Statewide Implementation of School Threat Assessment in Florida

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CONTENTS

Acknowledgements 3

Executive Summary 4

Purpose and Project Goals 10

Implications for Criminal Justice Policy and Practice 12

- Demographics of Students Making Threats 13
- Disciplinary and Law Enforcement Outcomes 13
- Training and Educational Needs 16
- Practice and Fidelity Needs 18
- Dissemination of Project Findings 19

References 21

Appendix A: *Threat assessment training and implementation needs survey state report* 24

Appendix B: *Threat Assessment and Management Training in Florida Schools Technical Report.* 40

Appendix C: *School Threat Assessment in Florida: Technical Report of 2020-2021 Case Data* 71

Appendix D: *School Threat Assessment in Florida: Technical Report of 2021-2022 Case Data* 89

Appendix E: Publications, Presentations, and Selected News Media Recognition ...138

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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 project investigated threat assessment training and implementation, the kinds of threat cases that schools experienced, and how they were resolved. Of special interest was whether threat assessment was conducted without disproportionate negative consequences for students across diverse groups defined by race, ethnicity, and special education (disability) status. This project used a mixed-method approach with 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?

Research Question 1: Training and Implementation Reactions

To answer research question 1, we used a convergent mixed-methods approach, collecting qualitative and quantitative data about stakeholder perceptions of the threat assessment process. We developed and implemented a statewide survey of all district school safety leads in Florida to identify needs and concerns. We conducted interviews with 30 school stakeholders (division level safety specialists and schools threat assessment team members) to gather perspectives of district-level stakeholders that reflect Florida's diversity of race/ethnicity, income level, and population density (urban, suburban, and rural). The goal of these interviews was to allow these stakeholders to describe in more detail perceptions of threat assessment training and implementation needs, barriers they encountered, and how these were mitigated and/or if they remain. We also collected data from students, parents, and teachers who completed online educational programs that introduced them to the basics of threat assessment, and online pre-/post-training survey measures for team members to understand how much they learned in workshops and their attitudes toward using threat assessment in their schools.

The methods, sample, and detailed results are reported in two technical reports focused on the training of school personnel to use the CSTAG model (Appendix A and B):

- Maeng, J. L., Cornell, D. G., and 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. L., Kerere, J. & Cornell, D. G. (2023). *Threat assessment and management training in Florida schools technical report.* Charlottesville, VA: School of Education and Human Development, University of Virginia.

Key findings from these reports include:

- Approximately 50% of the district safety specialists in Florida schools indicated a moderate or serious need for more training (Maeng et al., 2021).
- Participants who completed in-person threat assessment training workshops (n = 3,452) and Level 1 online CSTAG training (n = 3,291) showed significant improvement in threat assessment knowledge regardless of participant discipline (Maeng et al., 2023).
- For both online and in-person professional development (PD), more than 93% of participants had positive perceptions of the PD, indicating satisfaction with the training and motivation to implement the threat assessment program (Maeng et al., 2023).

Key recommendations from these reports include:

- Given the comparable outcomes for participants completing in-person workshops and online training programs, school districts should choose the PD format that will best meet the needs of their personnel considering factors such as the cost and timing of workshops, training facilities, and trainer quality (Maeng et al., 2023).
- Ensure participants complete evaluations to verify completion and identify trainers and/or districts in need of more support (Maeng et al., 2023).
- FLDOE and/or districts should maintain records of staff PD completion to verify that the school has a trained team and to show evidence of PD completion in instances where a staff member changes schools (Maeng et al., 2023).
- FLDOE used a train-the-trainer program to allow each district to select staff from their district to serve as ongoing in-house trainer-coaches who support the training and implementation of threat assessment for the school teams in their district. Two lessons to learn from this effort were: (1) to carefully select school staff to conduct a lengthy PD program; (2) to make efficient use of trainers by supporting them in scheduling workshops for substantial numbers (20 or more) of staff (Maeng et al., 2023).

Research Questions 2-4: Case Characteristics and Outcomes

To answer research questions 2, 3, and 4, we used two years of case data (2020-21 and 2021-22 academic years) for student threat assessments conducted in Florida Public Schools. We used the data to examine threat case characteristics and outcomes descriptively, as well as to investigate associations of case characteristics with academic, disciplinary, and legal student outcomes. Inputs included school characteristics (chiefly enrollment size, prevalence of low-income students, racial and ethnic composition) and student characteristics (age, ethnicity, gender, grade, race, family income level, and

special education status) because they have been identified in prior studies as central to the examination of racial/ethnic disparities.

For year 1 (2020-21), we used case data from a subset of Florida public schools that voluntarily submitted data to FLDOE. Most of Florida's 67 districts declined to submit case data, noting the challenges of the COVD-19 pandemic and other strains on their resources. As a result, we obtained usable data for a sample of 1,102 cases in 21 districts and 2 lab schools. Consequently, we regarded this sample as a pilot study that may not generalize to all Florida schools. Further, these results reflect a unique school year during the COVID-19 pandemic in which many schools had modified schedules and environments, and there were heightened concerns about the health of students and staff.

For year 2 (2021-22), we used a more complete data set. We received data for 23,135 student threat assessments from 60 of Florida's 67 school districts and 6 specialty schools representing approximately 90% of the total enrollment in Florida public schools.

The methods, sample, and detailed results are reported in two technical reports (Appendix C and D):

- Maeng, J., Cornell, D., Edwards, K., & Huang, F. (2022). *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., 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. doi: 10.13140/RG.2.2.31694.23369

Key findings from the 2021-22 academic year are presented on the next page. Details are in the technical report (Appendix D; Maeng et al., 2023).

Relationships among academic, disciplinary, and legal outcomes for students receiving a threat assessment

- 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 (e.g., arrest) than male students.

Disparities in student outcomes associated with race, ethnicity, or special education status

- 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% of Black students who received a threat assessment received an OSS) 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.

- Results of logistic regression analyses that included covariates for grade, gender, free-reduced price meal status, and threat serious, and accounted for nesting of cases within districts through group mean centered predictors and cluster-robust standard errors indicated some of these comparisons (Hispanic v White OSS and Black v White expulsions and placement change) were statistically significant, but small in magnitude. The statistically significant Odds Ratios (*OR*) were 1.2 for Hispanic vs White OSS, 1.4 for Black vs White expulsions, 1.3 for Black vs White placement change, and 1.2 for Hispanic vs White placement change.
- In contrast to the small disciplinary disparities observed in this study, there are large disparities in disciplinary outcomes often observed for the general population of students in Florida and nationwide (U.S. Department of Education, 2018).
- Following a threat assessment, there were no statistically significant differences in law enforcement actions (i.e., arrest, charges, incarceration) for Black, Hispanic, or White students. This is a noteworthy finding because law enforcement records tend to show large disproportionate rates for juveniles of color (Florida Department of Juvenile Justice, 2022).
- Results indicated no evidence that students with disabilities were subject to harsher discipline or legal consequences than other students following a threat assessment. 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.
- 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.

Characteristics of threat assessments conducted in Florida public schools

	2021-22 Academic Year
Sample	
No. Cases	23,135
No. Districts	60
No. Specialty Schools	6
[1]Approximate threat prevalence	0.91%
Demographics	
% Male	72%
% White	37%
% Black	37%
% Hispanic	23%
% Other race	4%
% Individualized educational plan	33%
% 504 Plan	9%
Threat Severity	
No Threat	17.8%
Transient	64%
Serious Substantive	13.4%
Very Serious Substantive	4.7%
Threat Attempts	
Not attempted	87.8%
Attempted and averted	6.4%
Carried out	5.9%
Serious injury	.23%
School Responses	
Student received services	73%
Parent meeting	45%
Student apologized	18%
Student referred for mental health services	33%
Increased monitoring	20%
Conflict resolution	9%
Student transferred to alternative school	5.2%
Disciplinary Actions	
Reprimand	17.1%
In school suspension	14.7%
Out of school suspension	26%
Expulsion	2%
Law Enforcement Actions	
Charge	1.8%
Arrest	0.7%
Placed in juvenile detention	0.1%

Note. [1]Threat prevalence was calculated as the total number of students receiving a threat assessment (23,135) divided by the total student population (2,538,222 students) in the districts in the sample.

- 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 tended to issue slightly more exclusionary discipline to Black and Hispanic students in some analyses. Districts should monitor their outcomes and review any disparities that suggest unfairness or inequity.

