

SCHOOL THREAT ASSESSMENT IN FLORIDA:  
TECHNICAL REPORT OF 2021-2022 CASE DATA

6-1-23

Jennifer L. Maeng, Dewey G. Cornell, Jordan Kerere, Francis Huang,  
Timothy Konold, and Kelvin Afolabi

## Table of Contents

<b>Executive Summary</b> .....	3
<b>Acknowledgements</b> .....	7
<b>Goals and Objectives</b> .....	8
<b>Methods</b> .....	9
<b>Sample</b> .....	9
<b>Results</b> .....	10
<b>Case Demographics</b> .....	10
<b>Cases Per District</b> .....	12
<b>Threat Classification</b> .....	15
<b>Threat Attempts</b> .....	17
<b>Services Provided</b> .....	21
<b>Discipline Outcomes</b> .....	22
<b>Law Enforcement Outcomes</b> .....	23
<b>School Placement</b> .....	23
<b>Comparison of Virginia and Florida</b> .....	24
<b>End-of Year Academic and Behavioral Status</b> .....	25
<b>Disciplinary Outcomes by Race and Ethnicity</b> .....	27
<b>Disciplinary Outcomes by Disability</b> .....	32
<b>Conclusions and Recommendations</b> .....	35
<b>References</b> .....	44
<b>Appendix A: Case Record Survey</b> .....	46
<b>Appendix B: Cases Per District</b> .....	49
<b>Appendix C: Analysis without Outlier Districts</b> .....	51

## Executive Summary

In 2020, the University of Virginia was awarded a grant from the U.S. Department of Justice to examine the implementation of student threat assessment in Florida public schools. This is the complete technical report of case data from *Statewide Implementation of School Threat Assessment in Florida* (NIJ 2020-RF-CX-002).

### Prevalence of Threat Assessment Cases

- We examined case data for 23,135 student threat assessments conducted across grades pre-K through 12 during the 2021-2022 academic year. The sample was provided by 60 of Florida's 67 school districts and 6 specialty schools representing approximately 90% of the total enrollment in Florida public schools. The prevalence of student threats receiving an assessment was approximately 0.91% of the total student population (2,538,228 students) in these districts.
- Students referred for threat assessment were identified as White (37%), Black (37%), Hispanic (23%), and other racial/ethnic groups (4%). Approximately 72% were male students, 33% received special education services through an IEP, and 9% received services through a 504 Plan.

### Threat Severity and Safety

- More than 80% of referrals for a threat assessment resulted in a determination that there was no threat (17.8%) or that the case could be readily resolved as a transient (no serious intent) threat (64%). The remaining substantive cases were classified as serious (13.4%; a threat to fight) or very serious (4.7%; a threat to kill, rape, or use a lethal weapon). These findings demonstrate the value of using threat assessment to resolve less serious cases efficiently and concentrate more time and effort on serious cases. In contrast, schools relying on a zero tolerance approach would be removing far more students from school.
- More than 94% of threat assessment cases were resolved without a physical assault and fewer than 1% resulted in a serious injury. For a subgroup of 14,365 cases for which attempt data were recorded, cases were classified by schools as not attempted (87.8%), attempted but averted (6.4%), or carried out (5.9%). Of the 843 threats that were carried out (some form of physical attack took place), only 33 (0.23% of 14,365 total cases, 3.9% of 843 cases with an attack) resulted in serious injury (defined as a broken bone or hospitalization).

### Response to Student Threats

- Most students receiving a threat assessment were able to return to their original school (90%), with others transferred to an alternative school (5.2%), withdrawn by a parent

(0.8%), placed on homebound instruction (0.4%), or moved to a virtual school setting (0.2%).

- A guiding principle of threat assessment is that the most effective way to prevent violence is to address the problem or conflict that underlies the threat. More than 73% of students were referred for at least one service; in more than a third of cases, students were referred for mental health services (33%). Threats were also addressed through conferences with parents (45%), the student giving an explanation or apology (18%), increased monitoring (20%), and conflict resolution (9%). (Because more than one outcome is possible, numbers do not sum to 100%). In cases where it was determined that no threat occurred or the threat was easily resolved, no referral for follow-up services was expected.
- Schools were asked to confirm whether the referred services were delivered; in cases where this information was available (n = 8,753), 96% of the services were delivered. The primary services not delivered were counseling/mental health services or restorative practices, and the primary reason reported for a service not being delivered was that the parent/guardian declined the service or the student withdrew from the school.
- Following a threat assessment, schools made limited use of out-of-school suspension (OSS, 26%), in-school suspension (14.7%), detention (4.4%), or expulsion (2%).
- Law enforcement officers are included on threat assessment teams, but formal law enforcement actions were reserved for the most serious cases. A small percentage of students were charged with an offense (1.8%), arrested (0.7%), or placed in juvenile detention (0.1%) following a threat assessment.

### **Comparison of Results of Threat Assessments by Gender and Race/Ethnicity**

- After controlling for school district and student factors such as grade, gender, race, IEP status, 504 plan status, free/reduced-price meal (FRPM) status, and threat classification, logistic regression models indicated that students in higher grades and who made more serious threats were more likely to receive disciplinary or legal actions. Male students were more likely to receive out-of-school suspension than female students, and female students were more likely to receive a legal action than male students.
- There were small differences in disciplinary outcomes for Black, Hispanic, and White students who received a threat assessment. Out-of-school suspensions (OSS) were slightly higher for Black students (27.0%) and lower for Hispanic students (24.8%) than for White students (25.9%). Expulsions were very low overall, but slightly higher for Black (1.9%) and Hispanic (2.0%) students than White (1.2%) students. Placement changes were 11.1% for Black students, 13.9% for Hispanic students, and 7.2% for White students. Some of these comparisons (Hispanic v White OSS and Black v White

expulsions and placement change) were statistically significant, as can be expected in a very large sample, but small in magnitude. The statistically significant Odds Ratios (*OR*) were 1.2 for Hispanic v White OSS, 1.4 for Black v White expulsions, 1.3 for Black v White placement change, and 1.2 for Hispanic v White placement change.

- There were no statistically significant differences in law enforcement actions (i.e., arrest, charges, incarceration) for Black, Hispanic, or White students.
- In contrast with the large disparities in outcomes often observed for the general population of students in Florida and nationwide (U.S. Department of Education, 2018), the comparisons of Black, Hispanic, and White students who received a threat assessment showed little or no disparity in disciplinary and law enforcement outcomes.

### **Comparison of Students with and without Individualized Education Plans and 504 Plans**

- Results indicated no evidence that students with disabilities were subject to harsher discipline or legal consequences than other students. Results of logistic regression analyses indicated students with IEPs were less likely than their peers to receive an expulsion (*OR* = 0.50). Students with a 504 plan were less likely than their peers to receive a legal action (*OR* = 0.65). IEP and 504 plan status were not predictive of out-of-school suspension or placement change.

### **Limitations and Conclusions**

- This report presents the largest and most comprehensive investigation of school threat assessment cases in the threat assessment field to date.
- The primary limitation is that there was no information from 6 of 67 districts, and other districts varied in the completeness of their records, so that some analyses were conducted on subsamples of cases. Another limitation is that some districts had not completed training in the state's threat assessment model Comprehensive School Threat Assessment Guidelines (CSTAG), which might explain some of the variation in prevalence rates.
- Overall, these results indicate that the ongoing implementation of school threat assessment in Florida has been widely, but not uniformly, successful. Success can be measured in multiple ways that can be generally grouped into safety, effectiveness, and fairness and equity. From a safety perspective, relatively few threats (5.9%) were carried out and very few (0.23%) resulted in someone being seriously injured.
- Effectiveness was broadly indicated in the ability of teams to efficiently distinguish different levels of threats, resolve most threats that were not serious, and take more extensive action to manage threats that were judged to be serious. Another aspect of effectiveness was measured by the large number of services provided to students and that 90% of students were able to continue in their original school.

- The fairness and equity of threat assessment was reflected in the calibration of disciplinary and law enforcement outcomes with the seriousness of the threat. Threat assessment can be contrasted with a zero tolerance approach in which all cases are treated the same, and students with minor violations are subject to the same strict outcomes (primarily school removal) as students with major violations. Florida schools using threat assessment produced outcomes that were calibrated to the seriousness of the case and resulted in low rates of school removal and very low rates of law enforcement actions. Most cases were resolved as non-serious threats with low rates of school removal and very low rates of law enforcement actions. There were few differences between student groups defined by race, ethnicity, or disability status, although districts should be aware that educators have a tendency to issue slightly more exclusionary discipline to Black and Hispanic students in some of the analyses.
- We recommend that the Office of Safe Schools provide more guidance to districts to assure more efficient and complete training of school teams and to increase the consistency and fidelity of implementation in schools. A system for monitoring and supporting both the training and functioning of threat assessment teams could be useful. Annual collection and analysis of statewide data would help achieve these goals.
- Areas for further study include the examination of cases that resulted in physical attacks, the effectiveness of services and long-term outcomes for students who received a threat assessment, and the impact of threat assessment on the well-being and safety of the school community, including persons targeted or affected by threats.

## Acknowledgements

This report is the product of collaboration between the Florida Department of Education's Office of Safe Schools and the University of Virginia's School of Education and Human Development. The UVa research project team includes Kelvin Afolabi, Dewey Cornell, Katrina Debnam, Francis Huang, Gilchrist Johnson, Jordan Kerere, Tim Konold, Theodore LengKong, Angel Lin, and Jennifer Maeng. The independent advisory board for this project includes Catherine Bradshaw, Chelsea Dunn, Dorothy Espelage, Anne Gregory, Reid Meloy, David Osher, Scott Poland, and Brooks Rumenik. We thank them for their advice, review, and feedback on this project.

This project was supported by Grant #NIJ 2020-RF-CX-0002 awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this report are those of the authors and do not necessarily reflect those of the U.S. Department of Justice, Florida Department of Education, or the advisory board.

Dewey Cornell discloses that, as the principal developer of the Comprehensive School Threat Assessment Guidelines (CSTAG), he has a financial interest in school threat assessment training.

Recommended citation: Maeng, J., Cornell, D., Kerere, J., Huang, F., Konold, T. & Afolabi, K., (2023). *School Threat Assessment in Florida: Technical Report of 2021-2022 Case Data*. Charlottesville, VA: School of Education and Human Development, University of Virginia.

## Goals and Objectives

In 2020, the University of Virginia was awarded a grant from the U.S. Department of Justice to examine the implementation of student threat assessment in Florida public schools. This project examined threat assessment training and implementation, the kinds of threats identified, and whether threats were resolved without violence in Florida public schools. Of special interest was whether threat assessment was conducted without disproportionate negative consequences for students across diverse groups defined by race, ethnicity, and disability status. This mixed methods project had four broad research questions:

1. What are stakeholder reactions to training and implementation of threat assessment in their school?
2. What are the characteristics of threat assessments conducted in Florida public schools?
3. What relationships exist among academic, disciplinary, and legal outcomes for students receiving a threat assessment?
4. Are there adverse disparities in student outcomes associated with race, ethnicity, or special education status?

Two previous project reports addressed the first research question regarding stakeholder perceptions of training needs and training implementation (Maeng, Cornell, & Warren, 2021; Maeng, Kerere, & Cornell, 2022b). A third report addressed research questions 2-4 using a preliminary, voluntary sample of 1,102 threat assessment cases from the 2020-21 school year (Maeng, Cornell, Edwards, & Huang, 2022a). The present report examined research questions 2-4 using more complete data for 23,135 cases from the 2021-2022 school year.



## Methods

### Sample

All school districts in the state were invited by the Florida Department of Education to submit threat case data for the 2021-22 academic year. This was explicitly a voluntary request made in May 2022; FLDOE staff followed up with districts that did not initially respond to the request by the end of June 2022. In August 2022, the chair of the Marjory Stoneman Douglas Commission offered to send a follow-up request to school districts who had not responded. As of December 1, 2022, 60 districts, 4 lab schools, Florida Virtual, and Florida School for the Deaf and Blind (referred to as specialty schools in this report) provided usable threat assessment case data for the 2021-22 school year. The sample included approximately 3,400 of the 3,800 K-12 public schools in the state. Case data could be submitted through an electronic Qualtrics survey, in an emailed data file, or in paper format (Appendix A).

**Analytic Sample.** The sample originally consisted of 23,351 cases from 60 school districts and 6 specialty schools. Cases of self-harm threats were excluded (n = 216), reducing the analytic sample to 23,135 cases.

Some districts submitted student data that were missing one or more of the following: race (n = 595, 2.6%), gender (n = 825, 3.6%), threat classification (n = 206, 0.9%), and threat attempt (n = 8,770, 37.9%). Districts reported that they submitted incomplete data because demographic information was not recorded or was housed in a different system than threat case data and could not be easily merged. In the case of threat attempt (defined as a report that the threat was not attempted, attempted but averted, or carried out with a physical assault of someone), many schools did not record this information. In order to retain these observations with missing data in our analyses, we created separate Not Specified categories for these variables with missing data instead of omitting the observations altogether. The creation of variables to identify cases with missing data allowed us to investigate and control for the potential impact of these cases on the results.

In many instances, schools submitted de-identified written descriptions of their actions (e.g., services, disciplinary actions, legal actions). These responses were reviewed and coded by the research team. One district did not report services recommended or disciplinary actions, 5 districts did not report placement changes, 3 districts did not report law enforcement actions, 15 districts did not report end-of-year academic status, and 30 districts did not record whether services were actually delivered after recommendation. As a result, the analyses for these outcomes have smaller sample sizes.

## Results

### RQ 2: What are the characteristics of threat assessments conducted in Florida public schools?

The sample of 23,135 cases was based on an underlying total enrollment of 2,538,228 students and approximately 3,400 schools in the participating districts. This means that 0.91% of students (slightly less than 1 per 100) received a threat assessment. The corresponding rates were 0.86% for elementary school grades (PreK-5), 1.2% for middle school grades (6-8), and 0.64% for high school grades (9-12). A typical Florida elementary school of 600 students can be expected to conduct approximately 5 cases per year; a typical middle school of 670 students would conduct approximately 8 cases; and a typical high school of 850 students would conduct approximately 5 cases (<https://www.publicschoolreview.com/school-size-stats/florida/elementary>). At this time, there is no accepted standard for how many cases are markedly too many or too few for a school.

#### Case Demographics

The sample was compared to data from the Florida Department of Education for the general enrollment of the 60 school districts and 6 specialty schools. Boys made 71.6% of threats, although they represented 50.6% of the district population. The sample contained a higher proportion of Black students (36.5%) and a lower proportion of Hispanic students (22.9%) than the overall general enrollment, which was 21.2% and 36.3%, respectively. The sample also had a higher proportion of students with disabilities (33.0%) than the general enrollment (14.6%).

