Large Scale Implementation of the Virginia Student Threat Assessment Guidelines: A Quasi-Experimental Examination of Effects on School Suspensions

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His work on bullying focuses on using person-centered approaches to understand patterns of bullying and victimization amongst middle and high school students. His ongoing work examines the distinctiveness of cyberbullying from other forms of bullying, covariates of relational aggression in middle school girls, as well as the effect of school bullying climate on longitudinal patterns of school-level academic and behavioral outcomes. He has a newly-available article in the Journal of Youth Violence.

Virginia Public Schools

133 school divisions
2,002 public schools
1.2 million students

Types of Schools

Size of Schools

Virginia Safety Audit Survey

- Annual online survey of school principals
- Covers building security, safety procedures, prevention programs
Threat Assessment Items on the VA Safety Audit Survey

14. Does your school use a formal threat assessment process to respond to student threats of violence?
   • Yes
   • No
   • No

15a. For your formal threat assessment process, do you follow the guidelines developed by the University of Virginia (UVA)?
   • Yes
   • No

15b. When did you begin using the University of Virginia guidelines? (check one)
   • First year (2001-2002)
   • 2 years (2002-2003)
   • 3 years (2003-2004)
   • 4 years (2004-2005)
   • 5 years (2005-2006)
   • 6 years (2006-2007)
   • 7 years (2007-2008)
   • 8 years (2008-2009)

15c. Have members of your staff been formally trained in using the University of Virginia guidelines?
   • Yes
   • No

Virginia School Discipline Records

• Summary of 133 types of discipline infractions
• Summary of disciplinary responses (short- and long-term suspensions)

Merger of Two Databases

Virginia Department of Education
Annual Report Discipline, Crime, and Violence School Year 2009-2010
May 2011

Limited Test of Threat Assessment Effects

• Limited to available outcome data
  - Long- and Short-term Suspensions
• Limited information on quality of implementation
  - How long using Virginia TA?
  - Receive training from UVA?

Research Question

Do schools using Virginia threat assessment show a lower rate of suspensions than other schools?
Independent Variables

- Used Virginia TA (no/yes)
- Years using TA (1 to 5+ years)
- Staff Training in TA (no/yes)

Control Variables

- School type (elem/middle/high)
- School size
- % low income families
- % minority students
- Total discipline infractions in 2006

Dependent Variables

- Number of long-term suspensions (~10 or more days out of school)
- Number of short-term suspensions (1-9 days out of school)

Suspension Practices

Suspension may be a practice that has more negative than positive effects on students:

- Fall behind in their classes
- Feel alienated and rejected
- Continue to misbehave and be suspended
- Drop out of school
- Disproportionate effects on minority students
- Juvenile court involvement

http://www.justicecenter.csg.org/resources/juveniles
Analyses

- Negative binomial regression
- Poisson-based regression technique
- Appropriate for counts of infrequent events that violate assumptions for Ordinary Least Squares regression

Regression Analyses with Suspensions

<table>
<thead>
<tr>
<th>Measure</th>
<th>Long-Term B (S.E.)</th>
<th>Short-Term B (S.E.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>2.641** (0.203)</td>
<td>1.834** (0.075)</td>
</tr>
<tr>
<td>Middle School</td>
<td>2.668** (0.145)</td>
<td>1.675** (0.061)</td>
</tr>
<tr>
<td>Enrollment</td>
<td>0.142** (0.017)</td>
<td>0.102** (0.009)</td>
</tr>
<tr>
<td>Infractions '06</td>
<td>0.055** (0.019)</td>
<td>0.064** (0.013)</td>
</tr>
<tr>
<td>% White</td>
<td>-1.078** (0.293)</td>
<td>-0.700** (0.117)</td>
</tr>
<tr>
<td>FRPM</td>
<td>1.571** (0.369)</td>
<td>2.512** (0.162)</td>
</tr>
<tr>
<td>Used UVA TA (yes/no)</td>
<td>-0.210* (0.103)</td>
<td>-0.082* (0.046)</td>
</tr>
</tbody>
</table>

*p < .01, *p < .05, †p < .10
N = 1795

Association of Threat Assessment with Suspensions

<table>
<thead>
<tr>
<th>Exp(B)</th>
<th>LTS</th>
<th>STS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used Virginia Threat Assessment Guidelines</td>
<td>19% fewer</td>
<td>8% fewer</td>
</tr>
</tbody>
</table>

Schools using Virginia TA

<table>
<thead>
<tr>
<th>Exp(B)</th>
<th>LTS</th>
<th>STS</th>
</tr>
</thead>
<tbody>
<tr>
<td>One year increase in number of years using UVA TA (1-5)</td>
<td>17% fewer</td>
<td>5% fewer</td>
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</table>

*p < .05 for both LTS and STS
Same control variables

Does Training in TA Matter?

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<th>Short-Term B (S.E.)</th>
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</thead>
<tbody>
<tr>
<td>High School</td>
<td>2.647** (0.204)</td>
<td>1.837** (0.075)</td>
</tr>
<tr>
<td>Middle School</td>
<td>2.678** (0.144)</td>
<td>1.681** (0.062)</td>
</tr>
<tr>
<td>Enrollment</td>
<td>0.144** (0.017)</td>
<td>0.102** (0.009)</td>
</tr>
<tr>
<td>Infractions '06</td>
<td>0.054** (0.019)</td>
<td>0.063** (0.013)</td>
</tr>
<tr>
<td>% White</td>
<td>-1.079** (0.296)</td>
<td>-0.708** (0.117)</td>
</tr>
<tr>
<td>FRPM</td>
<td>1.593** (0.373)</td>
<td>2.505** (0.161)</td>
</tr>
<tr>
<td>UVA TA – No Training1</td>
<td>-0.064 (0.171)</td>
<td>0.004 (0.067)</td>
</tr>
<tr>
<td>UVA TA – Training1†</td>
<td>-0.253* (0.109)</td>
<td>-0.111** (0.050)</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01
1 Reference is No TA
N = 1795

Association of Threat Assessment with Infractions

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<th>Exp(B)</th>
<th>LTS</th>
<th>STS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff trained in UVA TA versus no UVA TA</td>
<td>22% fewer</td>
<td>11% fewer</td>
</tr>
</tbody>
</table>

*p < .05 for both LTS and STS
Same control variables
Summary

1. Schools using the Virginia Threat Assessment model show lower levels of long and short-term suspensions than schools not using the model.
2. Longer use of the model is associated with lower levels of suspensions.
3. TA effects are found only in schools that had formal training.

Limitations

• Quasi-experimental design; schools were not randomly assigned.
• Fidelity of implementation not measured.
• Suspensions are a limited outcome.

Future Directions

• Broader array of outcome measures
• Assessment of implementation fidelity
• Identification of strategies to improve outcomes
• Follow-up with students