The key recommendations from this report are:

- The Office of Safe Schools should 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 would be useful. Annual collection and analysis of statewide data would help achieve these goals. We recognize that these goals would require more authority, staff, and funding than was available to the Office of Safe Schools at the outset of this project.
- 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.
- In addition, future research could investigate variations among threat assessment teams and districts for the purpose of achieving a consistently high standard of practice and determining whether there are needs for training or support. Differences in threat assessment rates and outcomes can be a function of differences in student populations, school resources, training and implementation fidelity, and other factors.

PROJECT PURPOSE AND GOALS

The overarching purpose of this project was to advance the practice of behavioral threat assessment and management (often shortened to "threat assessment") as an innovative school safety strategy. Threat assessment is a systematic approach to violence prevention designed to distinguish serious threats, defined as behaviors or communications in which a person poses a threat of violence, from cases in which the threat is not serious (Vossekuil et al., 2002). The term "threat assessment" encompasses assessment, intervention, and management of threatening situations (Borum, Cornell, Modzeleski, & Jimerson, 2010). Student threat assessment is intended to maintain school safety by resolving student conflicts or problems before they escalate into violence.

A secondary benefit of threat assessment is to reduce the reliance on school safety practices that have deleterious consequences, such as the use of zero tolerance discipline. As detailed in a national report on school discipline (Morgan et al., 2014), the practice of zero tolerance has supported high rates of exclusionary discipline such as suspension or expulsion from school. Research has found that exclusionary discipline does not improve school safety and has adverse effects on the academic success of students. Exclusionary discipline has been widely criticized for its disproportionate impact on minority students and contribution to the school-to-prison pipeline.

In 2001, researchers at the University of Virginia led by Dewey Cornell began research and development on a student threat assessment model known as the Virginia Student Threat Assessment Guidelines (VSTAG), which was re-named the Comprehensive Student Threat Assessment Guidelines (CSTAG) in 2018. This model was widely disseminated in Virginia schools and was recognized as an evidence-based program by the federal government's National Registry of Evidence-based Programs and Practices (NREPP) in 2013. CSTAG is designed for use by a school-based multidisciplinary team including members representing school administration, law enforcement, mental health, and other staff selected by the school (e.g., a school nurse, teacher, special education coordinator).

In 2019, following the shooting at Marjory Stoneman Douglas High School, Florida undertook an ambitious plan to transform the safety of its schools with multiple changes in security and prevention measures, including a mandate to train and establish threat assessment teams in all Florida schools (Statute 1001.212.). The behavioral threat assessment and management program chosen by the Florida Department of Education for use between 2019-2023 in Florida public schools was CSTAG.[1]

This project builds upon the previously funded project that examined the statewide implementation of threat assessment in Virginia public schools (NIJ-2014-CK-BX-0004). In the present project, we 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

[1] In 2023, Florida legislation directed the Florida Department of Education to create a new threat assessment program to be implemented in 2024. The findings in this study apply to the CSTAG model used in Florida during the study period and do not necessarily extend to the newly devised Florida model. However, the legislation brought substantial additional funding and staff to address concerns about training capacity and implementation consistency identified in this report.

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?

Ultimately, the results of this project contribute knowledge in student threat assessment that can be used by schools throughout the United States. Project findings have been widely disseminated at state and national conferences, such as the American Educational Research Association, American Psychological Association, American Society of Criminology, and Association of Threat Assessment Professionals. Project findings have also been used in the technical assistance programs of the National Center for School Safety funded by the Bureau of Justice Assistance. Reports have been published in peer-reviewed journals, book chapters, and other professional publications (see Appendices E and F).

IMPLICATIONS FOR CRIMINAL JUSTICE POLICY AND PRACTICE

This project has valuable implications for school safety policy and practice in Florida and nationwide. Although behavioral threat assessment has been recommended as a school safety practice by experts in law enforcement and education for more than two decades, it has become much more widely used in recent years. A review of the nationally representative 2019- 2020 School Survey on Crime and Safety (Wang et al., 2022) found that more than 60% of schools in the U.S. reported using some form of threat assessment. A 2017 report found that nearly every state department of education is encouraging or actively supporting the use of school threat assessment (Woitaszwewski, et al., 2018). Since the 2018 shooting at Marjory Stoneman Douglas High School in Parkland, Florida, an increasing number of states (notably Florida, Illinois, Kentucky, Maryland, Michigan, New York, Ohio, Pennsylvania, Utah, Wisconsin, and others) have passed legislation to implement threat assessment in their schools.

Despite its widespread adoption, there has been relatively little empirical research on its implementation or outcomes. Most previous empirical research on threat assessment has taken place in Virginia (e.g., Cornell et al., 2012; Cornell et al., 2017; Cornell et al., 2018; Maeng et al., 2020). One contribution of the present project is that we now have substantial testing of threat assessment in two different states (Virginia and Florida) that differed in implementation timeline, training programs, and other school safety requirements.

Schools in Virginia voluntarily started to use the Virginia Student Threat Assessment Guidelines in 2001 and more than half of the districts in the state received training (from the University of Virginia) before the state mandated the use of threat assessment in 2013. Virginia then implemented a new training program without requiring a specific model of threat assessment (https://www.dcjs.virginia.gov/sites/dcjs.virginia.gov/files/publications/law-enforcement/threat-assessment-model-policies-procedures-and-guidelinespdf.pdf).

In contrast to Virginia, Florida's implementation took place much more rapidly; state legislation following the shooting at Marjory Stoneman Douglas High School required every school to implement the CSTAG model within 17 months. In addition, training and implementation primarily occurred during the COVID-19 pandemic.

Despite these contextual differences, the outcomes of threat assessment measured across studies were similar. The consistency in findings across thousands of schools in two states should provide some confidence that threat assessment is a reasonably robust process that can be implemented in a manner that is safe and effective in responding to the threat of violence and providing services to students. Although more research is needed, the findings of previous controlled studies conducted in Virginia, along with the findings of the present project, can inform other states as they implement school threat assessment and management programs.

Demographics of Students Making Threats

Similar to statewide studies of threat assessment in Virginia, most threats in Florida were made

by male students (74%) and a disproportionate number were made by students in the middle grades (42% in grades 5-8). Relative to their overall representation in the student population in Florida (14.6%) and Virginia (12%), students receiving special education services were disproportionally represented among students making threats; they comprised more than one-third of students making threats in Virginia (35%) and Florida (33% with an IEP, 9% with a 504 Plan).

In both Virginia and Florida studies, the vast majority (approximately 80%) of threats were considered to be transient or no threat. This classification system means that school teams can resolve most threats relatively easily and devote more time and effort to the small percentage of more serious threats. A triage approach to threat assessment brings greater efficiency and reduces the burden on school staff to conduct the same extensive process for every case.

In Virginia, fewer than 1% of threats were carried out by the student in the form of physical attacks, with none resulting in serious injury (Maeng & Cornell, 2020). In Florida, 5.9% of threats were carried out and only 33 (0.23%) resulted in a serious injury. Although not based on controlled studies that would support causal inferences, these findings provide evidence across two statewide samples that threat assessment can be carried out safely and that teams can classify threats with a high degree of accuracy.[2] Large-scale controlled studies involving national samples of schools may be helpful in further demonstrating the effectiveness of threat assessment in preventing violence.

Another valuable effect of threat assessment is in identifying students in need of support services. Results of the present study indicate that 73% of students received at least one service following a threat assessment. Although schools did not report details of their intervention plans, the available survey data indicate that students were referred for services that included mental health services (33%), increased monitoring (20%), conflict resolution (9%), review/ implementation of safety plans (6%), and review/implementation of behavior contracts (5%). These services are consistent with an underlying philosophy of threat assessment that emphasizes helping troubled or distressed students before their problems escalate into violence. Future studies should examine the impact of these services on student adjustment and academic outcomes.

Disciplinary and Law Enforcement Outcomes

One especially important outcome is that threat assessments can be conducted with minimal use of exclusionary discipline (e.g., expulsion). Critics have raised concerns that threat assessment will lead to excessive use of school exclusion and legal actions (e.g., arrest, incarceration) for students due to misbehavior that does not pose a serious risk of violence. On the contrary, our study found that the great majority of students (90%) were able to return to their home school without expulsion or transfer to

[2] These findings apply to students who received a threat assessment and do not tell us about threats that did not come to the attention of authorities. However, Virginia schools have not experienced the school homicide of a student since 1998 and Florida schools have not had a school homicide since 2018. The fact that school teams have conducted thousands of threat assessments with no serious injuries is a reassuring observation, but from a scientific perspective, it is not rigorous evidence that threat assessment caused a reduction in violence because there is no control group to examine the incidence of violence in schools not using threat assessment. School homicides are statistically so rare that a quasi-experimental controlled study would require a huge sample studied over a number of years, and a randomized controlled trial does not seem feasible.

another school or educational program. Consistent with results from Virginia, only a small percentage of threat assessments resulted in an expulsion (1.7%), placement in an alternative school (5.2%), or placement in juvenile detention (0.1%). Out-of-school suspensions were reported in 26% of cases. Because of the focus on school exclusion, in-school suspension and changes in classroom placement were not systematically measured in this study.