	Sample 23,135 cases		District enrollment 2,538,228 students	
	N	Column %	N	Column %
<b>Gender</b>				
Male	16,557	71.6%	1,284,161	50.6%
Female	5,753	24.9%	1,219,613	48.0%
<b>Race/Ethnicity</b>				
Black	8,238	36.5%	538,568	21.2%
Hispanic	5,170	22.9%	921,102	36.3%
White	8,237	36.5%	895,299	35.3%
<sup>1</sup> Other	895	4.0%	183,061	7.2%
<b>Disability Status</b>				
<sup>2</sup> Has IEP	7,643	33.0%	370,089	14.6%
Does not have IEP	13,747	59.4%	2,167,647	85.4%
<sup>3</sup> Has 504 Plan	2,071	9.0%	N/A	N/A
Does not have 504 Plan	13,367	57.8%	N/A	N/A

Note. <sup>1</sup>Other race (sample) = 2.3% two or more races, 0.8% other race, 0.8% Asian; Other race (district) = 3.9% two or more races, .42% other race, 2.9% Asian. <sup>2</sup>IEP status not reported for n = 1,744 (7.5%) of students in sample, <sup>3</sup> 504 plan status not reported for n = 7,697 (33.3%) of students in sample.

## **Disproportionate Referrals for a Threat Assessment**

Consistent with previous studies in Virginia (Cornell et al., 2018), there were differences in referral rates for Black, Hispanic, and White students. Black students constituted 36.5% of referrals, which was disproportionately high compared to their 21.2% enrollment in the general school population. In contrast, Hispanic students constituted 22.9% of referrals, which was disproportionately low compared to their 36.3% enrollment in the general school population. White students constituted 36.5% of referrals, quite close to their enrollment of 35.3%.

Another way to compare referral rates is that 1.5% of Black students were referred for a threat assessment, compared to 0.56% of Hispanic students and 0.92% of White students.

Students with disabilities represent a substantial portion of students referred for a threat assessment. Students with an IEP or a 504 Plan were counted as having a disability. Students with disabilities were referred at a higher rate - over twice as likely than expected given their proportion in the general school population. Although the districts did not consistently provide complete information on whether students had an IEP or 504 Plan (see table above), available data indicate that approximately 33% of students referred for a threat assessment had an IEP and 9% had a 504 Plan, for a total of 42%.

The proportion of students with a disability (based on IEP status) referred for a threat assessment was 2.1% (7,643 students divided by 370,089 total enrollment with an IEP). Because information on the statewide prevalence of 504 Plans was not available, the proportion of students with 504 Plans referred for a threat assessment was not calculated.

Disproportionalities in referral for a threat assessment deserve careful consideration since they could reflect biases or misunderstandings by those making a referral or they could reflect true differences in the rate at which students engage in threatening or concerning behavior. No study to date has attempted to measure this distinction, which would indicate different needs for intervention. Referrals for a threat assessment are based on reports made by students, staff, parents, or anyone else who expresses concern that a student is threatening violence in their communications or behavior. A study of disproportionalities in referral would need to consider the reasons for referrals made by all of these different reporters and judge whether they were appropriate referrals or reflected some form of bias or misunderstanding.

A disproportionately high rate of referral for a threat assessment does not necessarily mean that a student will be harmed by the threat assessment process. If a student is identified by a reporting party as threatening violence, a threat assessment can be the means by which the report can be resolved if the threat is classified as not a threat or not a serious threat. This outcome can lessen or remove the stigma of a student being perceived as dangerous and it can reduce the likelihood that a student will experience disciplinary or law enforcement consequences. A randomized controlled study in Virginia (Cornell et al., 2012) found that both Black and White students were much less likely to be removed from school (by suspension or

transfer) if they received a threat assessment compared to students identified as threatening violence in schools not using threat assessment.

Another potential benefit of threat assessment is that, if the threat is serious, the referral can be a means of preventing violence and identifying a student's need for services. Students with disabilities might engage in higher rates of threatening behavior because of frustrations and conflicts associated with their disability. A threat assessment team can identify needs or concerns that can be addressed by the special education process. Further analyses of disproportionalities in threat assessment outcomes are presented later in this report.

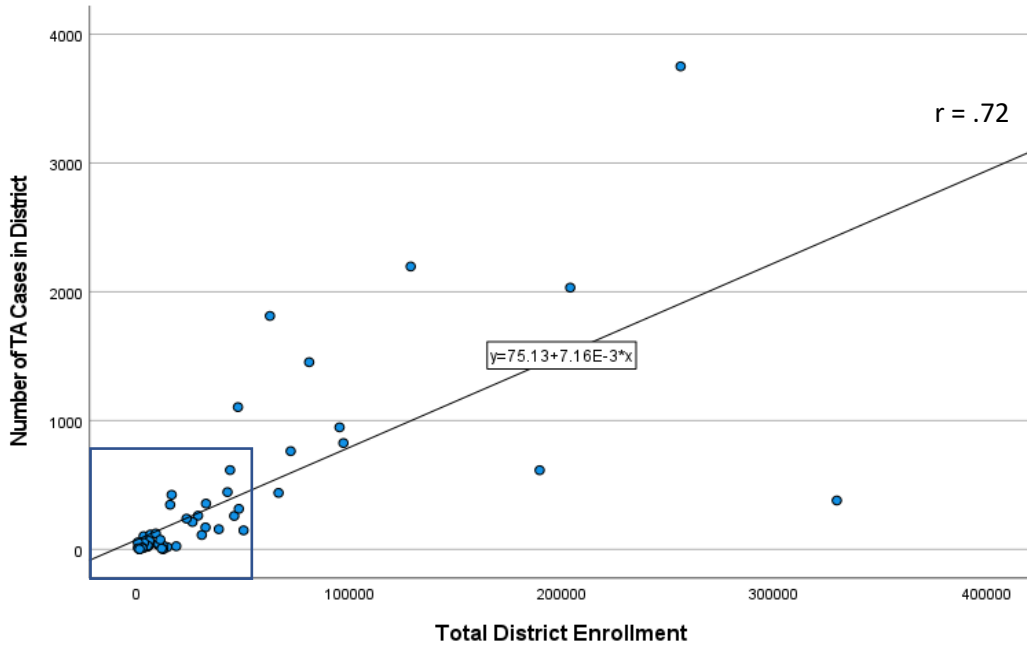
### Cases Per District

The percent of cases reported relative to district enrollment varied across districts. To protect the confidentiality of districts, the table in Appendix B presents for each district or specialty school the number of threat cases, approximate enrollment, and the approximate percentage of the students in the district that received a threat assessment

The scatterplot below shows the distribution of school enrollment versus number of threat cases. This display allows readers to see the overall positive correlation ( $r = .72, p < .001$ ) between enrollment and number of threat cases. A correlation of .72 is a strong correlation in educational research and indicates that there is consistency between the number of threat cases and the overall enrollment of the district. However, there are districts whose number of threat cases is much higher or lower than the general trend for the sample.

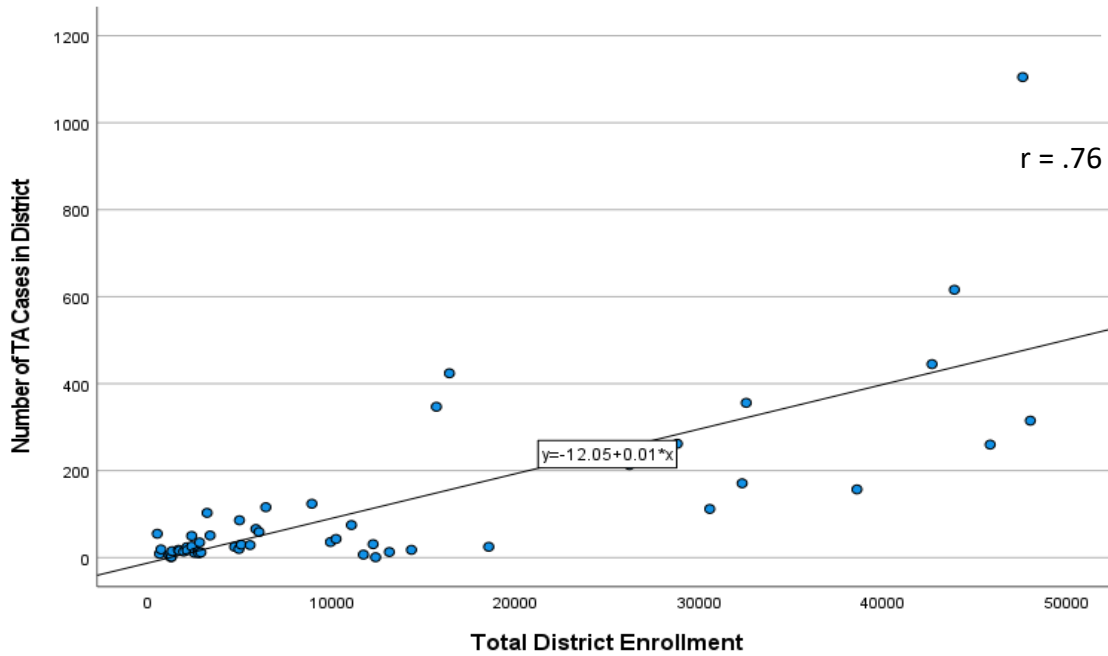
The first scatterplot shows the number of student threat cases in the district as a function of the total district enrollment. This scatterplot has 66 data points (60 are districts and six are independent schools such as lab schools.) Because Florida school districts range greatly in size (from 494 to 329,575) with most districts under 50,000, a second scatterplot is used to show the smaller districts in the small box.

### Number of threat cases for 66 Districts



The second scatterplot shows a close-up of the districts and schools with enrollment < 50,000 (found in the box in the first scatterplot).

### Number of threat cases for 53 Districts (Enrollment < 50,000)

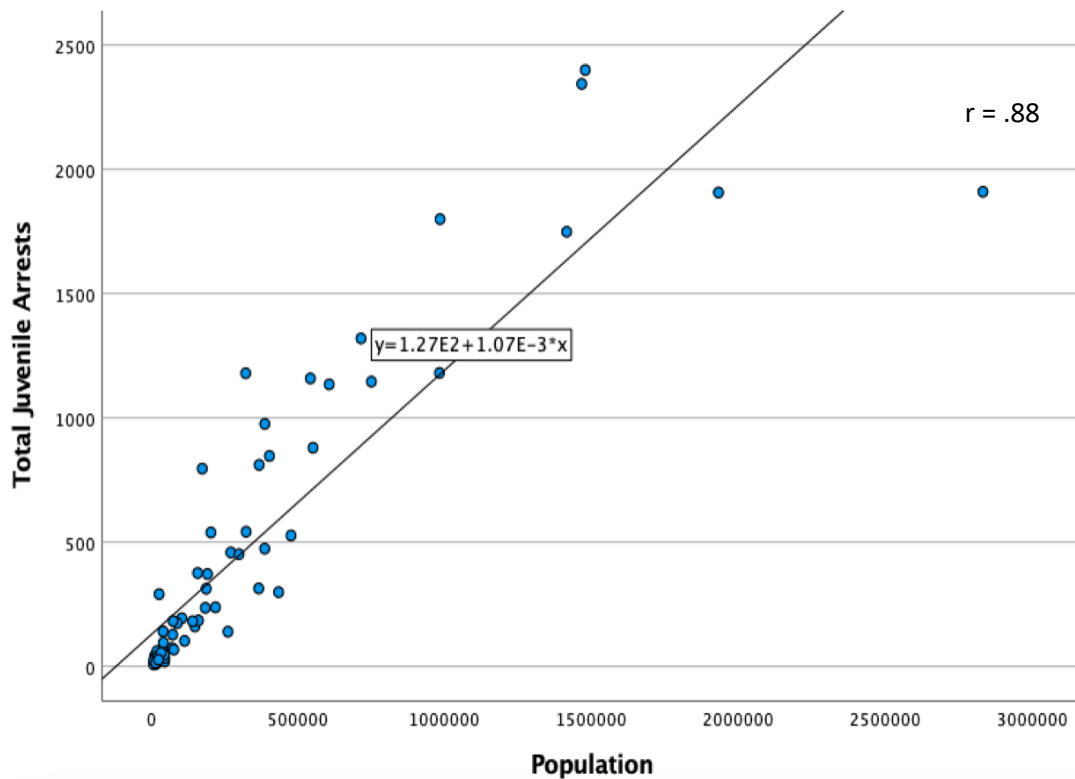


The trendlines show the expected (or average) number of threat cases for a district based on its enrollment. If district enrollment were the only factor affecting the number of cases, every district would be placed on this trendline. Reasonable variation above and below the line is expected since the number of threat cases could be influenced by student demographics and the school climate (e.g., how common it is for students to make threats, how willing students are to report threats). It is possible that districts well below the line are not actively engaged in threat assessment or have few threats reported in their schools. Districts well above the line could have very high levels of threat reporting and/or they could be conducting threat assessments on incidents that do not merit an assessment. Put simply, variation is a common occurrence in social science research.

**Outlier Districts.** The scatterplot showing the district enrollment and number of threat assessment cases (p. 13) suggests that two very large districts are outliers: one district had far fewer threat assessment cases than the trend line predicts and the other district had far more threat assessment cases than the trend line predicts. The combined enrollment of these two districts is approximately 590,000 students, which represents approximately 23% of the total student enrollment for the 60 districts and 6 schools in this study. Because of their size, these two districts could have an impact on study findings, so we conducted a series of supplementary analyses that omitted these districts from the statewide sample. After removing the two outlier districts, the correlation between district enrollment and number of threat assessment cases improved from .72 to .81. The results of these supplemental analyses in the form of logistic regressions for disciplinary and law enforcement outcomes are in Appendix C. The supplemental analyses show very little change in the pattern of statistically significant versus non-significant results, suggesting that the inclusion of these districts decreased the correlation between threat assessment rates and enrollment, but did not substantially influence other study results, such as how student characteristics are related to disciplinary outcomes.

**Juvenile Arrests and District Enrollment.** At present, there is no research to identify the factors that contribute to higher or lower threat assessment rates. Some variation can be expected just as there are differences in community crime rates that are associated with differences in demographics, in crime reporting, and in policing. For example, the correlation between juvenile arrests (for the community as a whole) and school district size for all of the districts in Florida is also strongly positive,  $r = .88$ . These are areas for further study. As indicated in the figure below, larger districts tended to have more juvenile arrests in their community, but there are some districts (deviations from the best-fit line) that had more arrests or fewer arrests than the expected number based on enrollment.

