of services from public mental health system
- Type of services from public mental health system
- MAYSI results
- Alcohol and drug use
Family Factors

- Sexual, physical, or emotional abuse
- Neglect
- Domestic violence
- Family juvenile lives with
- Family criminal history
- Family mental illness or substance abuse
- Deceased family members
- Supervision at home
- Economic status
Risk & Protective Factors

- Chaotic home environment
- Friends use drugs
- Trouble controlling temper
- Good relationship with parents
- Involved with extra curricular activities
- Passing classes at school
Treatment

- Prior department supervision
- Prior rehabilitation programs
- Prior residential placement
Intervening Variables

- Supervision after referral
- Treatment/ programming for offenses
- Residential placement for offenses
- Incarceration for initial or subsequent offenses
- Change in family status
What We Have Found

- Demographics
- Re-offense
- Criminal history
- Current offense
- School
- Mental health & substance abuse
- Families
<table>
<thead>
<tr>
<th>Age</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>Age</th>
<th>Ethnicity</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 years old</td>
<td>1% African American</td>
<td>19%</td>
<td>Female</td>
<td>19% African American</td>
<td>36%</td>
</tr>
<tr>
<td>11 years old</td>
<td>2% Caucasian</td>
<td>33%</td>
<td>Male</td>
<td>33% Caucasian</td>
<td>64%</td>
</tr>
<tr>
<td>12 years old</td>
<td>7% Hispanic</td>
<td>48%</td>
<td>Total</td>
<td>48% Hispanic</td>
<td>100%</td>
</tr>
<tr>
<td>13 years old</td>
<td>13% Other</td>
<td>1%</td>
<td></td>
<td>13% Other</td>
<td>100%</td>
</tr>
<tr>
<td>14 years old</td>
<td>20% Total</td>
<td>100%</td>
<td></td>
<td>20% Total</td>
<td>100%</td>
</tr>
<tr>
<td>15 years old</td>
<td>25%</td>
<td></td>
<td></td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>16 years old</td>
<td>30%</td>
<td></td>
<td></td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>17 years old</td>
<td>3%</td>
<td></td>
<td></td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
## Re-Offense

<table>
<thead>
<tr>
<th>Number of Referrals/Arrests w/n 3 years</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>558</td>
<td>33%</td>
</tr>
<tr>
<td>One</td>
<td>336</td>
<td>20%</td>
</tr>
<tr>
<td>Two</td>
<td>236</td>
<td>14%</td>
</tr>
<tr>
<td>Three</td>
<td>198</td>
<td>12%</td>
</tr>
<tr>
<td>Four</td>
<td>126</td>
<td>7%</td>
</tr>
<tr>
<td>Five or more</td>
<td>246</td>
<td>14%</td>
</tr>
<tr>
<td>Total</td>
<td>1,700</td>
<td>100%</td>
</tr>
</tbody>
</table>
## Violent Re-Offense

<table>
<thead>
<tr>
<th>Number of Violent Felony Referrals/Arrests w/n 3 years</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>1,489</td>
<td>88%</td>
</tr>
<tr>
<td>One</td>
<td>172</td>
<td>10%</td>
</tr>
<tr>
<td>Two or more</td>
<td>39</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>1,700</td>
<td>100%</td>
</tr>
</tbody>
</table>
## Committed to TYC

<table>
<thead>
<tr>
<th>Committed to TYC w/n 3 years of referral</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1,525</td>
<td>90%</td>
</tr>
<tr>
<td>Yes</td>
<td>175</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>1,700</td>
<td>100%</td>
</tr>
<tr>
<td>Total Referrals at time of current referral</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>One</td>
<td>976</td>
<td>57%</td>
</tr>
<tr>
<td>Two</td>
<td>331</td>
<td>19%</td>
</tr>
<tr>
<td>Three</td>
<td>141</td>
<td>8%</td>
</tr>
<tr>
<td>Four</td>
<td>69</td>
<td>4%</td>
</tr>
<tr>
<td>Five or more</td>
<td>183</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>1,700</td>
<td>100%</td>
</tr>
</tbody>
</table>
### Criminal History

<table>
<thead>
<tr>
<th>Total Adjudications at time of current referral</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>1330</td>
<td>78%</td>
</tr>
<tr>
<td>One</td>
<td>230</td>
<td>14%</td>
</tr>
<tr>
<td>Two</td>
<td>99</td>
<td>6%</td>
</tr>
<tr>
<td>Three or more</td>
<td>41</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>1,700</td>
<td>100%</td>
</tr>
</tbody>
</table>
## Current Offense

<table>
<thead>
<tr>
<th>Current Offense</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent Felony</td>
<td>152</td>
<td>9%</td>
</tr>
<tr>
<td>Other Felony</td>
<td>327</td>
<td>19%</td>
</tr>
<tr>
<td>Class A or B Misd</td>
<td>861</td>
<td>51%</td>
</tr>
<tr>
<td>Violation of Probation</td>
<td>172</td>
<td>10%</td>
</tr>
<tr>
<td>CINS</td>
<td>188</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,700</td>
<td>100%</td>
</tr>
</tbody>
</table>
## Disposition

<table>
<thead>
<tr>
<th>Initial Disposition</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dismissed</td>
<td>314</td>
<td>9%</td>
</tr>
<tr>
<td>Supervisory Caution</td>
<td>268</td>
<td>16%</td>
</tr>
<tr>
<td>Deferred Prosecution</td>
<td>489</td>
<td>29%</td>
</tr>
<tr>
<td>Probation</td>
<td>594</td>
<td>35%</td>
</tr>
<tr>
<td>Committed to TYC</td>
<td>33</td>
<td>2%</td>
</tr>
<tr>
<td>Certified as an Adult</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,700</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
School

- 36% of juveniles were chronically truant or not attending school
- 40% had previously been suspended or expelled
- 35% had previously failed a grade
- 29% were currently or previously in a DAEP or JJAEP
- 21% were identified as special education
Mental Health & Substance Abuse

- 39% had suspected or confirmed mental health needs
- 26% of those with suspected or confirmed mental health needs had a diagnosis of depression or bipolar disorder
- 15% had suicidal ideations; 5% had attempted suicide
- 16% used alcohol frequently
- 33% used illegal drugs frequently
Families

• 23% of records indicated reports of child abuse or neglect
• 39% of juveniles lived with both parents
• 24% of records indicated the parent had no control of the juvenile
• 37% of households received federal financial assistance
Families

- 39% came from households where the mother, father, or caregiver had a criminal record
- 20% had siblings with a criminal record
- 28% came from households where the mother, father, or caregiver had substance abuse
- 7% had siblings with substance abuse
- 8% came from households where the mother, father, or a sibling was deceased
Where We Are Going

• Visit more counties
• Reconcile data from different sources
• Make certain instrument only uses those factors that predict risk
• Conduct regression analysis
• Determine cut off scores for risk levels
Where We Are Going

• Logistic regression to predict which variables matter while controlling for the effect of other variables
• Utilize cluster analysis to determine appropriate score for high, medium, and low risk
• Correlation analysis to measure strength of each factor to recidivism
• Factor analysis to determine if any factors are duplicative
Where We Are Going

- Account for intervening variables such as programs and supervision
- Ensure no race/ gender discrimination
- Pilot the instrument in a few departments
- Create electronic version
- Implement the instrument for all departments in the state that want to use it
Challenges of Sample

• Availability of data at or before 2003
• Difficulty retrieving archived data from other agencies
• Possibility of intervening variables, including treatment and supervision
• Possibility of major changes in juvenile’s living situation, peers, and traumatic events over three years
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