Consistent with studies in Virginia (Burnette et al., 2018; Maeng et al., 2020), the strongest predictor of disciplinary consequences was the team's classification of the threat as serious. Students in higher grades and those making more serious threats were more likely to receive out of school suspension (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.

Race and ethnicity variables were associated with disciplinary outcomes after controlling for threat seriousness and other demographic variables. There were statistically significant associations between Hispanic ethnicity and both OSS and placement change, and Black race and both expulsion and placement change. 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). For example, the covariate-adjusted percentages[3] for students who received an OSS were 24% for White students, 27.9% for Black students, and 26.9% for Hispanic students, or a difference of approximately 4%. For expulsion, covariate-adjusted percentages were 1.3% for White students, 2.0% for Black students, and 1.6% for Hispanic students, the largest difference being approximately 0.7%. For placement changes, covariate-adjusted percentages were 8.8% for White students, 11% for Black students, and 10.5% for Hispanic students, the largest difference being 2.2%.

Disparities in school discipline are a serious problem observed nationwide (Johnson & Johnson, 2023). Notably, threat assessments in our study were conducted with only small racial/ethnic disparities in disciplinary outcomes. We compared these disparities with the overall schoolwide discipline disparities calculated from Florida Department of Education records (https://www.fldoe.org/safe-schools/discipline-data.stml). For Black compared to White students, these disparities were smaller for students receiving a threat assessment than for the overall differences in Florida across all disciplinary outcomes. For example, for districts in our sample, the Black/White risk ratio for expulsion following a threat assessment was 1.6 and FLDOE discipline records indicate that the schoolwide Black/White risk ratio for expulsion was 2.4. The Black/White risk ratio for a placement change following a threat assessment was 1.8, while the schoolwide Black/White risk ratio for placement change was 3.4. In other words, there was a larger disparity in expulsion and placement change between Black and White students across disciplinary actions in general than between Black and White students receiving a threat assessment.

[3] To obtain more accurate estimate of rates, the percentages for groups were statistically adjusted for covariates of grade, special education indicators, FRPM status, gender, and threat seriousness.

In contrast, the Hispanic/White risk ratio for OSS following a threat assessment was .96, higher than the schoolwide Hispanic/White risk ratio of .60 for OSS for any disciplinary action. However, both results indicate that Hispanic students were less likely to receive an OSS than White students. The Hispanic/White risk ratio for a placement change following a threat assessment was 1.9, which is similar to the schoolwide Hispanic/White risk ratio of 1.8 for placement change for any disciplinary action. These findings indicate that both in the threat assessment sample and the general population, Hispanic students are less likely than White students to receive an OSS, but more likely than White students to receive a placement change. This observation bears future study.

Following a threat assessment, race and ethnicity variables were not predictive of law enforcement action after controlling for threat seriousness and other demographic variables. For law enforcement action, adjusted percentages were 2.4% for White students, 2.5% for Black students, and 2.5% for Hispanic students. These results suggest parity by race for students receiving a law enforcement action following a threat assessment (risk ratio = 1.0). In contrast, records for Florida show larger differences for Black students, with a Black/White risk ratio for law enforcement action of 2.7. However, the Hispanic/White risk ratio was .46 (Office of Juvenile Justice and Delinquency Prevention, n.d.). The unexpected result for Hispanic students needs more investigation.

Although further study is needed, these results suggest that disciplinary consequences and law enforcement actions were based on the seriousness of the threat, consistent with training in the CSTAG model, and were not substantially influenced by the student's racial/ethnic background. In view of concerns that law enforcement presence is correlated with higher rates of exclusionary discipline and arrests, particularly for students of color (Tocci et al., 2023), it is noteworthy that all Florida schools were required to have law enforcement involvement on their threat assessment teams. These findings suggest that appropriately selected and trained law enforcement officers could function effectively on school-based teams without high rates of school removal or arrest. To better understand these findings, there is a need for more intensive, qualitative study of the role of law enforcement on threat assessment teams.

Further, these results suggest that threat assessment has the potential to reduce disparities between Black and White students that are found to occur generally in school discipline. The Virginia studies found that schools not using threat assessment, or using a model other than CSTAG, tended to have greater use of school exclusion. They also found that schools using threat assessment tended to reduce their overall use of school exclusion for all students (Cornell & Lovegrove, 2015; JustChildren & Cornell, 2013). The Florida project did not include similar comparison groups because all schools were required to use CSTAG, but the rates of school exclusion were comparable to those observed in Virginia for expulsion (~1%) and placement change (~16%). However, out-of-school suspension was used at a higher rate in Virginia (43%) than in Florida (26%; Cornell et al., 2018).

The CSTAG model of threat assessment places strong emphasis on discouraging the use of school exclusion and moving away from a zero tolerance philosophy of school discipline that fails to consider the circumstances and seriousness of the student's misbehavior (Cornell, 2018). Previous studies have found that staff trained in CSTAG show a decrease in support for zero tolerance and the use

of school suspension (Allen, Cornell, Lorek, & Sheras, 2008; Cornell, Allen & Fan, 2012). Other studies have found that schools using CSTAG show a reduction in the use of out-of-school suspension (Cornell et al., 2012; Cornell, Gregory, & Fan, 2011; Cornell, Sheras, Gregory, & Fan, 2009; JustChildren & Cornell, 2013; Nekvasil & Cornell, 2015). These findings are consistent with a general movement in education to reduce the use of exclusionary discipline. Schools nationwide are adopting multi-tiered systems of support, restorative discipline practices, social-emotional learning programs, and trauma-informed care programs to improve school climate and reduce disciplinary problems. These efforts should also reduce the use of exclusionary discipline. A valuable next step in research would be to examine how the use of CSTAG threat assessment dovetails with other school climate improvement efforts. The CSTAG training specifically encourages the use of evidence-based programs as part of a multi-tiered system of student support.

These findings suggest that it would be useful to incorporate information on the negative consequences of exclusionary discipline in threat assessment training programs. More generally, school training in threat assessment should contrast the problem-solving and preventive emphasis of this approach as an alternative to a zero tolerance approach that relies on exclusionary discipline. There should be explicit attention to fairness and equity in threat assessment across demographic groups.

Training and Educational Needs

A typical school has 4-6 team members on its threat assessment team. With approximately 4,000 schools, Florida would need to train approximately 20,000 staff members. An initial cohort of 90 CSTAG trainers participated in train-the-trainer workshops in August 2019. It was estimated that 90 trainers could train 20,000 staff members if each conducted 4-5 workshops of 50 participants each. If workshops were as small as 20 participants, each trainer would need to conduct 11 workshops.

Early in 2021, our project conducted a survey of district safety specialists to examine progress in the training process (Maeng et al, 2021; see Appendix A). Results indicated a statewide need for additional training and education on school threat assessment (Maeng et al., 2021); approximately 50% of district-level safety coordinators indicated moderate or serious training needs, particularly around having sufficient trainers to conduct training, scheduling times and locations for training, and training all team members.

As a result of this need, the Florida Department of Education Office of Safe Schools requested four additional train-the-trainer workshops, which were conducted between June 2021 and November 2022, producing an additional 110 CSTAG trainers. As a result, the state of Florida had approximately 200 trainers prepared to conduct workshops.

These trainers could conduct professional development (PD) in CSTAG through two modalities: (1) 8-hour in-person workshops or (2) an e-learning program consisting of a series of asynchronous online modules (Level 1) and completion of a series of case exercises on Zoom under the direction of a CSTAG trainer (Level 2). Evaluation of both the online and in-person PD demonstrated that participants made large gains in knowledge and reported positive evaluations of their experience (Maeng et al., 2023). Both forms of PD produced comparable results across participant discipline, which is important

because threat assessment requires a multidisciplinary team.