### Juvenile Arrests in all 67 Florida School Districts



#### Threat Classification

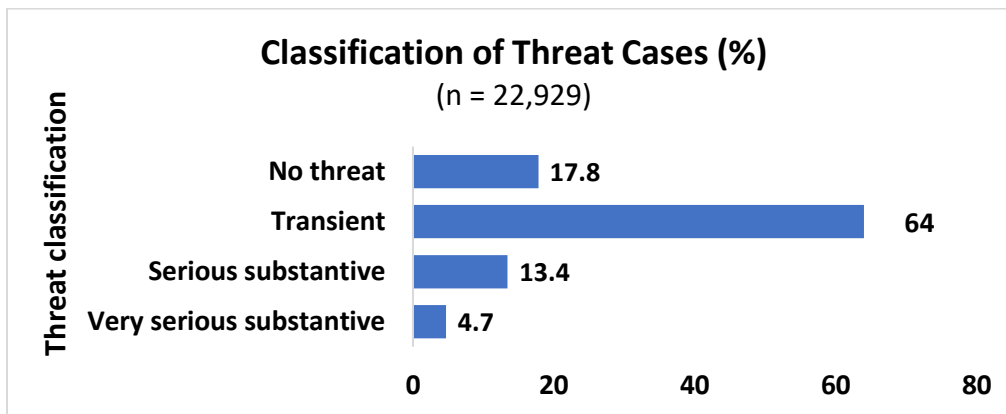
The CSTAG model classifies threat cases in four categories (no threat, transient, serious substantive, very serious substantive) that require different levels of response. The classification is described in detail in the CSTAG manual (Cornell, 2018). If a potential threat is reported and the team finds that no threat occurred (e.g., a false rumor), the case is classified as *no threat* and no further threat assessment is conducted. If a threat is readily found to be an expression of humor, rhetoric, or emotion that can be easily clarified and resolved so that the team is confident that the student of concern has no serious intent to harm someone, the case is resolved as a *transient* threat. This determination is only made if the team is confident that the threat has been resolved and there is no need for protective action to prevent an attack.

The determination that a threat is transient does not preclude other responses to the student, including disciplinary actions and support services, if appropriate. If a threat cannot be readily resolved or there is concern that the threat might be serious, the threat is classified as substantive. A substantive threat means that the team must initiate some kind of protective action as a precaution to prevent the threat from being carried out. Substantive threats involving a threat to fight or hit someone are classified as *serious substantive* threats and threats involving a threat to kill, rape, or assault someone with a dangerous weapon are

classified as *very serious substantive* threats. Serious substantive threats usually involve some form of conflict resolution, whereas very serious substantive threats require a more comprehensive assessment and development of a safety plan. Appropriate classification of threats helps teams avoid over-reacting to threats that are not serious and under-reacting to threats that are serious.

The table below shows the distribution of threat classification for 22,929 cases for which districts provided classification. The majority of cases were identified as not a threat (17.8%) or easily resolved as transient threats that are not serious (64%). Only about 1 in 5 threats were determined to be substantive, including 13.4% serious (such as a fight) and 4.7% very serious (such as a serious threat to kill, shoot, or stab that could not be resolved as transient).

Threat Classification	Description	N = 22,929
No threat	A potential threat was reported to the threat assessment team and determined not to meet the criteria for a threat	4,087 (17.8%)
Transient threat	The threat is an expression of humor, rhetoric, anger, or frustration that can be resolved with a clarification and/or apology so that there is no sustained intent to harm someone and no need for further protective action.	14,684 (64%)
Serious substantive threat	The threat is to assault, strike, or beat up someone and could not be resolved as a transient threat.	3,076 (13.4%)
Very serious substantive threat	The threat is to kill, rape, or inflict serious injury with a weapon and could not be resolved as a transient threat.	1,082 (4.7%)

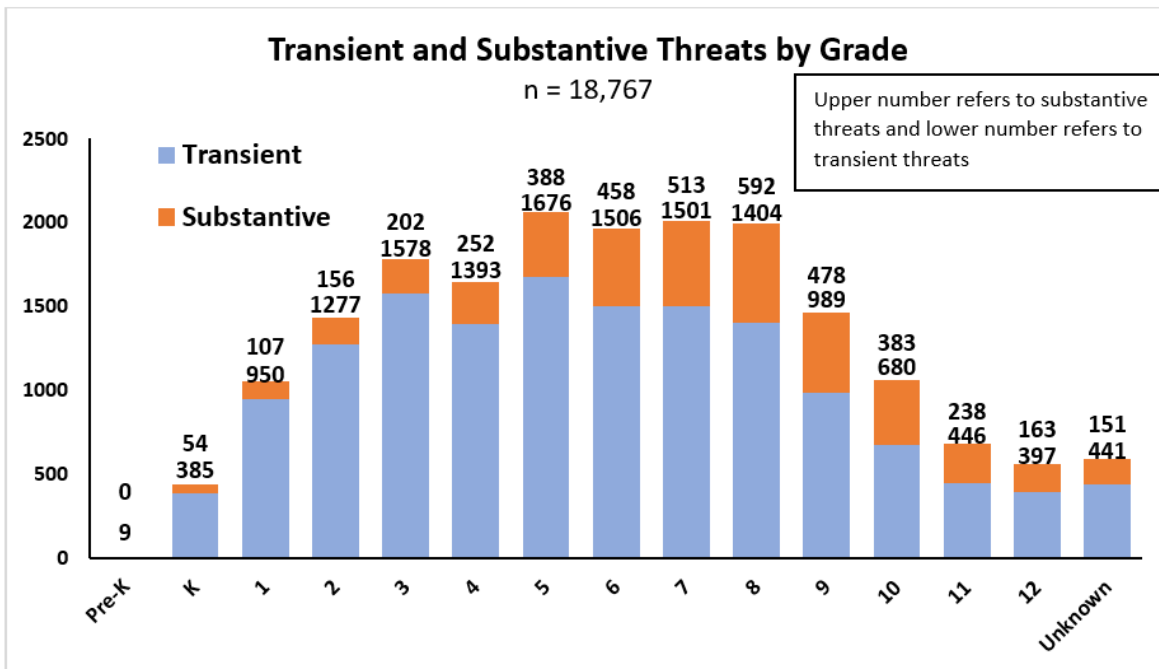


*Threat Classification (n = 22,929)*

Students ranged from pre-K to grade 12, although most of the threats were made by students in the middle grades. For each grade level, most of the threats were determined to be transient (not serious, easily resolved).



*Threat Classification by Grade (n = 18,767)*



Note. Cases classified as “No threat” were omitted from this chart.

### Threat Attempts

Analyses of whether a threat was attempted are based on a sample of 14,365 cases from 52 districts and 6 specialty schools representing 62.1% of the total sample, excluding 8 districts that did not report this information. Threat attempts were classified as: 1) no attempt to carry out the threat; 2) threat was attempted, but averted or stopped before anyone was assaulted; or 3) threat was carried out to the point of someone being assaulted.

In this subsample, 12,606 threats were not attempted (87.8%). There were 916 threats (6.4%) judged by schools to have been averted when a student attempted to carry out a threat and was stopped from doing so. In total, 94.1% of threats were not carried out. There were 843 threats (5.9%) judged by schools to have been carried out by the student.

Although it is encouraging that 94.1% of threats were not carried out, these results do not demonstrate conclusively that the threat assessment process prevented the threat from being carried out. In social science research, a claim of a causal effect generally requires a study such as a randomized controlled trial with a control group of schools not using threat assessment. This kind of study was not possible because Florida mandates that all schools use threat assessment. There are immense practical and scientific barriers to demonstrating that any intervention prevented a school shooting (Cornell, 2020).

	<b>All Schools</b> (14,365 cases)	
	n	Column %
No attempt	12,606	87.8%
Averted	916	6.4%
Carried out	843	5.9%

The 843 threats that were carried out took place in 31 of 52 school districts that provided outcome data. In 21 of the 52 districts that provided outcome data, none of the threats were carried out. Threats were more likely to be carried out if they had been classified as substantive. Specifically, the percentages of threats that were carried out was 2.2% (64 of 2,957) for threats classified as not a threat, 3.6% (312 of 8,667) for threats classified as transient, 18.6% (376 of 2,026) for threats classified as serious substantive, and 12.5% (87 of 695) for threats classified as very serious substantive. The largest category of threats that were carried out were serious substantive threats, which typically involve a threat of one student to fight or hit someone. These are common circumstances in schools and should not be interpreted as threats to commit a school shooting.

Among 2,957 cases classified as no threat, no physical attack was attempted in 96.8% of the cases. Similarly, among 8,667 cases classified as transient (meaning that the team concluded that the student had no serious intent to carry out the threat), there was no attempt at a physical attack in 91.7% of the cases. These results suggest that the team determinations of risk were highly accurate, but not perfect. It would be useful to examine the cases where an attack was attempted contrary to the team’s determination in order to learn whether any improvements might be made in the assessment process. For example, was there important information about the case that was not uncovered at the time of the assessment? In retrospect, did the student provide false information about their intentions in the interview process? Another possibility is that the student’s adversary engaged in some form of provocative behavior that changed the situation and contributed to the student’s decision to attack. Predictions of violence are inherently limited because there may be contextual factors and actions by other parties that affect the individual being evaluated. A qualitative follow-up study of these cases would be useful.

The cases classified as substantive indicate that the team concluded that the student had some intention to carry out the threat, so that the school needed to take protective action and try to resolve the problem underlying the threat. There was no attempt in 65.4% of the 2,026 serious substantive cases, with 16% of cases attempted and averted and 18.6% of cases in which the threat was carried out. These cases primarily involve students who threatened to fight or assault someone, and typically are addressed with some form of conflict resolution. It would be

useful to review what kind of conflict resolution was undertaken and what factors were associated with the fight taking place despite efforts to prevent it.

There were 695 cases classified as very serious substantive cases because the team determined that the student threatened severe harm (e.g., killing, shooting, stabbing) and had some degree of serious intent to the carry out the threat. These are the cases of most concern to a threat assessment team and require the most comprehensive assessment and implementation of a safety plan. In 459 (66%) of these 695 cases, there was no attempt and in 149 (21.4%) cases an attempt to carry out the threat was made and averted. It is concerning that 87 (12.5%) of these cases resulted in some kind of physical attack. More information on the circumstances of these cases and the interventions that were attempted is needed.

	<b>No attempt</b> n (row %)	<b>Averted</b> n (row %)	<b>Carried out</b> n (row %)	<b>Total</b> n (row %)
Very serious substantive	459 (66.0%)	149 (21.4%)	87 (12.5%)	695 (100%)
Serious substantive	1,324 (65.4%)	326 (16.1%)	376 (18.6%)	2,026 (100%)
Transient	7,950 (91.7%)	405 (4.7%)	312 (3.6%)	8,667 (100%)
Not a threat	2,862 (96.8%)	31 (1.0%)	64 (2.2%)	2,957 (100%)
<b>Total</b>	<b>12,595</b>	<b>911</b>	<b>839</b>	<b>14,345</b>

*Note. 8,770 cases (37.9%) did not include attempt information and 206 (.89%) did not report classification.*

It may be useful to examine the cases that were carried out in more detail in order to identify any lessons that can be learned about accurately assessing a threat and implementing interventions to reduce the risk of violence. We would expect that cases classified as “no threat” or “transient” would not be carried out; however, there were 64 no threat and 312 transient cases that were incorrectly judged not to be serious. Of the 312 transient cases that were carried out, 138 (44%) were from one district and the others were from 21 different districts. It would be useful to study threat assessment practices on a case-by-case basis and to examine the practices in the district that had a disproportionate number of cases that were carried out.

Detailed information on these cases was not available. Based on our experiences in a prior study with more detailed case data, one possible scenario is that a student threatened to fight a classmate, and although the team thought the conflict was resolved, a fight later ensued. Another possibility is that the school counted a fight prior to a threat assessment as “carried out” and then deemed the potential for future altercations as low and classified the threat as “transient”. This may also explain the cases of a threat being classified as not a threat, yet still

being carried out. The threat assessment teams in these districts may benefit from more training in classifying threat cases or in implementing conflict resolution interventions.

## Injuries

Districts were asked to report whether injuries occurred only for threats that were reported as carried out. For the sub-sample of 14,345 threat assessment cases for which classification and threat attempt data were provided, there were 839 (5.8%) cases in which the student carried out a physical attack on someone. Districts did not provide injury data for all of these cases. As a result, injury data were available for only 507 of the 839 carried out threats.

For the 507 threats with injury data, 318 (62.4%) resulted in no injury, 159 (31.2%) resulted in minor injuries (e.g., bite marks, bloody nose), and 33 (6.5%) resulted in serious injury. Serious injury was defined as a broken bone or requiring hospitalization. There is no additional information on the nature of these injuries.

Records indicate that 4 (4.6%) of the 87 very serious substantive threats that were carried out resulted in a major injury, 11 (12.6%) resulted in a minor injury, and 28 (32.2%) resulted in no injury. (Districts did not provide injury status for 17 (28.3%) very serious substantive cases that were reported as carried out.)

For the subsample of 14,345 cases in which outcome and threat classification data were provided by districts, 33 cases (0.23%) resulted in a major injury and 156 cases (1.1%) resulted in a minor injury. Although these results are not compared to a control group of schools not using threat assessment, they indicate a very low injury rate in a sample of more than 14,000 cases in which a student threatened to harm someone.

### RQ 3: What relationships exist among academic, disciplinary, and legal outcomes for students receiving a threat assessment?

#### Services Provided

Threat assessments are intended to produce an intervention designed to reduce the risk of violence by helping the student with the conflict or problem underlying the threat. Therefore, there is no expectation that all schools respond to all threats in the same way, but there are some responses that are commonly used. Future studies should examine what kinds of responses are associated with different kinds of cases, and whether those actions are associated with differential outcomes.

Data were available from 59 out of 60 districts and all 6 specialty schools on services provided to students receiving a threat assessment. The number of services students received ranged from 0 to 10 with 73% receiving at least one service and 27% receiving no services. There were 32.1% of students receiving 1 service, 17.6% receiving 2 services, 11.8% receiving 3 services, 6.9% receiving 4 services, and 4.7% receiving 5 or more services.

There is no expectation that every student would need services, especially in the cases classified as no threat or a transient threat, but most students did receive some kind of service in response to the problem or need identified in the threat assessment. For example, a student threatening to fight a peer might be referred for conflict mediation. Some students were identified as in need of academic support and others were referred for consideration for special education services, which would be handled by the special education staff of a school.

In more than a third of cases (33.3%), the student who made the threat received mental health services (e.g., MH services in or out of school). In a third of the cases (45.1%), there was a parent notification/meeting. Schools increased student monitoring in 20% of cases and contacted the target in 16% of cases.