Despite the large number of trainers available, there were practical difficulties in making effective use of them. For example, many trainers found it difficult to schedule professional development workshops for more than a handful of school staff at a time, which meant that they had to lead more sessions than expected, in addition to their other duties. There was also some attrition of trainers; some trainers were reassigned to other duties or for other reasons did not lead workshops. To compensate, the Florida Department of Education conducted workshops as well, but they reported that they did not have enough staff to cover the demand.

Based on these findings, we have the following recommendations for threat assessment training in Florida and other states:

1. All team members should obtain a minimal level of training before or soon after joining a threat assessment team. Training must be given sufficient priority by the school administration so that a training day and facility are made available and staff members are released from other duties to attend.
2. Training should emphasize the negative consequences of exclusionary discipline and recognize that threat assessment presents an alternative to zero tolerance practices. Training should emphasize the use of evidence-based practices in threat assessment and intervention. Training should also include information about the potential for implicit bias during the threat assessment process and the importance of monitoring the fairness and equity of outcomes.
3. School districts should choose the format (one-day workshop, e-learning platform) that will best meet the needs of their personnel.
4. It would be useful for state departments of education to maintain a record of staff who have completed training and to provide this information when a staff member transfers to a different school.
5. The effectiveness of the training program should be formally evaluated. States implementing threat assessment should consider requiring participants to complete a standard evaluation that could be used to verify training completion and identify trainers and/or districts in need of support.
6. It is important that trainers be carefully selected by their districts. Whenever possible, trainers should have demonstrated expertise in threat assessment and be motivated to become trainers. Trainers should be capable of leading workshops and of serving as coaches who supervise and support the implementation of threat assessment in their schools.
7. Schools implementing threat assessment should provide students, parents, and staff with an orientation to their threat assessment practices and the need for threat reporting. The orientation should be evaluated for effectiveness.
8. Training should be an ongoing process, with advanced training and coaching available to teams.

Many school teams reported a need to educate their students, parents, and staff about the practice of threat assessment. In response to this need, we provided the online educational programs developed in our previous NIJ project (NIJ-2014-CK-BX-0004) to Florida and these were used by some districts. To encourage use, we reduced their length and made them more accessible through a YouTube channel.

School Safety and Threat Assessment for Students – English 7 minutes

School Safety and Threat Assessment for Students – English with Spanish subtitles and text 7 minutes

School Safety and Threat Assessment for Parents – English 14 minutes

School Safety and Threat Assessment for Parents – Spanish 19 minutes

School Safety and Threat Assessment for School Staff – English 16 minutes

Basics for Threat Assessment Teams 15 minutes

School Discipline and Research for Threat Assessment Teams 15 minutes

Case Management for Threat Assessment Teams 25 minutes

We continue to encourage their use as an efficient and effective way to raise stakeholder awareness of threat assessment.

Practice and Fidelity Needs

We examined the practice of threat assessment in several domains. Results indicated that the implementation of CSTAG in Florida has been generally, but not uniformly, successful. Threat assessment *effectiveness* was broadly reflected in the ability of teams to distinguish between different levels of threats, efficiently 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. The *fairness* of threat assessment is reflected in the calibration of disciplinary and law enforcement outcomes with the seriousness of the threat. Florida schools using threat assessment produced outcomes that corresponded to the seriousness of the case and resulted in low rates of school removal and very low rates of law enforcement action. Despite these positive outcomes, 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.

An immediate concern is that implementation was 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. Two large districts, comprising approximately 23% of the student population, did not complete training of 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. The number of cases a district conducts can be strongly influenced by administrative support for the use of threat assessment, and by the willingness of the school community (primarily students, but also teachers, school staff, and parents)

to report a possible threat.

Consistent with our statewide study of Virginia schools, many schools in Florida reported no threat assessment cases in an entire year and one particularly large district reported an unusually low number of cases. This may indicate that the administration was not encouraging the implementation of threat assessment and/or that threats were not being reported in those schools. Low levels of threat reporting may suggest that the school might not have a school climate that is conducive to threat reporting. Our research in Virginia indicated that students are most willing to report threats of violence when they have trusting relationships with the adults in their school and feel that school rules are strict, but fair (e.g., Crichlow-Ball & Cornell, 2021; Crichlow-Ball et al., 2022).

In addition to the concern that some teams reported no threat cases, there are also variations in threat assessment outcomes that suggest the need for additional training and support in some districts. There was variation in record-keeping (e.g., case management, case outcomes, student services, academic and behavioral outcomes). In addition, approximately half of district safety specialists indicated that a moderate to serious challenge was finding time for threat team members to meet. This suggests that teams may not have the time to regularly monitor students of concern and review their support services. Evaluations of statewide implementation of threat assessment in Texas schools suggested similar challenges with training and implementation (Hairston & Stafford, 2023; Lee, 2023).

Based on these observations, we have the following recommendations to improve threat assessment practice.

1. School teams should provide evidence that they have an active threat assessment team by reporting de-identified information on their cases each year. They should have time designated for regular meetings as needed for assessment, management, and training purposes. States should inquire when schools have an unusually low number of cases and should provide guidance on the frequency of team meetings.
2. School districts should conduct an annual evaluation of the quality (fidelity) of each school's threat assessment practices. The evaluation should consider the impact of threat assessment on student adjustment and academic progress, and whether there are disparities in impact on students across demographic groups, including racial/ethnic groups and special education status.
3. We recommend that states collect sufficient case-level information on all threat assessment cases so that quality of implementation and equity of impact on student demographic groups can be examined.

Dissemination of Project Findings

We have actively disseminated project findings to both research and practitioner groups (see Appendix E). The project has generated 3 articles published or under review in peer-reviewed journals with additional articles in progress. We have made presentations at 5 national conferences, including meetings of the American Educational Research Association, American Psychological Association, and

the American Society of Criminology. Each member of our research team has made one or more conference presentations and co-authored journal publications and reports. We will continue presenting these findings at conferences and webinars in the coming year.

Project findings have been presented at 8 conferences for educators and practitioners. In addition, results and recommendations derived from this project were included in the National Center for School Safety's *School Threat Assessment Toolkit* (Cornell & Maeng, 2024). The National Center for School Safety also published an online video https://www.nc2s.org/resource/expert-video-school-threat-assessment-in-florida/ of some key findings.

Our team has also shared reports and findings in response to requests from numerous professional organizations including the Association of Threat Assessment Professionals, the National Center for School Safety at the University of Michigan, the Mental Health Technology Transfer Center at Stanford University School of Medicine, and the WestEd Justice & Prevention Research Center. In addition, there have been multiple news media interviews regarding our work, including ARD German TV, Associated Press, BBC World News, Education Week, NHK Cosmomedia, Police1 Podcast, PolitiFact, The Hechinger Report, The New York Times, The New Yorker, USA Today, Washington Post, and others.

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APPENDIX A: *THREAT ASSESSMENT TRAINING AND IMPLEMENTATION NEEDS SURVEY STATE REPORT*

Report to the Florida Department of Education Office of Safe Schools from
Project for the Statewide Implementation of School Threat Assessment in Florida
University of Virginia, School of Education and Human Services

Overview

A threat assessment training and implementation needs survey was sent to district safety specialists in all 67 of Florida's school districts as well as 6 lab schools and 2 other schools that operate outside of districts.

According to the survey, more than half of district specialists reported moderate or serious training needs. These needs included staff who needed training (e.g., teachers; 65%), having sufficient trainers (59%), and difficulties scheduling times/locations for training (52%).

Regarding implementation needs, more than half of district specialists identified needs in follow-up interventions for students (61%), working with parents (55%), and time for team members to conduct threat assessments (54%). Fewer than half of district specialists indicated they had implementation needs related to working with school or division level administration, law enforcement, mental health staff, or teachers/school staff. They also indicated few or no needs related to coordinating with special education services, team member knowledge of threat assessment, team member turnover, or record keeping.

Most respondents reported school or district-wide intervention strategies in addition to threat assessment. The most common strategies were multi-tiered systems of support and anti-bullying programs.

Most schools keep threat assessment records electronically (81%); approximately equal numbers store information in both a student educational record and separate record (55%) or only in a separate record (52%). Complete statewide results are reported below.

Participants

The survey (see Appendix A) was sent to 74 district safety specialists. District safety specialists from 49 districts, 5 lab schools and 1 other school responded for a response rate of 73% (see Appendix B). Six specialists (8%) opened the survey and declined the informed consent, and another 13 (17%) were unresponsive to the request to complete the survey.

School Teams

	Number of schools	Percent of total
Number of schools, including charter schools in district	2,747	N/A
Approximate number of schools using CSTAG model	2,692	98%
Approximate number of schools with TA team at this time	2,730	99%
Approximate number of schools with some team members formally trained in CSTAG	2,559	93%

Respondents were asked whether their responses applied to charter schools, and if not, to explain how practices are different. Twenty-nine (47%) indicated their responses apply to the charter schools in their district, 20 (32%) indicated they were unable to answer the question, 6 (10%) indicated they do not apply, and 7 (11%) did not respond to this item. Of the 6 that indicated "do not apply", 3 indicated they have no charter schools, 1 indicated they use the same model and record system, 1 indicated they use the same model and their own record system, and 1 indicated they use the same model.

Training Needs[1]

Rate the following threat assessment training needs for the schools in your district.	Little or no need	Moderate need	Serious need
Having sufficient trainers to conduct training	23 (41%)	23 (41%)	10 (18%)
Scheduling time or location for training to take place	27 (48%)	22 (39%)	7 (13%)
Training all team members	29 (52%)	17 (30%)	10 (18%)
Training school administration	32 (57%)	15 (27%)	9 (16%)
Training law enforcement	29 (52%)	16 (29%)	11 (20%)
Training mental health staff (counseling, school psych, social work)	32 (57%)	18 (32%)	6 (11%)
Training other staff (e.g., teachers)	20 (36%)	30 (54%)	6 (11%)
Training new team members after staff turnover	27 (48%)	21 (38%)	8 (14%)
Training for elementary schools	32 (57%)	20 (36%)	4 (7%)
Training for middle schools	32 (57%)	20 (36%)	4 (7%)
Training for high schools	33 (59%)	19 (34%)	4 (7%)
[2]Other training needs (please describe)	42 (75%)	12 (21%)	2 (4%)

Note. [1] "Little or no need" means the district is meeting the need without significant difficulties, "Moderate need" means the need requires attention, "Serious need" means this is a high priority concern, [2] Written in training needs included related to refresher training (3), time, number of trainers, content, process (all 2), and FASST (1).

Participants were asked to elaborate on the most serious training need identified above or to describe another need that they regard as the most serious training need in threat assessment for their district. Responses fell into 9 categories: none (10), initial training (18), finding time for training (13), needing more trainers (11), training law enforcement staff (5), providing refresher training (3), and the process of conducting a threat assessment TA (2). Other responses (6) were related to training to address mental health (3), law enforcement coverage for monthly meetings (1), funding for substitutes to cover staff absences during training (1), and CSTAG/FASST (1). Complete responses are in Appendix C.

Implementation Needs

Rate the following needs in how threat assessment is being carried out in your schools.	Little or no need	Moderate need	Serious need
Working with school-level administration	43 (77%)	10 (18%)	3 (5%)
Working with district-level administration	43 (77%)	11 (20%)	2 (4%)
Working with law enforcement	40 (71%)	12 (21%)	4 (7%)
Working with mental health staff (counseling, school psych social work)	41 (73%)	14 (25%)	1 (2%)
Working with parents	25 (45%)	28 (50%)	3 (5%)
Working with teachers/school-based staff	32 (57%)	23 (41%)	1 (2%)
Coordinating threat assessment with special education services	38 (70%)	15 (27%)	3 (5%)
Team member knowledge of threat assessment	39 (70%)	15 (27%)	2 (4%)
Record keeping practices	30 (54%)	21 (38%)	5 (9%)

Team member turnover	34 (61%)	20 (36%)	2 (4%)
Time needed for team members to conduct threat assessment	26 (46%)	27 (48%)	3 (5%)
Follow-up interventions for students	22 (39%)	28 (50%)	6 (11%)
[1]Other (please describe)	47 (84%)	7 (13%)	2 (4%)

Note. [1] Written in training needs included related to data collection (3), data transfer (1), district review team oversight (1), conducting TA on distance learning students (1), parent resources (1), and structured case management beside interventions (1)

Participants were asked to elaborate on the most serious implementation need identified above or to describe another need that they regarded as the most serious in their district. Responses fell into 11 categories: training (13), records (12), intervention plans (8), time (8), fidelity (5), law enforcement (4), parents (4), COVID/distance learning (4), buy-in/acceptance of TA (2). Other responses (3) related to mental health services (2) and charter schools (1). Five respondents indicated they had no serious implementation needs. Complete responses are in Appendix C.

Respondents were also asked to elaborate on the ways they have modified how they carry out threat assessment in schools in response to the Covid-19 pandemic. Responses fell into 4 categories: virtual meetings (26), social distancing/masks (17), and no modifications (12). Other responses (5) related to changes in sharing information while maintaining confidentiality (1), breaking training into two shorter face-to-face sessions (1), partnering with community LEO instead of SRO for fully online students (1), and including virtual learners (1). Complete responses are in Appendix C.

Intervention Strategies

Which of the school or district-wide intervention strategies do schools in your district use?	I don't know	Few or no schools	Many schools	All or almost all
Restorative discipline practices	0	19 (34%)	17 (30%)	20 (36%)
Multi-tiered systems of support (such as Positive Behavior Intervention and Supports or Response To Intervention)	0	2 (4%)	12 (21%)	42 (75%)
Social-Emotional Learning (SEL) curriculum	0	5 (9%)	20 (36%)	31 (55%)
Anti-bullying program	0	6 (11%)	11 (20%)	39 (70%)
[1]Other (please describe)	0	34 (61%)	6 (11%)	16 (29%)

Note. [1] Written in intervention strategies included mental health services (11), SEL (6), trauma informed care (2), MTSS (1), PBIS (1), and other (5). Other responses included mentoring programs (1), hearing impaired strategies with interpreters (1), asking students to report peer crisis situations (1), cultural activities (1), and MFB Child Safety Matters (1).

Threat Assessment Record Keeping

	Number of schools	Percent of total (N = 2,747)
Approximate number of schools maintaining TA records in electronic data system	2,211	81%
Approximate number of schools maintaining TA records only in student educational record	547	20%
Approximate number of schools do not put TA records in student educational record but maintain them in separate record	1,419	52%
Approximate number of schools maintaining records in both student educational record and separate record	1,518	55%

Note. Total could be greater than 100% because respondent answered each item separately.

Is the information in your student threat assessment records consistent across schools?	Number of school districts	Percent of total (N = 55)
All schools record the same information	46	84%
Most schools record the same information	6	11%
[1]Records vary across schools	3	6%

Note. Two responses related to using different record keeping software (e.g., Focus vs Syward). The third response indicated all contain CSTAG forms but each record may contain additional individualized data.

Which of the following is maintained in the threat assessment records for your schools?	Few or no schools	Many schools	All or almost all
Student gender	6 (11%)	1 (2%)	49 (88%)
Student age or grade level	2 (4%)	0 (0%)	54 (96%)
Student race/ethnicity	19 (34%)	1 (2%)	36 (64%)
Special education status	8 (14%)	1 (2%)	47 (84%)
Free/reduced price meal status	42 (75%)	0 (0%)	14 (25%)
Type of threat (transient, serious substantive, or very serious substantive)	1 (2%)	0 (0%)	55 (98%)
What student threatened to do (e.g., shoot someone)	1 (2%)	0 (0%)	55 (98%)
Who student threatened (e.g., student, teacher)	1 (2%)	0 (0%)	55 (98%)
Whether the threat was to harm others, harm self, or both	3 (5%)	0 (0%)	53 (95%)
Whether student was referred for a Baker Act evaluation	8 (14%)	3 (5%)	45 (80%)
Whether student received a Baker Act hospitalization	11 (20%)	2 (4%)	43 (77%)
Disciplinary consequences (e.g., suspension, expulsion)	8 (14%)	3 (5%)	45 (80%)
Whether student was arrested or charged in association with threat incident	7 (13%)	5 (9%)	44 (79%)
Whether student attempted or carried out the threat	3 (5%)	2 (4%)	51 (91%)
Whether anyone was harmed by student who made threat	4 (7%)	2 (4%)	50 (89%)
Whether student returned to school or continued education in some other setting	6 (11%)	3 (5%)	47 (84%)
What interventions or services were undertaken for the student	1 (2%)	3 (5%)	52 (93%)
Follow-up information on whether the student passed or failed courses	22 (39%)	5 (9%)	29 (52%)
Follow-up information on whether student had further disciplinary problems	11 (20%)	3 (5%)	42 (75%)

Recommended citation for this report: Maeng, J. L., Cornell, D. G., and Warren, E. (2021). *Threat assessment training and implementation needs survey state report.* Charlottesville, VA: School of Human Development, University of Virginia.