	<b>All Schools</b> (23,134 cases)	
	n	Column %
Parent meeting/conference	10,440	45.1
Mental health services <sup>1</sup>	7,782	33.3
Increase monitoring of subject student	4,562	19.7
Student apologized	4,354	18.8
Contact target	3,663	15.8
Other	2,442	10.6
Conflict resolution	2,123	9.2
Safety plan developed or reviewed	1,431	6.2
Behavior contract developed or reviewed	1,140	4.9
IEP developed or reviewed	1,047	4.5
Schedule change of subject student	832	3.6
At least one service	16,909	73.1
No services	6,225	26.9

Note. Column percentages can exceed 100% because more than one category could be checked. <sup>1</sup>Mental health services include: MH services (including meeting with school counselor, psychologist, or social worker) in school (n = 4,628) or out of school (n = 1,204) or in an unspecified location (n = 3,120); 148 students were taken for psychiatric evaluation under the Baker Act.

**Services Referred but not Delivered**

We asked a follow-up question regarding whether recommended (referred) services were delivered or not and received this information for 8,753 cases. In 8,369 or 95.6% of these cases, schools reported that the recommended (referred) services were delivered. In 384 or 4.4% of these cases, schools reported that students were referred for services that were not delivered. If a service was not delivered, the school was then asked what service was not delivered and why not. Services not delivered were primarily identified as counseling/mental health services or restorative practices. Schools reported that most undelivered services were declined by the parent/guardian or the student withdrew from the school.

**Discipline Outcomes**

All but one of the 60 participating districts and all 6 of the specialty schools provided information on disciplinary outcomes, resulting in a sample of 23,134 cases. Disciplinary decisions are made by the school administration rather than the threat assessment team, but the results of the threat assessment can influence the disciplinary decision. About half of students (55.6%) received formal disciplinary consequences. Out-of-school suspension was the most common disciplinary response, occurring in 26% of the cases. Students received a reprimand in 17.1% of cases, in-school suspension in 14.7%, detention in 4.4%, and expulsion in 1.7%. There were 42.9% of students who received only one consequence, 10.8% received 2 consequences, and 2% received 3 or more consequences.

	<b>All TA Cases (n = 23,134)</b>	
	n	Column %
Suspension (out of school)	6,024	26.0
Reprimand/Warning	3,967	17.1
Suspension (in school)	3,400	14.7
Detention (including time out/lunch detention)	1,018	4.4
Expelled	383	1.7
Other	1,559	6.7
None	10,267	44.4

Note. Column percentages can exceed 100% because more than one category could be checked.

### Law Enforcement Outcomes

Law enforcement officers are members of threat assessment teams and are most actively involved in the most serious cases. Three districts did not provide information on law enforcement actions resulting in a sample of 22,694 cases with law enforcement action information. The majority of cases (86.6%) were resolved without formal law enforcement actions; only 2.5% (n = 571) cases resulted in a court charge, arrest, or placement in juvenile detention. Students were charged in 418 (1.8%) cases, arrested in 156 (0.7%) cases, and placed in juvenile detention in 34 (0.1%) cases. Other less formal law enforcement actions, such as consultation with law enforcement and home visits/welfare checks, occurred in 11.3% of cases. There were 148 (0.7%) cases involving a Baker Act transportation of a student for psychiatric evaluation.

	<b>All TA Cases (n = 22,694)</b>	
	n	Column %
Student charged with offense by law enforcement	418	1.8
Student arrested	156	0.7
Student incarcerated/placed in juvenile detention	34	0.1
Other <sup>1</sup>	2,497	11.0
None	19,659	86.6

Note. Column percentages can exceed 100% because more than one category could be checked. <sup>1</sup> These cases include those in which the district indicated "law enforcement consulted".

### School Placement

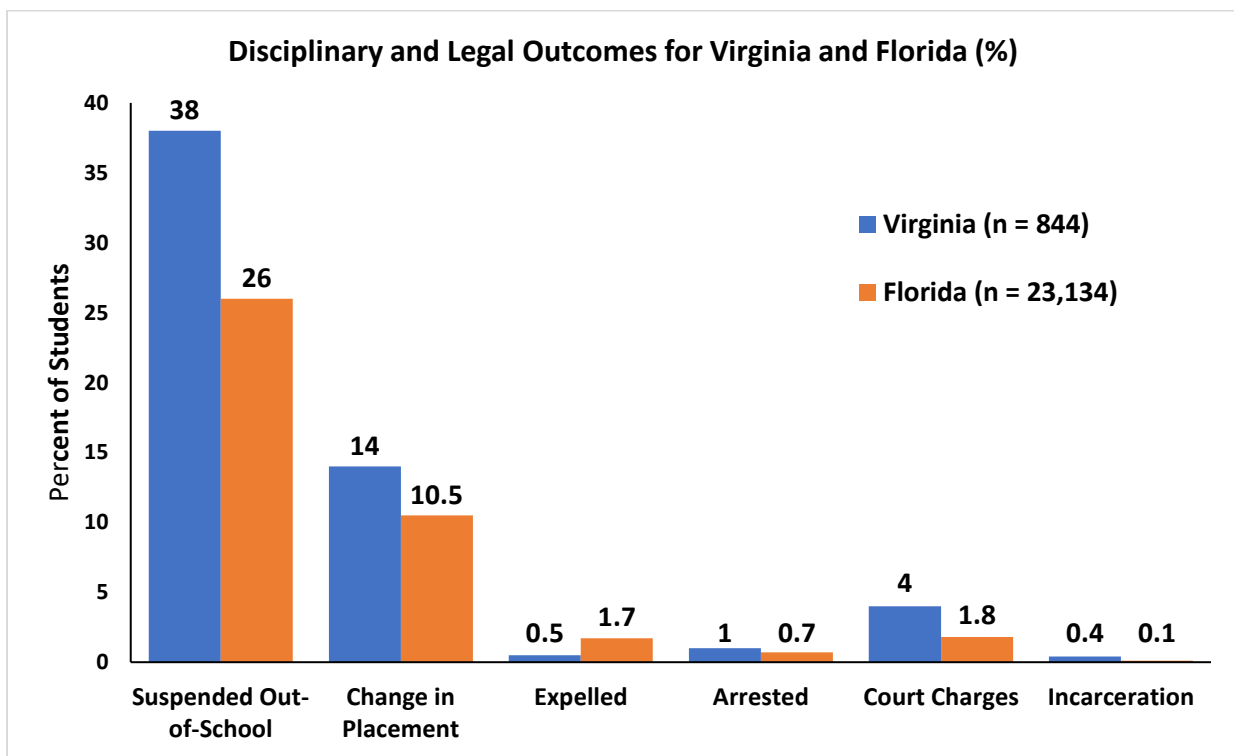
Five districts did not provide placement change information, resulting in a sample of 17,130 cases with school placement information. Most students (90%) were able to return to their school following a threat assessment, but others (n = 898) were transferred to an alternative school (5.2%), placed on homebound instruction (0.4%), or placed in a virtual school setting (0.2%). A few parents (0.8%) withdrew their child from school.

	All Schools (17,130 cases)	
	n	Column %
Transferred to alternative school	898	5.2
Parent withdrew student from school	143	0.8
Placed on homebound instruction	77	0.4
Placed in a virtual school setting	32	0.2
Other	671	3.9
No change	15,416	90.0

Note. Column percentages can exceed 100% because more than one category could be checked.

### Comparison of Virginia and Florida

Although the data for Virginia and Florida were not collected in the same way and the Virginia data are for the 2014-15 school year (pre-COVID), a comparison of disciplinary and legal outcomes for Virginia (Maeng et al., 2020) and Florida schools indicated similar results. In both states, fewer than 40% of students received out-of-school suspensions, at least 86% were able to continue in their original school, and fewer than 2% were expelled. From a law enforcement perspective, fewer than 5% of cases involved court charges, about 1% involved arrests, and in less than 1% of cases, students were incarcerated. The Virginia sample had higher rates for out-of-school placement changes and court charges than the Florida sample.





## End-of Year Academic and Behavioral Status

There has been concern that a threat assessment might have negative effects on a student’s academic progress that were not observed at the time of the threat assessment. We were not able to rigorously examine academic progress in this study; however, as a first step to partially respond to this concern, we asked schools to report on adverse academic events for each case such as dropping out of school or failing a course observed at the end of the school year in which the threat assessment occurred. Student end-of-year academic status was reported in 14,705 cases; 14 districts and one specialty school did not report this information.

A small proportion of students had adverse academic events ranging from dropping out (0.8%) to failing a state achievement test (21%). These findings require further evaluation to be placed in context. Adverse events at the end of the year are not necessarily caused by the threat assessment, because students referred for a threat assessment might already be at-risk for school difficulties. Moreover, these rates cannot be considered high or low without comparison to district norms or rates observed for at-risk students who did not have a threat assessment.

For the 2021-22 school year, approximately 50% of all Florida students achieved a level of three (on-grade-level) or passed Florida Assessment of Student Thinking (FAST) assessments in reading and math (Florida Department of Education, 2022b). Although the available information does not permit a direct comparison, it appears that students receiving a threat assessment do not underperform on the FAST tests relative to the general student population in Florida.

According to a state report (Florida Dept of Education, 2022a), approximately 3.2% of Florida’s 2020-21 cohort dropped out of school between 9<sup>th</sup> and 12<sup>th</sup> grade, which is approximately 0.8% of students per year. Therefore it appears that the dropout rate for students receiving a threat assessment was comparable to the dropout rate for the most recent student cohort with information available. These findings are not conclusive and provide a basis for further study.

	All Schools (14,705 cases)	
	n	Column %
Student failed one or more state achievement tests	3,087	21.0
Student failed one or more courses	2,388	16.2
Subsequent disciplinary action resulted in out-of-school suspension	1,172	8.0
Student retained in same grade	734	5.0
Student dropped out	112	0.8
Other	448	3.0
None	8,900	60.5

Note. Percentages could add up to more than 100% because a given case could have more than one end-of-year outcome reported.

#### RQ 4: Are there adverse disparities in student outcomes associated with race, ethnicity, or special education status?

In order to consider the combined influence of multiple independent variables (e.g., student characteristics), we conducted logistic regression analyses for key disciplinary outcomes (i.e., OSS, placement change, expulsion) and legal actions (i.e., arrest, incarceration, court charge) using predictor variables of student grade (comparing elementary, high, and unknown to middle), gender (comparing female and unknown to male), free-reduced meals status (comparing yes and unknown to no), threat seriousness (comparing transient, serious substantive, and very serious substantive to no threat), race/ethnicity (comparing Black, Hispanic, and Other students to White students), and IEP status (comparing has IEP and IEP-status unknown to no IEP). We accounted for nesting of cases within districts (the non-independence of cases within districts) using group mean centered predictors together with cluster robust standard errors (Huang & Li, 2021).

Results of the logistic regression analysis indicated students in higher grades and those making more serious threats were more likely to receive OSS, expulsion, and change in placement. Male students were more likely to receive OSS than female students. However, female students were more likely to receive a legal action than male students. The gender difference in legal action needs further investigation. Because most threat assessments involve male students, those involving female students might be more serious or raise greater concern. There is also some evidence that female students are more likely to carry out their threat with an assault than male students (Kerere et al., 2023), which could lead to more arrests.

Race and ethnicity variables were predictive of disciplinary and legal outcomes after controlling for threat seriousness and other demographic variables. There were statistically significant associations between Hispanic ethnicity and out-of-school suspension and placement change; Black race and expulsion and placement change; and Other race and placement change. Hispanic students and Black students were more likely than White students to receive OSS or a placement change. Other race students were more likely than White students to receive a placement change.

Disability status, as measured by having an IEP, had a statistically significant association with expulsion. Students with IEPs were less likely than students without IEPs to be expelled. Disability status, as measured by having a 504 plan, had a statistically significant association with legal action. Students with 504 plans were less likely than students without 504 plans to receive a legal action.

The results for student race, ethnicity, and disability status are examined in more detail below.

Appendix C contains the results of the logistic analyses when the two outlier districts (as described on p. 14) were removed from the sample. This resulted in little change in findings.