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APPENDIX A1: SURVEY OF THREAT ASSESSMENT TRAINING AND IMPLEMENTATION NEEDS

The purpose of this survey is to assess the needs of Florida schools for threat assessment training and implementation. Note that Section 1006.07(7) of Florida Statutes requires each district school board adopt policies for the establishment of threat assessment teams at each school, consistent with the model policies developed by the Office of Safe Schools. Based on requirements outlined in section 1001.212 of Florida Statutes, the Office of Safe Schools identified the CSTAG as the standardized, statewide behavioral threat assessment instrument, which includes various components, one of which is specific to training for members of threat assessment teams and school administrators regarding the use of the instrument.

This survey is being conducted by the Florida Department of Education in collaboration with a research team headed by Dr. Jennifer Maeng and Dr. Dewey Cornell at the University of Virginia. Dr. Cornell is the principal developer of the Comprehensive School Threat Assessment Guidelines used in Florida schools. This project is funded by the U.S. Department of Justice (2020-RF-CX-0002). Direct questions about the survey to Brooks Rumenik (brooks.rumenik@fldoe.org; 850-245-0416).

_____ Name of person completing this survey (confidential)

_____ Job title

_____ School district

Training Needs

As you may know, Florida schools are required to use a standardized threat assessment tool, the Comprehensive School Threat Assessment Guidelines (CSTAG).

_____ How many schools, including charter schools, are in your district? Use this number in answering the questions below:

_____ Approximately how many of your schools use the CSTAG model?

_____ Approximately how many of your schools have a threat assessment team at this time?

_____ Approximately how many of your schools have some team members who have been formally trained to use CSTAG?

In rating the support needed for your district,

- "Little or no need" means the district is meeting the need without significant difficulties
- "Moderate need" means the need requires attention
- "Serious need" means this is a high priority concern

Training Needs

Rate the following threat assessment training needs for the schools in your district.	Little or no need	Moderate need	Serious need
Having sufficient trainers to conduct training			
Scheduling time or location for training to take place			

Training all team members			
Training school administration			
Training law enforcement			
Training mental health staff (counseling, school psychology, social work)			
Training other staff (e.g., teachers)			
Training new team members after staff turnover			
Training for elementary schools			
Training for middle schools			
Training for high schools			
Other training needs (please describe)			

Please elaborate on the most serious training need identified in the list above or describe another need that you regard as the most serious training need in threat assessment for your district.

_____

Implementation Needs

Rate the following needs in how threat assessment is being carried out in your schools.	Little or no need	Moderate need	Serious need
Working with school-level administration			
Working with district-level administration			
Working with law enforcement			
Working with mental health staff (counseling, school psychology, social work)			
Working with parents			
Working with teachers/school-based staff			
Coordinating threat assessment with special education services			
Team member knowledge of threat assessment			
Record keeping practices			
Team member turnover			
Time needed for team members to conduct threat assessment			
Follow-up interventions for students			
Other (please describe)			

Please elaborate on the most serious implementation need identified in the list above or describe another need that you regard as the most serious need in the implementation of threat assessment in your district.

_____

In what ways have you modified how you carry out threat assessment in your schools in response to the Covid-19 pandemic?

_____

Which of the school or district-wide intervention strategies do schools in your district use?	I don't know	Few or no schools	Many schools	All or almost all schools
Restorative discipline practices				
Multi-tiered systems of support (such as Positive Behavior Intervention and Supports or Response To Intervention)				
Social-Emotional Learning (SEL) curriculum				
Anti-bullying program				
Other (please describe)				

Threat Assessment Records

Help us understand where your schools maintain threat assessment records.

Note that Section 1003.25, Florida Statutes requires the following, "(1) Each principal shall maintain a permanent cumulative record for each student enrolled in a public K-12 school. Such record shall be maintained in the form, and contain all data, prescribed by rule by the State Board of Education. The cumulative record is confidential and exempt from the provisions of s. 119.07(1) and is open to inspection only as provided in chapter 1002.

_____ Approximately how many of your schools maintain threat assessment records in an electronic data system?

____ Approximately how many of your schools maintain threat assessment records only in the student's educational record?

____ Approximately how many of your schools do not put any threat assessment records in the student's educational record, but maintain them in a separate record?

____ Approximately how many of your schools maintain threat assessment records both in the student's educational record and in a separate record?

How are threat assessment records for a student transferred when the student moves to a different school? Choose one.

Note that Section 1003.25, Florida Statutes requires the following, (2) The procedure for transferring and maintaining records of students who transfer from school to school shall be prescribed by rules of the State Board of Education. The transfer of records shall occur within 3 school days. The records shall include: (a) Verified reports of serious or recurrent behavior patterns, including threat assessment evaluations and intervention services. (b) Psychological evaluations, including therapeutic treatment plans and therapy or progress notes created or maintained by school district or charter school staff, as appropriate. Additionally, Florida Administrative Code Rule 6A-1.0955 Education Records provides a list of information contained in education records to include a "Threat assessment done by the threat assessment team."

_____ Records are not transferred

_____ Records are transferred upon request only

_____ Records are routinely transferred

_____ Transfer practices vary across schools

Is the information in your student threat assessment records consistent across schools? Choose one.

_____ All schools record the same information

_____ Most schools record the same information

_____ Records vary across schools. Explain _____

Which of the following is maintained in the threat assessment records for your schools?	Few or no schools	Many schools	All or almost all schools
Student gender			
Student age or grade level			
Student race/ethnicity			
Special education status			
Free/reduced price meal status			
Type of threat (transient, serious substantive, or very serious substantive)			
What student threatened to do (e.g., shoot someone)			
Who student threatened (e.g., student, teacher)			
Whether the threat was to harm others, harm self, or both			
Whether student was referred for a Baker Act evaluation			
Whether student received a Baker Act hospitalization			
Disciplinary consequences (e.g., suspension, expulsion)			
Whether student was arrested or charged in association with threat incident			
Whether student attempted or carried out the threat			
Whether anyone was harmed by student who made threat			
Whether student returned to school or continued education in some other setting			
What interventions or services were undertaken for the student			
Follow-up information on whether the student passed or failed courses			
Follow-up information on whether student had further disciplinary problems			

Do your answers to this survey apply to the charter schools in your district as well? If not, please explain how practices differ for the charter schools in your district. If you are not able to answer this question, please indicate.

APPENDIX A2: SCHOOL DISTRICTS

The threat assessment training and implementation needs survey was sent to district safety specialists in 74 of Florida's school districts (n = 67), lab schools (n = 6), and other schools (n = 2). District safety specialists from 49 districts, 5 lab schools and 1 other school responded (73% response rate). Specialists from 6 districts (8%) opened the survey and declined the informed consent, and another 13 (17%) were unresponsive to the request to complete the survey.

Completed Survey (n = 55)

Baker
Bay
Bradford
Brevard
Broward
Calhoun
Charlotte
Citrus
Clay
Columbia
Dade
DeSoto
Dixie
Flagler
Franklin
Gadsden
Gilchrist
Hamilton
Hardee
Hernando
Hillsborough
Holmes
Jefferson
Lake
Lee
Leon
Liberty
Madison
Manatee
Marion
Martin
Monroe
Okaloosa
Okeechobee
Palm Beach
Pasco
Pinellas
Putnam
St. Johns
St. Lucie
Santa Rosa
Sarasota
Seminole
Suwannee
Taylor
Union
Wakulla
Walton
Washington
Florida School for the Deaf & the Blind
FAMU Lab School
FAU Lab School
FSU Lab School
FSU Lab School
UF Lab School

Did not complete survey

Declined informed consent (n = 6)

Escambia
Hendry
Indian River
Jackson
Nassau
Osceola
Gulf
Highlands
Lafayette

Unresponsive to survey request (n = 13)

Alachua
Collier
Duval
Glades
Levy
Orange
Polk
Sumpter
Volusia
FL Virtual

APPENDIX A3: CATEGORIZED RESPONSES

Qualitative Comments

14 Responses for Other Training Needs
In-service training
Refresher Training
Usage of forms and distinguishing between what forms to use for transient to substantive for our staff members.
We need to add trainers that have been fully certified in the Virginia model
Suicide risk assessment training
Finding training dates and locations that fit into our schedules
We have trained before and will be utilizing NAV 360 to meet additional training needs
Need additional trainers
FASST
Yearly updates for new staff has been a challenge due to COVID
Time is the largest need.
Overall Mental Health Mandates per the state of Florida
Writing the mental health assessment/ post assessment support

50 Responses for Most Serious Training Need
Additional trainers
Training of law enforcement has occurred slowly as the agencies cannot pull officers from their duties to do the training and we must train them on school breaks and summer, but they are not normally with other team members
I am the only trainer in the District. It is nearly impossible for me to conduct training.
The last train the trainer was in summer of 2018!
We really need additional CSTAG training in general. Prior to this school year, our district had zero training with CSTAG. Due to my prioritization of this training coupled with our awesome state regional contact, we were able to provide training to members from each school. However, we still need additional training for the remaining members of our teams. I am in the process of becoming a certified trainer for my district through Dr. Cornell, so that will help. Additionally, I believe we all (statewide) could benefit from an overview of the CSTAG model. As a previous school-based administrator, I did not fully grasp the gravity of it at the school level. I am working diligently to stress it to my school folks, but if information came directly from the state about the importance of utilizing this model with fidelity, I feel like it would be more impactful for everyone.
Need more trainings
SROs must be in schools each day, so they cannot be trained on school days.
Training of new staff due to attrition is always of concern. Providing refresher training and ensuring that the CSTAG process is being implemented properly.
Would be beneficial to have at least one more certified trainer on staff.
Usage of forms and distinguishing between what forms to use for transient to substantive for our staff members using them.
How we can more efficiently have district team members trained to be trainers? The current model of having to travel to a location during a pandemic and is time consuming should be reconsidered to a virtual platform.
All of our schools and the Threat Team members are trained annually. The school follows the CSTAG Model and is trained annually by our CSTAG Trainer. The other four schools are trained annually by County Public Schools on their model.
We have only 2 trainers including me and I am retiring at the end of next year. We have limited numbers of PD days and large meeting spaces so its always difficult to find the time and locations for training.
Training teachers outside of the safety team or to recruit to the safety team has been difficult.
Refresher Training time allotment
There needs to be more State sponsored training for train the trainers in the Cornell model
The concern is getting more educators trained, beyond the assessment teams.
Having enough trainers to train everyone
Scheduling Time for Training

We don't have anyone trained as of this date. But, we have 5 of our 8 members being trained on 17 Feb in Tallahassee
Being a single K-12 School District, we are able to regularly communicate with team members and address any deficiencies in understanding responsibilities that may arise.
Just in need of the formal 8 hour training, some members have had the 6 hour "refresher" training
Law Enforcement training has been difficult - they are at the schools when school is in session but on other detail when school is not in session.
Training all team members in a large district
We only have three schools and the core group at each school has been trained but we need to train new members and learn the NAV 360 System.
Need training for train-the-trainer for eventual personnel turn-over.
Having enough LEO's to cover all school monthly TAT meetings.
We are a small district. We do not have the logistical issues that larger districts must deal with.
Training for teachers in dealing with threating situations.
Funding for training- substitute teachers or after-hours summer stipends.
CSTAG & FASST
We currently have 2 CSTAG trainers. We are in the process of training other staff to help assist the trainers. The majority of our School Based Threat Assessment Teams (SBTAT) are trained in CSTAG. We are now training new staff in CSTAG and provide a yearly Threat Assessment Training at the beginning of the school year for all SBTAT members. Please note, that due to COVID, we do not have the ability to train in person. We are using virtual and recorded trainings for all types of trainings that we offer. We are unable to pull teachers and staff during school hours, therefore, trainings are mostly held after hours.
Because of the varied work schedules, time to bring all team members in the district together to train is the largest need.
Finding time to do refresher training.
Changes with both Teachers and School Resource Officers has taken place since the last training the district received.
Providing training to all members from each team including keeping up with staff turnover. More trainers are needed.
Training on CSTAG for TA Team at the School
We are a small district and do not have a serious training need at this time.
Overall Mental Health Mandates per the state of Florida
Finding the time to train 100% of all TAT members from all schools is easily the largest training challenge in our district.
Training in general for all staff
All schools have SRO's. It would be ideal to train all of them during the summer.
Scheduling and the turn over
Having sufficient trainers to train staff
Once paperwork is completed where should documents be held and how to ensure the paperwork is forwarded with student
Mental needs that can be used for our staff and students due to locations.
Train the trainer training for CSTAG.
Scheduling time for the training has been the greatest challenge for our elementary schools.
Scheduling training has been challenging but manageable
Training the mental health staff is an issue due to turnover

8 Responses for Other Implementation Needs
Beside interventions, we need structured case management
District Review Team oversight
Conducting threat assessments on distance learning students, who have made a threat outside the jurisdiction of the campus or school district police force.
We would benefit from an electronic version of CSTAG in our FOCUS Database to better track Threat Assessments.
Parent Resources
Understanding confidentiality/dispersment of information
Training on new system
Data Collection & Analysis

52 Responses for Serious Implementation Needs
Record keeping
School administrators must accept and adopt threat assessment principles to have better approval and compliance with the work of threat assessment teams
Getting them to own the BTA, not just check the boxes.
Charter staffing requirements are different than traditional public. Traditional public district schools have fewer needs at this time.
Time is always an issue at the school level. Again, this goes back to my previous answer about stressing the importance of the BTA process as a priority. Also, record keeping seems to be an ongoing issue. Our district is working on a remedy for that part of the process as we are now utilizing a new software to manage our BTA processes. However, this is new and it is a transition. I am confident that with continued use and understanding of the platform, our record keeping practices will be wonderful. I do believe that if there is a system that is dynamic that could be utilized statewide for all districts as the BTA processes move forward, that might be of benefit.
Time needed to complete
The time needed for team members to meet and complete the process.
Ensuring consistency with implementation of CSTAG and record keeping of process
Documentation of interventions provided and data collection on student performance related to the intervention
Conducting threat assessments on distance learning students, who have made a threat outside the jurisdiction of the campus or school district police force.
More time for administrators to complete the TA process. As they continue to work through it over the next few months, years, I am sure we will find ways to make the process efficient without losing fidelity.
[District] would like to have a form of electronic storage capability for record keeping practices
Our team is well-trained and works well together. We meet monthly and more often as needed. We track our students and their interventions well. However, we would like to have an electronic version of the CSTAG within FOCUS in order to more easily complete the packet and maintain the record. Currently we complete the paper copy and scan and upload the PDF. County Schools' model is electronic and it is very efficient for our other 4 Charter Schools within County.
Our school teams are functioning pretty well. The most difficult is the coordination that needs to happen with those administering discipline and law enforcement.
The follow-up for services from a Backer Act are difficult in a rural community.
Parent & teacher Training - time allotment
We are looking at a better way to track the information from beginning to end. We do not want to miss information.
Consistency in which each school level team completes documentation.
Time or availability of student/staff/ parent for interview.
Additional trainers needed
Time needed for team members to conduct assessments. Time for follow-up interventions.
Our team is very proactive and meets as required
Obtaining TA records from other institutions in a timely manner before accepting students to our school.
Just need the formal training
Turnover in staff
Making sure schools have active monitoring plans for substantive threats
To follow the initial process at the school level, interview to determine need of a threat assessment
Due to the high mobility rate of students in our district, it is challenging to ensure follow up with interventions and monitoring plans
Training and fully understanding the TA process.
Only issue is having the LEO personnel available for coverage and monthly meetings.
Additional services for those students who need residential placement.
Mental health staff shared between schools; therefore, they are not always available.
It can be difficult navigating interventions during the pandemic
Working with school level administration and law enforcement

Due to COVID, it has been challenging to provide training to teachers and school-based staff. SBTAT were trained in CSTAT in Fall of 2019, then in March, 2020, we moved to distance learning. This change in environment has impacted the implementation of the CSTAG with fidelity. Conducting threat assessments on students with disabilities (SWD) has presented the need for further guidance. Certain behaviors that are a manifestation of the student's disability poses a level of uncertainty when deciding to conduct a threat assessment. For example, a student with a disability that states he is going to kill you due to frustration or anger because he has no other way to verbalize his feelings, SBTAT members are uncertain if this student needs a threat assessment. Especially if the student makes this statement multiple times a day or week. We are currently working with FOCUS, which is the organization that we use for Student Information System, on developing an electronic record keeping system. Once this is developed and in production, we will have a consistent process for record keeping. Currently, schools upload threat assessment documentation through a MACH FORM data base. This data base houses all threat assessments. However, each school is responsible for maintaining student threat records. Team turnover is an ongoing concern. There is a shortage in Florida of Certified School Counselors and School Psychologists. Due to COVID, we are experiencing a shortage of school nurses.
Most parents view the process in a negative light.
Finding time to train those as a result of turnover.
Ensure proper record keeping, looking into electronic options.
Threat assessment is being carried out well, but still need to updated information on changes and to stay current throughout the year.
Finding available intervention/services.
Formal CSTAG training
Limited time and consistent monitoring of follow-up interventions are typically regarded as needs for our district.
Working with parents during the COVId-19 pandemic
Whether described as Record-Keeping or Data Collection & Analysis. We are working to develop a better system for documenting all threat assessments. It is a significant challenge and the private providers identified by the state charge ridiculous prices.
Working with teachers from the beginning of the process and to continue with wrap around services
Need more training specific to SRO in schools
working with parents that blame society or the district for their childs behavior
Working with parents and follow up after they get out of treatment.
Training new staff members due to employee turnover in the school district
Formal training is currently underway for the elementary schools in our district
Follow-up meetings at the school site has been a challenge, but manageable.
Currently there only 2 staff members at the district, the Superintendent and an assistant.