Logistic Regression Results: Disciplinary and Legal Outcomes

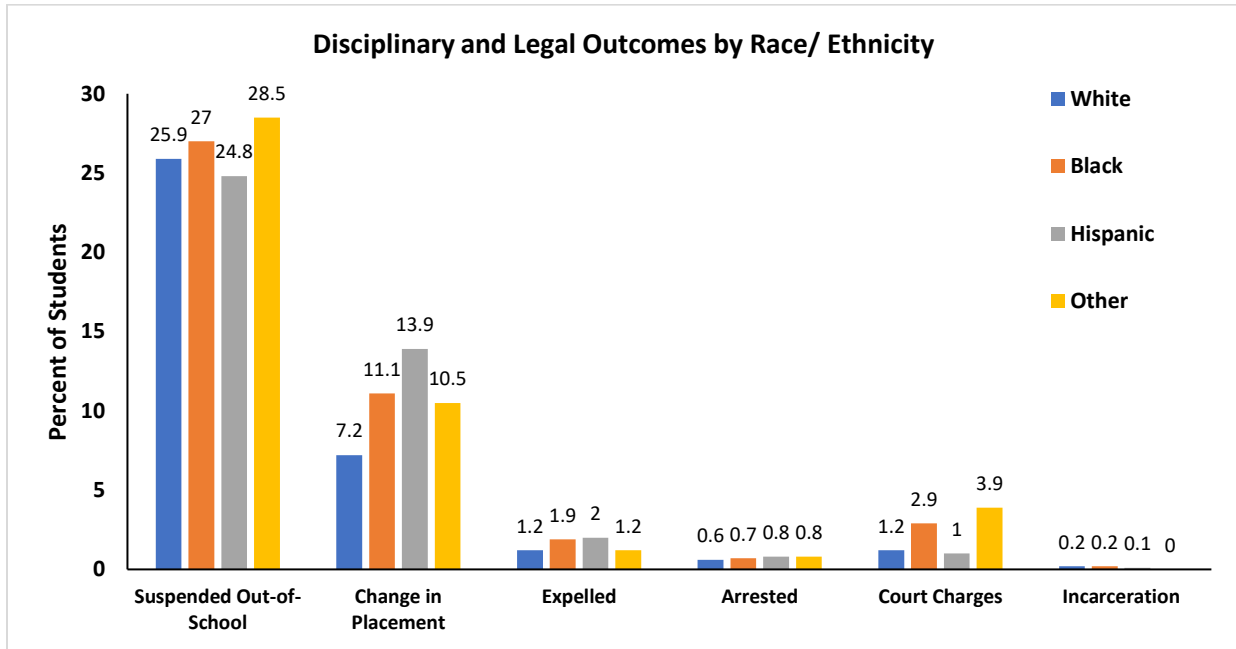
	OSS (n = 23,134) OR (CI)	Expulsion (n = 23,134) OR (CI)	Legal Action <sup>2</sup> (n = 22,694) OR (CI)	Placement Change (n = 17,130) OR (CI)
Elementary	0.550*** (0.427, 0.709)	0.485** (0.287, 0.819)	0.789 (0.429, 1.450)	0.495*** (0.368, 0.667)
High	1.268** (1.071, 1.500)	1.585** (1.126, 2.231)	1.782*** (1.324, 2.399)	1.337* (1.033, 1.730)
Grade Unknown	0.629* (0.397, 0.996)	1.137 (0.477, 2.713)	0.837 (0.403, 1.737)	0.973 (0.685, 1.383)
Has IEP	0.907 (0.792, 1.040)	0.512** (0.329, 0.796)	0.959 (0.819, 1.124)	0.799 (0.611, 1.043)
IEP Unknown	0.457 (0.098, 2.126)	0.451 (0.074, 2.757)	1.397 (0.626, 3.119)	0.388 (0.136, 1.108)
Has 504 plan	1.079 (0.935, 1.246)	0.588 (0.302, 1.147)	0.652* (0.447, 0.952)	0.957 (0.838, 1.092)
504 plan Unknown	0.864 (0.608, 1.226)	3.682 (0.841, 16.116)	0.690 (0.470, 1.013)	0.917 (0.490, 1.718)
Race: Black <sup>1</sup>	1.194 (0.980, 1.453)	1.404* (1.076, 1.832)	0.968 (0.806, 1.163)	1.271* (1.059, 1.527)
Ethnicity: Hispanic <sup>1</sup>	1.187* (1.038, 1.357)	1.104 (0.793, 1.536)	1.012 (0.812, 1.261)	1.229* (1.019, 1.484)
Race: Other <sup>1</sup>	0.946 (0.763, 1.173)	1.165 (0.725, 1.872)	1.369 (0.982, 1.909)	1.297* (1.059, 1.587)
Race: Unknown <sup>1</sup>	1.073 (0.901, 1.278)	1.563 (0.978, 2.501)	0.847 (0.586, 1.224)	1.034 (0.725, 1.474)
Receives FRPM	1.257 (0.991, 1.594)	0.848 (0.651, 1.104)	1.017 (0.841, 1.229)	1.007 (0.749, 1.353)
FRPM Unknown	1.286 (0.984, 1.680)	0.349** (0.173, 0.705)	1.274 (0.832, 1.952)	1.486* (1.091, 2.025)
Female	0.885*** (0.831, 0.942)	0.817 (0.653, 1.020)	1.266*** (1.106, 1.449)	1.035 (0.932, 1.148)
Gender Unknown	0.775 (0.440, 1.367)	0.982 (0.548, 1.761)	0.714 (0.495, 1.031)	0.633*** (0.499, 0.803)
Transient Threat	1.540 (0.826, 2.871)	0.637 (0.213, 1.906)	0.497*** (0.342, 0.722)	1.498** (1.137, 1.974)
Serious Substantive Threat	3.820*** (1.875, 7.782)	4.332*** (2.430, 7.723)	0.958 (0.407, 2.255)	4.798*** (3.312, 6.952)
Very Serious Substantive Threat	3.736** (1.657, 8.423)	22.206*** (11.731, 42.034)	2.518 (0.604, 10.487)	8.409*** (4.765, 14.841)
Threat Classification Unknown	0.398 (0.079, 2.019)	0.053 (0.000, 5.954)	0.929 (0.403, 2.141)	0.760 (0.283, 2.044)

Note. OR is odds ratio, CI is 95% confidence interval, \* significant at  $p < .05$ , \*\* significant at  $p < .01$ , \*\*\*significant at  $p < .001$ . <sup>1</sup> White is the reference group. <sup>2</sup> Legal action includes court charge, arrest, incarceration.

Disciplinary Outcomes by Race and Ethnicity

The chart below shows disciplinary and legal outcomes for students grouped as Black, Hispanic (regardless of race), White, or Other race students. Of particular interest were comparisons to

determine whether Black students received more punitive outcomes (e.g., higher rates of suspension or legal action) than White students and whether Hispanic students received more punitive outcomes than White students.



Note. As explained in the text, the sample size varied because some districts did not provide records of one or more of these outcomes. White OSS and expulsion n = 8,237, White Placement Change n = 6,460, White LEA n = 7,961; Black OSS and expulsion n = 8,237, Black Placement Change n = 5,517, Black LEA n = 8,153; Hispanic OSS and expulsion n = 5,170, Hispanic Placement Change n = 3,886, Hispanic LEA n = 5,122; Other race OSS and expulsion n = 895, Other race Placement Change n = 749, Other race LEA n = 869.

### Students Referred for Threat Assessment Receiving Consequence by Race

Outcome	Received Consequence?	Black	Hispanic	Other	Race Unknown	White
Suspended out of school	Yes	27.0%	24.8%	28.5%	20.8%	25.9%
	No	73.0%	75.2%	71.5%	79.2%	74.1%
	Total	8,237	5,170	895	595	8,237
Expelled from school	Yes	1.9%	2.0%	1.2%	1.8%	1.2%
	No	98.1%	98.0%	98.8%	98.2%	98.9%
	Total	8,237	5,170	895	595	8,237
Change in Placement	Yes	11.1%	13.9%	10.5%	3.9%	7.2%
	No	88.9%	86.1%	89.5%	96.1%	92.8%
	Total	5,517	3,886	749	518	6,460
Arrested	Yes	0.7%	0.8%	0.8%	0.0%	0.6%
	No	35.9%	99.2%	99.2%	100.0%	99.4%
	Total	8,153	5,122	869	589	7,961
Court charges	Yes	2.9%	1.0%	3.9%	0.5%	1.2%
	No	97.1%	99.0%	96.1%	99.5%	98.8%
	Total	8,153	5,122	869	589	7,961
Incarceration	Yes	0.2%	0.1%	0.0%	0.0%	0.2%
	No	99.8%	99.9%	100.0%	100.0%	99.8%
	Total	8,153	5,122	869	589	7,961
Any Law Enforcement Action	Yes	3.6%	1.8%	4.5%	0.5%	1.8%
	No	96.4%	98.2%	95.5%	99.5%	98.2%
	Total	8,153	5,122	869	589	7,961

### Students Receiving Any Disciplinary Consequence by Race (Districts in Sample; from 2020-21 Florida Discipline Data)

Outcome	Black	Hispanic	White
Suspended out of school	4.98%	1.92%	3.17%
	26,831	17,646	28,391
Expelled from school	.049%	.089%	.030%
	263	827	273
Change in placement	36.08%	16.98%	21.83%
	1,943	1,564	1,954

Note. Total White students n = 895,299; Total Black students n = 538,568; Total Hispanic students n = 921,102.

This table summarizes all disciplinary consequences for any disciplinary infraction by 2,538,228 Florida students, obtained from state discipline records (<https://www.fldoe.org/safe-schools/discipline-data.shtml>).

**Out-of-School Suspension.** Although statistically significant, the size of the race/ethnicity group differences were relatively small. The unadjusted percentages of students who received OSS were 25.9% for White students, 27.0% for Black students, and 24.8% for Hispanic students. In a

very large sample, relatively small differences can be statistically significant, which makes it more important to consider the size of the differences (George et al., 2014). When statistically adjusted for the other variables, the adjusted percentages were 24.0% for White students, 27.9% for Black students, and 26.9% for Hispanic students.

For the districts in our sample, the Black/White risk ratio for OSS after a threat assessment, calculated as the proportion of Black students receiving OSS as a result of a threat assessment (27.0%) relative to the proportion of White students receiving OSS as a result of a threat assessment (25.9%) was 1.04. A risk ratio of 1.0 means there was no difference in the risk of being suspended between Black and White students and a ratio of 2.0 means a student in one group was twice as likely to be suspended as a student in the other group.

The very small difference (1.04) found between Black and White students receiving a threat assessment can be compared to the overall difference between Black and White students found in Florida schools across all disciplinary actions. The Black/White risk ratio for OSS for any disciplinary action was 4.98/3.17 or 1.57. In other words, there is a larger disparity in OSS between Black and White students across all disciplinary actions (more Black students receive OSS) than between Black and White students receiving a threat assessment (1.04 compared to 1.57).

The Hispanic/White risk ratio for OSS after a threat assessment was 0.96. This indicates Hispanic students receiving a threat assessment were slightly less likely (.04) than White students to be suspended from school. The Hispanic/White risk ratio for OSS across all disciplinary actions was 0.60. This means that Hispanic students in Florida are much less likely to be suspended from school than White students. In other words, there is a larger disparity in OSS between Hispanic and White students (fewer Hispanic students receive OSS) across all disciplinary actions than between Hispanic and White students receiving a threat assessment (0.60 compared to 0.96).

**Expulsion.** The unadjusted percentages of students who were expelled following a threat assessment were 1.2% for White students, 1.9% for Black students, and 2.0% for Hispanic students. When statistically adjusted for the other variables, the adjusted percentages were 1.3% for White students, 2.0% for Black students, and 1.6% for Hispanic students.

For the districts in the study sample, the Black/White risk ratio for expulsion after a threat assessment was 1.58. This means that Black students who received a threat assessment were more likely to be expelled than White students who received a threat assessment. This disparity should be placed in the context of the overall very low rates of expulsion for students receiving a threat assessment. Only 1.9% of Black students (156 of 8,237) and 1.2% (101 of 8,237) of White students were expelled in the study sample.

The difference between Black and White students who received a threat assessment can be compared to the overall difference between Black and White students who were expelled in

Florida schools across all disciplinary actions. The Black/White risk ratio for expulsion for any disciplinary action was 1.60. The risk ratio for Black and White students receiving a threat assessment (1.58) is slightly lower than the risk ratio observed for Black and White students receiving all disciplinary actions.

The Hispanic/White risk ratio for expulsion after a threat assessment was 1.67. This means that Hispanic students receiving a threat assessment were more likely than White students to be expelled from school. The Hispanic/White risk ratio for expulsion for any disciplinary action was 2.94. This risk ratio means that Hispanic students in Florida are nearly 3 times as likely to be expelled as White students across all disciplinary infractions. Among students receiving a threat assessment, the difference between Hispanic and White students was much smaller (1.67 versus 2.94).

**Placement change.** The unadjusted percentages of students who received a placement change following a threat assessment were 7.2% for White students, 11.1% for Black students, and 13.9% for Hispanic students. When statistically adjusted for the other variables, the adjusted percentages were 8.8% for White students, 11% for Black students, and 10.5% for Hispanic students.

For the districts in our sample, the Black/White risk ratio for a placement change after a threat assessment was 1.54. This means that Black students were more likely to receive a placement change than White students who received a threat assessment. This disparity should be placed in the context of the relatively low rates of placement change for students receiving a threat assessment – 11.1% of Black students (614 out of 5,517) and 7.2% of White students (462 out of 6,460). In other words, the placement change rates for Black and White students receiving a threat assessment were within 4%.

The Hispanic/White risk ratio for placement change after a threat assessment was 1.93. This means that Hispanic students receiving a threat assessment were almost twice as likely to have a placement change as White students receiving a threat assessment. This disparity should be placed in the context of the relatively low rates of placement change for students receiving a threat assessment – 13.9% of Hispanic students (539 out of 3,886) and 7.2% of White students (462 out of 6,460).

The state records for Florida identify two kinds of placement change, *Alternative Placement and Change in Placement (not to exceed 45 days) following a drug, weapon, or serious bodily injury offense for students with disabilities only* (<https://www.fldoe.org/safe-schools/sesir-discipline-data/>), whereas the definition of placement change used in this study was broader, and included transfer to an alternative school, parent withdrew student, placed on homebound instruction, and placed in a virtual setting.

In order to compare the overall state rates with rates for this study, we only considered placement changes involving transfer to an alternative school following a threat assessment.

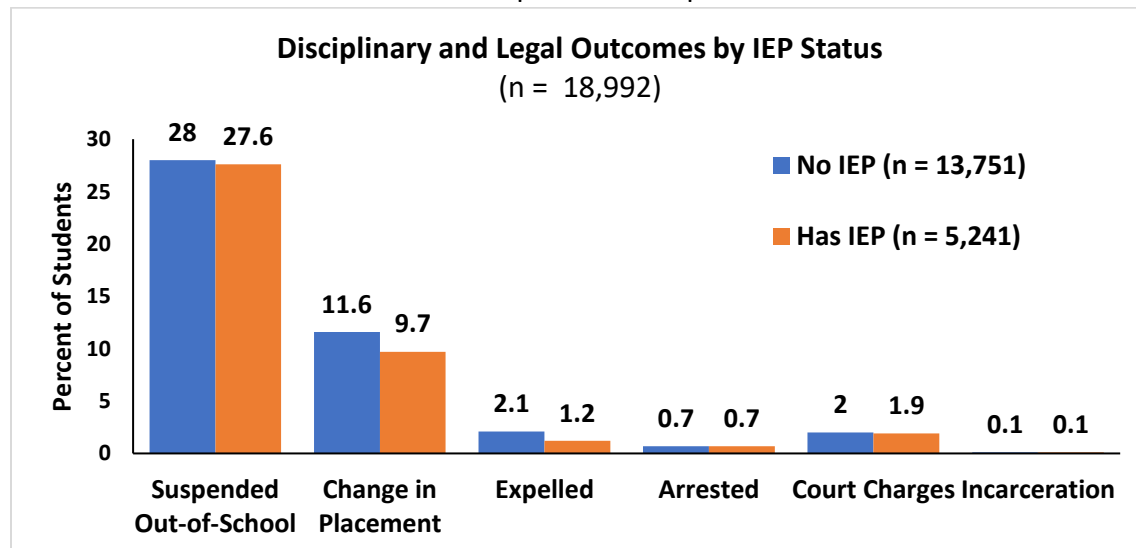
There were 229 White students, 355 Black students, and 255 Hispanic students transferred to another school following a threat assessment. Thus, in these supplementary analyses, the Black/White risk ratio for a placement change following a threat assessment was 1.83 (6.4%/3.5%), which is slightly higher than the state risk ratio of 1.65 for all Black and White students receiving a placement change. Using the more narrow state definition of a placement change, the Hispanic/White risk ratio for placement change following a threat assessment was 1.89 (6.6%/3.5%) and the risk ratio from state records for any placement change was 0.78.

**Law Enforcement Action.** The unadjusted percentages of students who received a law enforcement action (i.e., arrest, charge, incarceration) following a threat assessment were 1.8% for White students, 3.6% for Black students, and 1.8% for Hispanic students. When statistically adjusted for the other variables, the adjusted percentages were 2.4% for White students, 2.5% for Black students, and 2.5% for Hispanic students.

Because of their low frequency, the law enforcement actions of arrest, court charges, and incarceration were combined into a single measure that would be more likely to detect meaningful group differences in the logistic regression. There was no statistically significant difference between Black and White students, or between Hispanic and White students, in law enforcement actions.

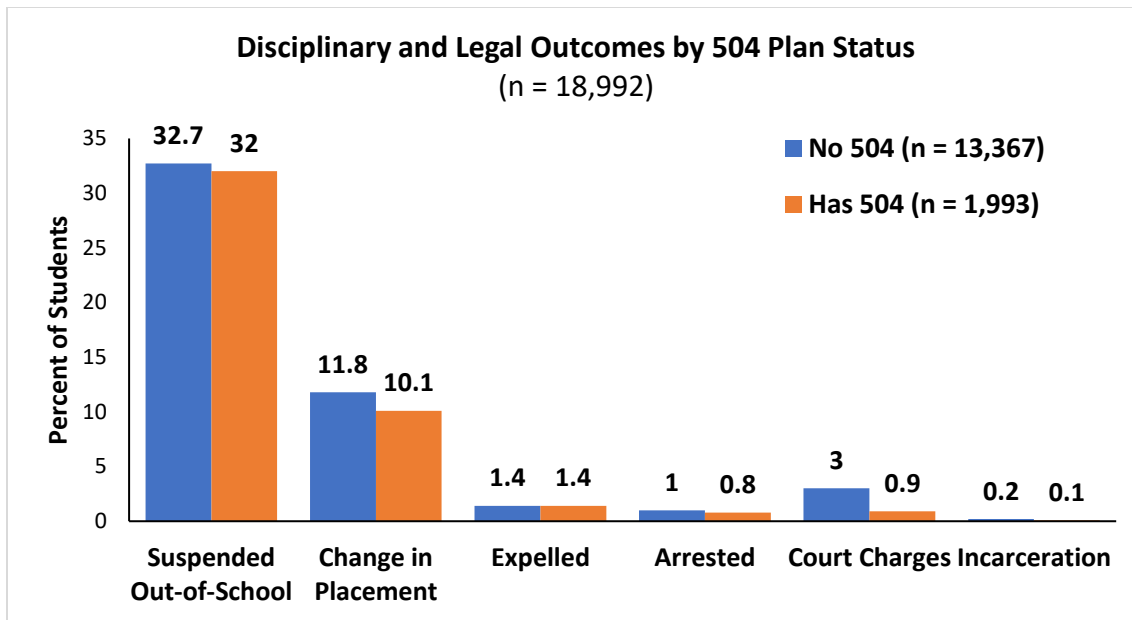
#### Disciplinary Outcomes by Disability

We also compared students with disabilities and students without disabilities using student IEP or 504 plan status as indicators of disability. Of particular interest were comparisons to determine whether students with IEPs or 504 plans received more punitive outcomes (e.g., higher rates of suspension or legal action) than students without IEPs or 504 plans. The sample sizes (n = 18,992) were somewhat smaller because 2 districts did not report the IEP status of their students and 8 districts did not report the 504 plan status of their students.



Note. No IEP OSS and expulsion n = 13,750, No IEP Placement Change n = 10,197, No IEP LEA n = 13,531; Has IEP OSS and expulsion n = 7,640, Has IEP Placement Change n = 5,189, Has IEP LEA n = 7,419.





Note. No 504 Plan OSS and expulsion n = 13,367, No 504 Plan Placement Change n = 11,209, No 504 Plan LEA n = 12,960; Has 504 Plan OSS and expulsion n = 2,071, Has 504 Plan Placement Change n = 1,976, Has 504 Plan LEA n = 2,038.

Results of logistic regression indicate disability status was associated with a lower rate of expulsion and placement change; students with IEPs were less likely than their peers to receive an expulsion ( $OR = .51$ ) or placement change ( $OR = .80$ ) after controlling for threat seriousness and other variables. Students with 504 plans had a lower rate of legal actions ( $OR = .65$ ) than their peers without 504 plans.

Although statistically significant, the differences were relatively small and indicated less punitive outcomes for students with disabilities. The unadjusted suspension rate for students with IEPs was 27.6% versus 28% for students without IEPs. For context, according to US OCR data from the 2017-18 school year (<https://ocrdata.ed.gov>), 21.8% of students served under IDEA versus 3.4% of students not served under IDEA were suspended. There is a very large disparity in suspension rates for students with disabilities generally in Florida, but no such disparity for students receiving a threat assessment.

The unadjusted expulsion rate for students with IEPs was 1.2% versus 2.1% for students without IEPs who received a threat assessment. In contrast, 2017-18 US OCR data indicate that 2.1% of all Florida students served under IDEA were expelled versus 0.3% of students not served under IDEA.

The unadjusted placement change rate for students with IEPs was 9.7% versus 11.6% for students without IEPs. The unadjusted rate of legal actions was 1.6% for students with 504 plans versus 3.9% for students without 504 plans. Comparable data from the US OCR were not

available, but these results show no disadvantage in placement change or legal actions for students with disabilities versus students without disabilities who received a threat assessment.

<b>Outcome</b>	<b>Received Consequence?</b>	<b>Has IEP</b>	<b>Does not have IEP</b>	<b>IEP status unknown</b>	<b>Has 504 Plan</b>	<b>Does not have 504 Plan</b>	<b>504 Plan status unknown</b>
Suspended out of school	Yes	27.6%	28.0%	4.0%	32.0%	32.7%	12.9%
	No	72.4%	72.0%	96.0%	68.0%	67.3%	87.1%
	Total	7,640	13,750	1,744	2,071	13,367	7,696
Expelled from school	Yes	1.2%	2.1%	0.1%	1.4%	1.4%	2.1%
	No	98.8%	97.9%	99.9%	98.6%	98.6%	97.9%
	Total	7,640	13,750	1,744	2,071	13,367	7,696
Change in Placement	Yes	9.7%	11.6%	1.3%	10.1%	11.8%	4.8%
	No	90.3%	88.4%	98.7%	89.9%	88.2%	95.2%
	Total	5,189	10,197	1,744	1,976	11,209	3,945
Arrested	Yes	0.7%	0.7%	0.3%	0.8%	1.0%	0.2%
	No	99.3%	99.3%	99.7%	99.2%	99.0%	99.8%
	Total	7,419	13,531	1,744	2,038	12,960	7,696
Court charges	Yes	1.9%	2.0%	0.2%	0.9%	3.0%	0.1%
	No	98.1%	98.0%	99.8%	99.1%	97.0%	99.9%
	Total	7,419	13,531	1,744	2,038	12,960	7,696
Incarceration	Yes	0.1%	0.1%	0.4%	0.1%	0.2%	0.1%
	No	99.9%	99.9%	99.6%	99.9%	99.8%	99.9%
	Total	7,419	13,531	1,744	2,038	12,960	7,696
Any Law Enforcement Action	Yes	2.5%	2.7%	1.0%	1.6%	3.9%	0.4%
	No	97.5%	97.3%	99.0%	98.4%	96.1%	99.6%
	Total	7,419	13,531	1,744	2,038	12,960	7,696

## Conclusions and Recommendations

This study investigated the statewide implementation of behavioral threat assessment and management in Florida schools based on analyses of 23,351 cases from 3,418 schools in 60 of Florida's 67 districts and 6 specialty schools during the 2021-2022 school year

Based on these results, this report provides recommendations for potential actions that the Office of Safe Schools could take to improve the implementation and consistency of threat assessment and management in Florida schools, recognizing that these recommendations require adequate authority, resources, and personnel.

1. **Prevalence.** The prevalence of threat cases is reasonably consistent across district size (correlation of  $r = .72$  between district enrollment and case prevalence). This is a relatively strong correlation given that many factors in the school climate, demographics, and operation of the threat assessment program can contribute to the number of threat assessments conducted in a school. Key factors that can influence the number of threat assessment cases in a school include:
  - *Threat Reporting.* Threats and other concerning behavior must be reported to school authorities in order for a threat assessment to occur. Schools might differ in the availability of threat reporting methods and the willingness of students, teachers, parents, and others in the community to make a report. Reporting can be influenced by recent events such as a recent school shooting or an incident in the school.
  - *Threat Frequency.* Just as there are differences in crime rates and student misbehavior across schools, there are differences in the frequency in which students make threats or engage in threatening behavior across schools. There also may be occasions, such as after a publicized shooting, where copycat threats are made more frequently. Events in the school or community, such as an ongoing gang conflict, might also increase the frequency of threats.
  - *Threat Assessment Team Training.* The school must have an active team that is available to conduct a threat assessment when concerning behavior is reported. If the team has not completed training or the school administration has not made threat assessment a safety priority, fewer assessments will be conducted. For example, in one large district, there was a delay in training teams, and this district had a notably lower number of threat assessment cases.
  - *Threat Assessment Thresholds.* The school team must make a judgment whether a reported concern merits a threat assessment or could be handled in some other way. Some teams may have a low threshold for deciding that a threat assessment is needed, while others limit their cases to incidents that seem more serious. For example, one large district had a notably high rate of cases; these schools had not been fully trained in the CSTAG model and may have relied on a prior model.

The Office of Safe Schools could consult with districts that have a relatively high or low prevalence of threat cases to determine what factors explain their prevalence rate. The statewide average was .91% of students received a threat assessment, with a breakdown of .86% for elementary school grades (preK-5), 1.2% for middle school grades (6-8), and .64% for high school grades (9-12).

2. **Threat Classification.** The threat assessment process should be efficient so that school teams do not expend excessive time on cases that are not serious and can concentrate their efforts on serious cases. The CSTAG guidelines use a decision tree that allows teams to determine 4 outcomes for a reported threat: (1) the concern is not a threat, but might represent a disciplinary matter or require some other response that is not a threat assessment; (2) the concern involves a threat that is not serious and can be easily resolved as a transient threat; (3) the concern refers to a serious threat of a fight that is usually managed with discipline and counseling to resolve a conflict; and (4) the concern involves a very serious threat where there is potential for serious injury or fatality and requires a more extensive evaluation and development of a safety plan with ongoing case management.

Results indicate that schools are making classification decisions that are consistent with the expected proportions of each threat category. Most threats are readily resolved as transient and fewer than 5% required the most comprehensive evaluation leading to a formal safety plan and extended case management. This process allows most teams to function efficiently and avoid conducting lengthy assessments for cases that are not serious and to instead concentrate resources on more serious cases.

These results support the value of the transient-substantive distinction in distinguishing cases that can be more easily resolved from those requiring more extensive assessment and intervention. This distinction is important because of the staff time and effort required to carry out more extensive assessment and intervention. School staff have heavy service demands and the efficient classification of cases allows them to spend greater time on the more serious cases. In this sample, the CSTAG system allowed teams to resolve 82.7% of their cases as no-threat or transient, to respond at a moderate level (e.g., conflict resolution) with 13.4% of their cases as serious substantive threats, and to conduct a comprehensive assessment and intervention for just 4.7% of their cases as very serious substantive threats. The time and effort to respond to a very serious substantive threat is much greater than for other kinds of threats, so the classification system appears to be highly valuable from a workload perspective. It is also potentially valuable in identifying students who need particular services, support, and monitoring. A follow-up study would be useful in examining how these students fare in their response to these interventions in the months and years after a threat assessment.

We recommend that the Office of Safe Schools monitor and consult with schools that have unusual patterns in their case data. For example, districts that have a disproportionate number of serious cases could have an unusually high level of student aggression, high

threat reporting, or a need for training in case classification. Based on the distribution of cases in this sample, we recommend that 6 districts with more than 10% of their cases classified as very serious substantive threats both review their classification process and consider whether their student population has an unusually high risk for violence (e.g., high levels of gang activity).

3. **Threat Attempts.** Consistent with previous studies, most threats (87.8%) were resolved without an attempt to carry out the threat. An additional 6.4% of threats were attempted but averted so that no assault took place. A threat was carried out in just 5.9% of cases. As would be expected, cases classified as substantive were more likely to be carried out.

The Office of Safe Schools should consult with schools where an unusual number of cases resulted in an assault. As previously noted, one district had 44% of the transient cases in the state that were carried out. Cases should be classified as transient only when the team is reasonably confident that the threat has been resolved and will not be carried out. Routine review of this kind of case data would give a district supervisor or the Office of Safe Schools a means of identifying schools where assistance is needed.

Fewer than 1% of the cases resulted in a serious injury (defined as requiring hospital care, such as a broken bone). The low rate of violence is a reassuring finding, but it must be acknowledged that it is not possible to claim conclusively that the threat assessment prevented the violence because there was not a randomized control group of students who did not receive a threat assessment. It would be useful to conduct qualitative reviews of cases that resulted in serious acts of violence to determine what might have been improved in the case management process.

One concern is that many schools did not maintain records of whether a threat was attempted and if attempted, what kind of injury occurred. It would be useful if the Office of Safe Schools encouraged schools to document these outcomes.

4. **Referral Rates.** There is concern by some civil rights groups that students of color and students with disabilities are disproportionately referred for a threat assessment. This concern assumes that referral for a threat assessment is a harmful process that is disadvantageous to the student. On the contrary, threat assessment research with the CSTAG model has found that students referred for a threat assessment are more likely to receive support services and less likely to be removed from school than students who attend schools not using threat assessment (e.g., Cornell et al., 2012). Threat assessment functions in a manner analogous to a juvenile court diversion program that gives youth a less punitive alternative. In the absence of a threat assessment program, schools could be more likely to respond to a student's threatening statements or behavior with a punitive or zero tolerance approach.
  - White students were referred for a threat assessment at a rate (36.5%) that was consistent with their percentage (35.3%) in the general student enrollment. Black

students were referred at a higher rate (36.5%) than their percentage (21.2%) in the general student enrollment (<https://www.fldoe.org/safe-schools/discipline-data.shtml>). However, it should be noted that the Black students referred for a threat assessment are more likely to receive support services than school removal consequences. From this perspective, a high rate of referral for a threat assessment can mean that students are identified for services before a potentially serious incident of violence or some other negative outcome occurs. The higher rate of placement change for Black students deserves further investigation.

- Hispanic students were referred for a threat assessment at a rate (22.9%) that was lower than their percentage (36.3%) in the general student enrollment. This lower rate has been observed in other studies and merits more investigation.
- In previous studies in Colorado (Crepeau-Hobson & Leech, 2022) and Virginia (Cornell et al., 2018) schools, students with disabilities represented a third or more of the cases, which is higher than their proportion in the general student body. Similarly, in this Florida sample, 33% of students referred for a threat assessment had an IEP compared to 14.6% of students with IEPs in the school districts in the sample. There are a number of reasons why students with a disability might have a higher rate of referral for a threat assessment than students without a disability.

It is important to note that a disproportionate referral rate is not necessarily an indication of bias or unfairness. Many students with disabilities have difficulties with impulsivity, frustration tolerance, social judgement, and emotional self-regulation that make them at increased risk of making threatening statements or engaging in threatening behavior that would lead to a threat assessment.

Referral for a threat assessment can have a beneficial effect of diverting students from exclusionary discipline and directing them to support services. If a student has an IEP or 504 plan, support services must be coordinated to assure protection of student rights under federal law. In 4.5% of cases, a student had an IEP developed or reviewed.

School staff must take care that a referral for a threat assessment could be produced by a misunderstanding of the student's behavior or a biased perspective based on the student's race, ethnicity, disability status, or other protected characteristic. Referrals can be made by students, staff, parents, or anyone in the school community with access to one of the school's mechanisms for reporting a threat. The threat assessment process does not begin until a referral is made, and here the team has an opportunity to gather information and carefully consider whether the referral represents a threat of violence, and if a threat is present, how serious it is and what should be done in response. In this way, the threat assessment process provides a check for potential bias or misunderstanding that might occur in the general school community when a threat is reported.

*Disproportionalities in referrals for threat assessment do not necessarily indicate bias or error by the referring party.* There may be independent reasons why one group might be referred at a higher or lower rate than a comparison group. Race and ethnicity may be correlated with factors such as low family income, a history of adverse childhood experiences, psychosocial stress and trauma exposure, or difficulties with learning in a conventional school environment. Such factors might predispose a student to greater frustration, impulsive behavior, or conflict that is expressed in a threatening statement or behavior. There also might be differential responses of peers and adults to a student from a different background that elicit reactions that ultimately lead to a threat report. *What is most important is that the school has a process for carefully evaluating threat reports, treating all students fairly and equitably, and taking actions that maintain safety and provide appropriate support and interventions for the student as well as others who are impacted by the circumstances.*

5. **Support Services.** CSTAG emphasizes identifying support services that would assist the student in resolving the problem or conflict underlying the threat. Consistent with previous studies in Virginia and the pilot sample in Florida last year, most students were referred for one or more services, such as counseling or mental health services. Because civil rights groups had questioned whether students were referred for services that were not delivered, this year the data collection tool also asked schools to confirm that the services were delivered and to indicate a reason if they were not delivered. Schools reported that 95.6% of cases the services were delivered. In cases where services were not delivered, the most common reason was that the parent declined.

A limitation of these findings is that many schools did not provide details of service delivery. To ensure that students are being treated fairly, the Office of Safe Schools could provide guidance to schools that they should document the delivery of all recommended services and record the reason why any services were not delivered. It would be a valuable next step in case management for teams to monitor the effectiveness of services and make changes as need to assure positive outcomes.

6. **Disciplinary Outcomes.** Threat assessment teams are not designed to make disciplinary decisions, but their findings could influence them. Ideally, one or more school administrators who make disciplinary decisions should serve on the school's threat assessment team, so that they understand threat assessment principles and know what the school team found in its assessment.

Although threat assessment has been criticized as an approach that could remove students from school, threat assessment was proposed by the FBI and Secret Service as an alternative to a zero tolerance approach that relies on the automatic use of school exclusion in response to a student threat. Virginia research has shown that schools using CSTAG make far less use of school exclusion, including out-of-school suspension, school transfer, and expulsion, than schools not using it. Although there was no comparison group for the

Florida schools, the findings for this study demonstrate a similar pattern to previous studies of CSTAG in Virginia. In the present study, 26% of students received out-of-school suspension, 10% received a change in placement, and 1.7% were expelled. Altogether, fewer students were excluded from school in the Florida sample than in the prior Virginia sample.

- **Disparities in disciplinary outcomes by race/ethnicity.** Contrary to our previous analyses on a smaller sample in Florida (Maeng, Cornell, Edwards, & Huang, 2022), there were some statistically significant differences between Black and White students. In part, this change in findings may be attributable to the much larger sample, since smaller differences are identified as statistically significant (i.e., not attributable to chance variations) as the sample grows larger. In the present sample of 8,237 White students and 8,237 Black students (by coincidence, the groups had the same n), White students were suspended at a slightly lower rate (25.9%) than Black students (27%). Although this difference (1.1%) is statistically significant, it is relatively small and generates a risk ratio of just 1.04 (where 1.00 means no difference). In contrast, the risk ratio is 1.57 for the overall suspension rate of Black students compared to White students for all disciplinary violations in Florida. In other words, the disparity is far smaller, but not absent, for Black students receiving a threat assessment compared to the larger population of Black students receiving a disciplinary consequence in Florida.
- Hispanic students receiving a threat assessment were slightly less likely to be suspended out of school (24.8%) than White students (25.9%). The risk ratio of 0.96 shows a slightly lower risk for suspension for Hispanic students, which is larger than the risk ratio of .60 for the overall population of Hispanic students receiving a suspension for any disciplinary infraction in Florida.
- Very few students (1.7%) receiving a threat assessment were expelled from school. This low rate was reasonably consistent for Black (1.9%), Hispanic (2.0%) and White (1.2%) students. However, the difference between Black and White students (.7%) was statistically significant and generated a risk ratio of 1.58. This risk ratio is slightly smaller than the risk ratio of 1.60 for all expulsions of Black versus White students in Florida schools. Similarly, Hispanic students were slightly more likely to be expelled than White students, with a difference 8 tenths of one percent and a risk ratio of 1.67. However, the risk ratio of 1.67 is considerably smaller than the risk ratio of 2.94 for the overall population of Hispanic students receiving an expulsion in Florida.
- Overall, the comparisons of Black and Hispanic students show promising results for the achievement of equity in outcomes with White students. These are important findings in light of research showing that other methods of reducing racial/ethnic disparities in exclusionary discipline have been unsuccessful (Cruz et al., 2021; Welsh & Little, 2018). The Office of Safe Schools could cite these positive findings in communications with stakeholders concerned about biased disciplinary practices.



- **Disparities in disciplinary outcomes by disability status.** There were no statistically significant differences between students with disabilities and students without disabilities that indicated disadvantages or unfair treatment for students with disabilities. In contrast, students with IEPs were less likely than their peers without IEPs to receive an expulsion or placement change. According to 2017-18 US OCR data, 2.1% of all Florida students served under IDEA were expelled compared to our sample in which 1.2% of students with IEPs who received a threat assessment were expelled. The Office of Safe Schools could share these results with stakeholders to allay concerns that the rights of students with disabilities are being violated and to build more support for the use of behavioral threat assessment and management in schools.
- 7. Law Enforcement Outcomes.** Another prominent concern is that threat assessment would result in students being criminalized for threats that were not serious and could be managed without law enforcement engagement. However, the results from this study, consistent with prior studies, show that very few students receiving a threat assessment were arrested (0.7%), charged with an offense (1.8%), or incarcerated (0.1%). Consistent with previous studies, there were no statistically significant differences between Black and White, Hispanic and White, or Other and White students in law enforcement outcomes. There was no statistically significant difference between students with IEPs and students without IEPs in law enforcement outcomes. There was a statistically significant difference between students with 504 plans and students without 504 plans favoring the students with 504 plans. In summary, there was a striking absence of disparities unfavorable to students of color or students with disabilities in these analyses. These findings should be shared as welcome evidence of effective cooperation between education and law enforcement that did not produce inequities in law enforcement outcomes. It would be useful for the Office of Safe Schools to gather qualitative case study information to document the appropriate role of law enforcement in the most serious cases where a serious threat to school safety was averted.
- 8. Academic and Behavioral Outcomes.** This study gathered a limited amount of data on the frequency of adverse academic outcomes for students who received a threat assessment. These results require further analysis to compare with the overall student population and with groups of students who are at-risk for academic difficulties. Nevertheless, they indicate relatively low rates of adverse academic outcomes. The dropout rate was 0.8%, which is consistent with Florida state norms. The rate of failing one of the state achievement tests was 21%, which appears to be below the failure rate for the state as a whole, although a test-by-test comparison is needed. The grade retention rate was 5% and the course failure rate was 16.2%; these rates appear to be consistent with a high-risk sample of students, but we did not have comparable state level data. Only 8% of students receiving a threat assessment had a subsequent disciplinary action that resulted in out-of-school suspension. These data were collected as a first step in identifying areas for further study. A future study

of student academic and behavioral outcomes could investigate these outcomes in more detail and compare them to the progress of other students at-risk for academic and behavioral difficulties.

- 9. General Recommendations.** There are many aspects of program implementation that are currently left for individual schools or districts to determine. This is common in public schools nationwide where, historically, there is little direct control at the state level. These results indicate that implementation has been uneven across districts, with some districts carrying out more threat assessments than would be expected for a district of its size and other districts carrying out substantially fewer threat assessments than would be expected for a district of its size. There are also variations in threat assessment outcomes that suggest the need for additional training in some districts. Finally, there was variation in record-keeping (e.g., case management, case outcomes, student services, academic and behavioral outcomes). Evaluations of statewide implementation of threat assessment in Texas schools suggest similar challenges with training and implementation (Hairston & Stafford, 2023; Lee, 2023). In order to achieve greater uniformity in the practice of threat assessment, the Office of Safe Schools could provide more detailed guidance to districts on the leadership and management of threat assessment teams. They could recommend a system of district oversight to coach and support teams and assure greater attention to case management.

### Limitations

This study examined statewide implementation of threat assessment in Florida, which required that all schools use the same model (CSTAG). Therefore it was not possible to conduct a controlled study comparing different models or schools not using threat assessment. Previous controlled studies have been conducted in Virginia, however, and provide indirect support for the Florida findings (e.g., Cornell et al., 2012; Cornell et al., 2017; Cornell et al., 2018; Maeng et al., 2020).

Although results were generally positive, some inconsistencies in training and implementation were observed. For example, two large districts, comprising approximately 23% of the student population, did not complete training all staff until after the data collection period. One of these districts reported an unusually low number of cases and the other district reported an unusually large number of cases. Recommendations for training are found in a separate report (Maeng et al., 2022b).

In addition, some districts did not provide records for all of the variables under study, which resulted in some variation in sample sizes across analyses. However, these variations did not appear to be sufficiently large or systematic in a way that would substantially alter study findings. Examining a larger sample and checking for bias in non-responders by auditing cases and checking additional student records or contacting parents to confirm case outcomes (such as delivered services) would be useful in future studies.

## Summary and Future Directions

Overall, these results are generally consistent with prior research, indicating that the implementation of CSTAG in Florida has been widely, but not uniformly, successful. Success can be measured in multiple ways that can be generally grouped into safety, effectiveness, and fairness and equity. From a safety perspective, relatively few threats were attempted and very few resulted in someone being injured.

Threat assessment effectiveness was broadly reflected in the ability of teams to efficiently distinguish between different levels of threats, resolving most threats that were not serious and taking more extensive action to manage threats that were judged to be serious. Another aspect of effectiveness was reflected in the large number of services provided to students. More detailed studies of effectiveness could examine the impact of these services and student academic and behavioral outcomes over time. Another dimension of effectiveness would be to study the fidelity of implementation by individual school teams and the association of fidelity with student outcomes, overall school safety, and school climate.

The *fairness* of threat assessment is reflected in the calibration of disciplinary and law enforcement outcomes with the seriousness of the threat. Threat assessment can be contrasted with a zero tolerance approach in which all cases are treated the same, and students with minor violations are subject to the same strict outcomes (primarily school removal) as students with major violations. Florida schools using threat assessment produced outcomes that were calibrated to the seriousness of the case and resulted in low rates of school removal and very low rates of law enforcement action.

The *equity* of threat assessment was indicated by the similarity in outcomes across student groups defined by race, ethnicity, and disability status. Although the results as a whole indicated comparable outcomes across student groups, there were some disparities that merit attention. Districts should monitor student outcomes on an ongoing basis and provide training and support to minimize the influence of bias or misunderstanding of student behavior. There is a need to examine why differences between groups arise and what appropriate actions are needed in response. It is also important to expand the assessment of equity to other protected student categories (such as gender and religion).

This study examined indicators of fairness and equity at a macro level based on statistical trends, consistent with much of the educational research literature, but analyses of individual cases on a qualitative level would also be useful.

We recommend that the Office of Safe Schools bring attention to these positive findings to build more public support to the use of behavioral threat assessment and management in Florida schools.

## References

- Cornell, D. (2018). *Comprehensive school threat assessment guidelines*. School Threat Assessment Consultants LLC. Charlottesville, VA.
- Cornell, D. (2020). Threat assessment as a school violence prevention strategy. *Criminology & Public Policy*, 1–18. <https://doi.org/10.1111/1745-9133.12471>
- Cornell, D., Allen, K., & Fan, X. (2012). A randomized controlled study of the Virginia Student Threat Assessment Guidelines in grades K-12. *School Psychology Review*, 41, 100-115.
- Cornell, D., Maeng, J. L., Burnette, A. G., Jai, Y., Huang, F., Konold, T., Datta, P., Malone, M., Meyer, P. (2017). Student threat assessment as a standard school safety practice: Results from a statewide implementation study. *School Psychology Quarterly*, 33, 213-222. DOI: 10.1037/spq0000220
- Cornell, D., Maeng, J.L., Huang, F., Shukla, K., & Konold, T. (2018). Racial/ethnic parity in discipline consequences using student threat assessment. *School Psychology Review*, 47, 183-195. DOI: 10.17105/SPR-2017-0030.V47-2
- Crepeau-Hobson, F., & Leech, N. (2022). Disciplinary and nondisciplinary outcomes of school-based threat assessment in Colorado schools. *School Psychology Review*, 51(5), 609-618. <https://doi.org/10.1080/2372966X.2020.1842716>
- Cruz, R. A., Firestone, A. R., & Rodl, J. E. (2021). Disproportionality reduction in exclusionary school discipline: A best-evidence synthesis. *Review of Educational Research*, 91(3), 397-431.
- Florida Department of Education. (2022a). *Florida's High School Cohort 2020-21 Graduation Rate*. <https://www.fldoe.org/core/fileparse.php/7584/urlt/GradRates2021.pdf>
- Florida Department of Education. (2022b). *Understanding FAST Grades 3-10 ELA and Mathematics Reports for Families 2022-2023*. <https://www.fldoe.org/accountability/assessments/k-12-student-assessment/results/2022.shtml>
- George, G., Haas, M. R., & Pentland, A. (2014). From the editors: Big data and management. *The Academy of Management Journal*, 57(2), 321–326.
- Hairston, A., & Stafford, J. (2023). School safety and threat assessments; Assessing the student beyond the threat. Texas Appleseed, Austin TX. <https://www.Texasappleseed.org>
- Huang, F. & Li, X. (2021). Using cluster robust standard errors when analyzing group randomized trials with few clusters. *Behavior Research Methods*. Doi: 10.3758/s13428-021-01627-0
- Kerere, J., Cornell, D., & Maeng, J. (2023, August 5-7). *Student attempts of violence following a school threat assessment* [Poster presentation]. Annual Meeting of the American Psychological Association, Washington, DC.
- Lee, J. (2023). Students pay as Texas school districts violate 'Threat assessment law'. *Texas Observer*. <https://www.texasobserver.org>
- Maeng, J., Cornell, D., & Huang, F. (2020). Student threat assessment as an alternative to exclusionary discipline. *Journal of School Violence*, 19, 377-388. doi: 10.1080/15388220.2019.1707682
- Maeng, J. L., Cornell, D. G., & Warren, E. (2021). *Threat assessment training and implementation needs survey state report*. Charlottesville, VA: School of Education and Human Development, University of Virginia.
- Maeng, J., Cornell, D., Edwards, K., & Huang, F. (2022a). *School Threat Assessment in Florida: Technical Report of 2020-2021 Case Data*. Charlottesville, VA: School of Education and Human Development, University of Virginia.
- Maeng, J. L., Kerere, J. & Cornell, D. G. (2022b). *Threat Assessment and Management Training in Florida Schools Preliminary Technical Report*. Charlottesville, VA: School of Human Development, University of Virginia.

U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2017-2018,  
<http://ocrdata.ed.gov>

Welsh, R. O., & Little, S. (2018). The school discipline dilemma: A comprehensive review of disparities and alternative approaches. *Review of Educational Research, 88*(5), 752-794.

## Appendix A: Case Record Survey

For each assessment of a student for a threat of harm to others conducted at your school, report the following information. If more than one person made the threat together, complete a separate form for each individual.

<p><b>School district</b> _____</p> <p><b>School name</b> _____</p> <p><b>School affiliation of person making threat</b> <input type="checkbox"/> Student <input type="checkbox"/> Parent <input type="checkbox"/> Staff <input type="checkbox"/> Other _____</p> <p><b>Affiliation status</b> <input type="checkbox"/> Current (student, parent, or staff) or <input type="checkbox"/> Former (not currently a student, parent, or staff)</p>
<p><b>Demographics of person making threat</b> <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other _____</p> <p><b>Age</b> _____</p> <p><b>Race (choose all that apply)</b> <input type="checkbox"/> American Indian/Alaska Native <input type="checkbox"/> Asian <input type="checkbox"/> Black/African American <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> White <input type="checkbox"/> Other Race</p> <p><b>Hispanic or Latinx</b> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><b>Grade (if person making threat is a current student)</b> preK K 1 2 3 4 5 6 7 8 9 10 11 12 NA</p> <p><b>Individual Educational Program (IEP) ((if person making threat is a current student)</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p><b>Section 504 Plan (if person making threat is a current student)</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p><b>Eligible for Free/Reduced Price Meals (if person making threat is a current student)</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p>
<p><b>Person(s) threatened</b> <input type="checkbox"/> one person threatened <input type="checkbox"/> more than one person threatened</p> <p><b>Who threatened</b> (check all that apply) <input type="checkbox"/> student <input type="checkbox"/> teacher <input type="checkbox"/> school staff member <input type="checkbox"/> other, describe _____</p> <p><b>Threat classification</b> <input type="checkbox"/> No Threat <input type="checkbox"/> Transient <input type="checkbox"/> Serious Substantive <input type="checkbox"/> Very Serious Substantive</p> <p><b>Threat outcome</b></p> <p><input type="checkbox"/> Threat not attempted (person made no physical attempt to carry out the threat)</p> <p><input type="checkbox"/> Threat attempted but averted (person made physical effort to carry out the threat but was stopped before anyone was assaulted)</p> <p><input type="checkbox"/> Threat carried out (person assaulted someone, regardless of severity)</p> <p><b>Most serious injury to person(s) threatened (only answer when threat carried out):</b></p> <p><input type="checkbox"/> assault with no injury <input type="checkbox"/> minor injury (e.g., bruise, bloody nose) <input type="checkbox"/> serious injury (e.g., broken bone, hospitalization)</p>

**What services did the student making the threat receive? Note: List only services that were provided to students, not services that were recommended but not provided. (Check all that apply.)**

- Student apologized for threat
- Parent notification/meeting/conference
- Target of threat contacted
- Mental health services in school, including counseling, provided by counselor, psychologist, social worker, or other qualified staff
- Mental health services outside of school, including counseling, provided by counselor, psychologist, social worker, or other qualified staff
- Conflict resolution, mediation, or restorative process
- Schedule change
- Increased monitoring of student
- Behavior contract developed or reviewed
- Safety plan developed or reviewed
- IEP developed or revised
- Other services received (specify)
- None

Were any services recommended but not provided?

- No
- Yes (what service and why not provided?)

What disciplinary actions did the student receive? (check all that apply)

- Reprimand/Warning
- Detention (including time out/lunch detention)
- In school suspension for \_\_\_\_\_ days
- Out of school suspension for \_\_\_\_\_ days
- Expulsion
- Other, describe \_\_\_\_\_
- None

Did the student receive a change in placement? (check all that apply)

- Transfer to a different school
- In-home instruction
- Transfer to a virtual instructional setting
- Parent voluntarily withdrew the student from school
- Other (describe) \_\_\_\_\_
- No change in school placement

What law enforcement actions did the student receive (check all that apply)

- Arrest by law enforcement
- Incarceration (e.g., juvenile detention or jail)
- Charges in juvenile or adult court
- Baker Act
- Other (describe) \_\_\_\_\_
- None

End-of-year academic status (check all that apply)

- Student dropped out of school
- Student retained in same grade
- Student failed one or more courses
- Student failed one or more state achievement tests
- Student had a subsequent disciplinary infraction that resulted in out-of-school suspension (of any length)
- None of the above



## Appendix B: Cases Per District

District	Number of Cases	Total District Enrollment	Cases per Enrollment (%)
1	17	1,000-2,999	0.50-0.99
2	13	10,000-99,000	0.10
3	1	1,000-2,999	< 0.10
4	25	3,000-9,999	0.50-0.99
5	315	10,000-99,000	0.50-0.99
6	124	3,000-9,999	1.00-1.99
7	66	3,000-9,999	1.00-1.99
8	10	1,000-2,999	0.10-0.49
9	262	10,000-99,000	0.5-0.99
10	86	3,000-9,999	1-1.99
11	213	10,000-99,000	0.5-0.99
12	12	1,000-2,999	0.1-0.49
13	3751	>100,000	1-1.99
14	24	1,000-2,999	1-1.99
15	347	10,000-99,000	2.00-4.99
16	19	< 1,000	2.00-4.99
17	5	1,000-2,999	0.1-0.49
18	380	>100,000	0.1-0.49
19	50	1,000-2,999	2.0-4.99
20	1813	10,000-99,000	2.00-4.99
21	30	3,000-9,999	0.50-0.99
22	75	10,000-99,000	0.5-0.99
23	51	3,000-9,999	1-1.99
24	11	1,000-2,999	0.1-0.49
25	9	< 1,000	1-1.99
26	2	1,000-2,999	0.1-0.49
27	29	3,000-9,999	0.5-.99
28	15	1,000-2,999	1-1.99
29	55	< 1,000	>5
30	7	10,000-99,000	< .1
31	26	1,000-2,999	1-1.99
32	445	10,000-99,000	1-1.99
33	14	1,000-2,999	0.5-0.99
34	25	10,000-99,000	0.1-0.49
35	36	3,000-9,999	0.1-0.49
36	35	1,000-2,999	1-1.99
37	16	1,000-2,999	0.5-0.99
38	14	1,000-2,999	0.5-0.99

39	18	1,000-2,999	1-1.99
40	20	3,000-9,999	0.1-0.49
41	18	10,000-99,000	0.1-0.49
42	239	10,000-99,000	1-1.99
43	31	10,000-99,000	0.1-0.49
44	1435	>100,000	0.5-0.99
45	103	3,000-9,999	2.0-4.99
46	59	3,000-9,999	0.5-0.99
47	1	10,000-99,000	< .1
48	171	10,000-99,000	0.5-0.99
49	615	>100,000	0.1-0.49
50	1454	10,000-99,000	1-1.99
51	43	10,000-99,000	0.1-0.49
52	2197	>100,000	1-1.99
53	948	10,000-99,000	0.5-.99
54	424	10,000-99,000	2.0-4.99
55	356	10,000-99,000	1-1.99
56	1105	10,000-99,000	2.0-4.99
57	763	10,000-99,000	0.5-.99
58	2033	>100,000	0.5-.99
59	616	10,000-99,000	1-1.99
60	260	10,000-99,000	0.5-.99
61	826	10,000-99,000	0.5-.99
62	148	10,000-99,000	0.1-0.49
63	157	10,000-99,000	0.1-0.49
64	112	10,000-99,000	0.1-0.49
65	439	10,000-99,000	0.5-.99
66	116	3000-9999	1-1.99

### Appendix C: Analysis without Outlier Districts

The scatterplot showing the district enrollment and number of threat assessment cases (p. 13) suggests that two very large districts are outliers: one district had far fewer threat assessment cases than the trend line predicts and the other district had far more threat assessment cases than the trend line predicts. The combined enrollment of these two districts is approximately 590,000 students, which represents approximately 23% of the total enrollment for the 60 districts and 6 schools in this study. Because of their size, these two districts could have an impact on study findings. In addition, in both districts, most of the CSTAG training for their districts occurred after the time period for this study (2021-2022 academic year). Although the cases in these districts are part of the statewide picture of threat assessment in Florida schools, they do not necessarily represent the practice of the CSTAG model since most of their staff had not been trained. Thus, we conducted a series of supplementary analyses that omitted these districts from the statewide sample. The results of these supplemental analyses are below.

Logistic Regression: Disciplinary and Legal Outcomes

	OSS (n = 19,003) OR (CI)	Expulsion (n = 19,003) OR (CI)	Legal Action <sup>2</sup> (n = 18,563) OR (CI)	Placement Change (n = 16,750) OR (CI)
Elementary	0.529*** (0.409, 0.682)	0.444* (0.233, 0.848)	0.783 (0.423, 1.451)	0.432*** (0.344, 0.543)
High	1.287* (1.058, 1.566)	1.782** (1.175, 2.700)	1.950*** (1.406, 2.704)	1.375* (1.045, 1.810)
Grade Unknown	0.621* (0.392, 0.983)	1.111 (0.375, 3.292)	0.864 (0.443, 1.685)	0.978 (0.653, 1.464)
Has IEP	0.948 (0.833, 1.078)	0.391*** (0.256, 0.596)	0.956 (0.806, 1.134)	0.831 (0.605, 1.142)
IEP Unknown	0.531 (0.159, 1.775)	0.449 (0.052, 3.908)	1.345 (0.690, 2.619)	0.310 (0.081, 1.189)
Has 504 plan	1.105 (0.964, 1.266)	0.555 (0.242, 1.274)	0.724* (0.556, 0.942)	0.958 (0.816, 1.126)
504 plan Unknown	0.885 (0.650, 1.205)	3.689 (0.718, 18.948)	0.753* (0.569, 0.997)	0.888 (0.418, 1.887)
Race: Black <sup>1</sup>	1.232 (0.998, 1.521)	1.433*** (1.157, 1.776)	0.944 (0.799, 1.115)	1.327** (1.095, 1.606)
Ethnicity: Hispanic <sup>1</sup>	1.196** (1.050, 1.362)	1.292 (0.926, 1.804)	1.030 (0.826, 1.285)	1.284* (1.047, 1.575)
Race: Other <sup>1</sup>	0.964 (0.778, 1.194)	1.246 (0.682, 2.275)	1.367* (1.013, 1.846)	1.353** (1.077, 1.700)
Race: Unknown <sup>1</sup>	1.059 (0.885, 1.269)	1.500 (0.801, 2.809)	0.825 (0.571, 1.194)	1.040 (0.687, 1.576)
Receives FRPM	1.225 (0.988, 1.520)	0.982 (0.780, 1.236)	1.043 (0.861, 1.264)	0.962 (0.693, 1.337)
FRPM Unknown	1.263 (0.992, 1.608)	0.315* (0.114, 0.867)	1.251 (0.846, 1.851)	1.522* (1.053, 2.198)

	OSS (n = 19,003) OR (CI)	Expulsion (n = 19,003) OR (CI)	Legal Action <sup>2</sup> (n = 18,563) OR (CI)	Placement Change (n = 16,750) OR (CI)
Female	0.885*** (0.828, 0.946)	0.915 (0.713, 1.175)	1.309*** (1.133, 1.511)	1.028 (0.907, 1.165)
Gender Unknown	0.812 (0.480, 1.372)	1.004 (0.538, 1.872)	0.785 (0.605, 1.019)	0.596*** (0.464, 0.765)
Transient Threat	1.436 (0.843, 2.444)	1.046 (0.494, 2.217)	0.536*** (0.400, 0.719)	1.536* (1.080, 2.186)
Serious Substantive Threat	3.747*** (1.971, 7.125)	5.462*** (3.028, 9.854)	0.996 (0.472, 2.100)	5.812*** (4.426, 7.633)
Very Serious Substantive Threat	3.804*** (1.732, 8.357)	17.035*** (9.247, 31.383)	2.528 (0.653, 9.778)	10.581*** (6.577, 17.021)
Threat Classification Unknown	0.483 (0.153, 1.529)	0.005 (0.000003, 7.954)	0.945 (0.451, 1.977)	0.642 (0.163, 2.536)

Note. OR is odds ratio, C.I. is 95% confidence interval, \* significant at  $p < .05$ , \*\* significant at  $p < .01$ , \*\*\*significant at  $p < .001$ . <sup>1</sup> White is the reference group. <sup>2</sup> Legal action includes court charge, arrest, incarceration.

The 76 odds ratios presented in the table above are very similar to those obtained in the original analyses (p. 26). The ORs that were statistically significant in the original analyses are statistically significant in the analyses above and the ORs that were not statistically significant in the original analyses are not statistically significant in the analyses above, with two exceptions. For legal actions, the ORs for 504 Plan unknown and Race: Other are statistically significant at the  $p = .05$  level in the table above, but not in the original analyses that included all of the districts. In conclusion, these supplemental analyses do not indicate that the presence of these two districts in the study meaningfully altered the overall findings in the statewide sample.