47 Responses for COVID-19 Implementation Modification
Many meetings have virtual participation
Threat Assessments extend to students in the virtual setting. Instant support is available as the district transitions to a more technology-based manner of communication.
We really haven't other than maybe including some individuals virtually in meetings. However, this is not necessarily a bad approach as the digital platform allows another method for individuals to be present for the meetings.
Voom
Meetings are held virtually.
TAT continue to meet on a monthly basis during the pandemic while school is open.
Threat assessment team members ensure social distance while conducting threat assessment meetings
We have gone to a virtual platform to hold meetings. Moved to online platform to document threat assessments. Given the option for virtual TA training.
Offer virtual attendance to both staff and parents
Our team meets virtually and we have to meet and interview our virtual students via Google Meets or Zoom. We have continued to conduct wellness checks using the [local] Police when a threat to self is made. We also have officers go to the home to check for weapons or check on a student having made a threat in the virtual or school setting.
Some training and meetings have been done virtually.

Following social distancing guidelines.
Virtual - training sessions
Larger meeting rooms.
Developed a protocol for students participating in virtual instruction.
Team members are meeting virtually when necessary or over phone conference.
Meetings held on computer
Training is being conducted via zoom or other digital platform to maintain social distancing.
We have had to change the way we meet and share information and still maintain confidentiality of the students.
Some meetings done over zoom
We have made no changes to our practice
Including virtual learners
The implementation is basically the same but CDC social distancing suggestions are followed when possible
School-based teams were provided guidance and training on conducting Virtual Threat Assessments for students engaged in distance learning
Still have meetings just follow CDC guidelines.
We meet in larger rooms with distancing.
Social distancing while meeting and mask worn.
Larger meeting areas and virtual meetings
Social distance and mask
In County, we have some students on campus and some students on-line. We have developed Virtual procedures for students who are on-line. SBTAT members will conduct threat assessments virtually and try to include a parent or adult that is in the home. If necessary, a LEO will be sent to the home. On campus, SBTAT members follow social distance and mask mandates when assessing students for threats while following standard Threat Assessment procedures.
To this point, Covid-19 has caused minimal modifications (social distancing, masks, etc.) during face-to-face interviews, meetings, etc.
Awareness of potential for virtual assessments.
Trainings/meetings are conducted using social distance and team members are making sure to wear face coverings when dealing with incidents.
Threat assessment meetings are held via Zoom and or Google Meets as needed.
Fortunately, this has not been an issue this year. All CDC rules apply when the safety/TA team meets (Masks, social distancing, virtual meetings when possible)
Many threat assessment meetings are now conducted virtually.
Limited home visits and virtual parent meetings
We have conducted all live training sessions via Microsoft Teams. We experienced no decrease in knowledge as indicated on course post-tests.
TAT meetings are virtual
Broke the training in to two smaller face to face sessions.
Use a bigger conference room
For students who are full-time online (low percentage of students) we are partnering more with community law enforcement rather than the school-based School Resource Officer due to the student's location.
Some members meet virtual
We still meet as a team but try to reduce people in the meeting if we can. Most schools cover a number of things so it works out ok.
Following the CDC's guideline when conducting interviews.
Since the students have returned to the brick and mortar, we have not changed the way we have implemented threat assessment.
Adjusting to virtual meetings when possible. Finding larger meeting rooms. Limiting the number of team members in an office at a time: rotating members in and out of small spaces.

19 Responses for School- or District-wide Intervention Strategies
Hearing impaired strategies with specific interpreters for interviewing
See Something Say Something, Admin meeting quarterly with each grade level
Sources of Strength
Community Mental Health Partnering Services
Social skills groups/universal screener /peer to peer program
Jason Foundation Suicide Prevention Curriculum & Youth Mental Health First Aid
Mental Health Referrals
Counseling services
PBIS
Mentoring Programs
Asking students to report peer crisis situations.
MH Counseling
Trauma informed practices
Trauma Informed Care, YMHFA/Kognito, 6-12 grade Mental Health Curriculum, School Based Mental Health Services, Community referrals for Mental Health Services.
Why Try Curriculum, Monique Burr Foundation curriculum
MFB Child Safety Matters
We are in the process of adopting a district-wide SEL curriculum in all grades and schools. This work is being done in conjunction with an overhaul of our MTSS-B procedures.
Reach
Cultural activities throughout the year

APPENDIX B: *THREAT ASSESSMENT AND MANAGEMENT TRAINING IN FLORIDA SCHOOLS TECHNICAL REPORT*

Jennifer L Maeng, Jordan Kerere, and Dewey Cornell

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Table of Contents

Overview	3
CSTAG Professional Development Program	3
PD Options	5
In-Person Professional Development	6
Content Knowledge	
Workshop Evaluations	
Comparison of Participant Content Knowledge in Florida Workshops and National Workshops	
Participant Written Comments	
Online Professional Development Program	16
Level 1 Online Program	18
Level 2 Online Program	21
Conclusions and Recommendations	23
References	25
Appendix A: Pre- and Post-In-Person Workshop Content Knowledge Assessment	26
Appendix B: Pre- and Post- Level 1 Content Knowledge Assessment	27
Appendix C: Post- Online Level 2 Application Questions	31

Overview

The purpose of this report is to provide information on the professional development (PD) of threat assessment and management teams in Florida schools. This report provides information on approximately 190 in-person threat assessment PD workshops and online threat assessment PD conducted between January 2019 and December 2022. We report outcomes for 3,452 participants in approximately 120 in-person PD and 3,291 participants who completed online PD. This report builds on a 2021 state survey report on training needs. A separate report will examine implementation of threat assessment through an analysis of threat assessment case data.

Our previous report (March 31, 2021), *Threat Assessment Training and Implementation Needs Survey State Report*, presented findings from a survey of district safety specialists in all 67 Florida districts as well as 8 individual schools operating independently of the districts. A key finding from the 2021 report was the need for more training; approximately 50% of respondents indicated moderate or serious training needs.

Rate the following threat assessment training needs for the schools in your district.	Little or no need	Moderate need	Serious need
Having sufficient trainers to conduct training	23 (41%)	23 (41%)	10 (18%)
Scheduling time or location for training to take place	27 (48%)	22 (39%)	7 (13%)
Training all team members	29 (52%)	17 (30%)	10 (18%)

Survey response rate was 73%, including 49 of 67 districts.

With approximately 4,000 schools and 4-6 team members per school, the estimated training need was 20,000 staff members. An initial cohort of 90 CSTAG trainers was prepared between May and August 2019. It was estimated that 90 trainers could train 20,000 staff members if each conducted 4-5 workshops of 50 participants each. If workshops were as small as 20 participants, each trainer would need to conduct 11 workshops.

At the request of the Office of Safe Schools, additional train-the-trainer workshops were conducted in June 2021, January 2022, and September 2022 producing an additional 98 trainers. A fourth train-the-trainer workshop in November 2022 produced 12 more trainers for Miami-Dade. As a result, the state of Florida has had approximately 200 trainers prepared to conduct workshops. However, the Office of Safe Schools reports that there has been some attrition from this number.

CSTAG Professional Development Program

Providing PD to school personnel in threat assessment is mandated in Florida by Statute 1001.212. The behavioral threat assessment and management program used in Florida schools is a nationally recognized program called the Comprehensive School Threat Assessment Guidelines (CSTAG). The CSTAG program was developed by Professor Dewey Cornell[4] and colleagues at the University of

[4] Dr. Cornell has a financial interest in CSTAG training. The principal investigator (Maeng) and three co-investigators (Debnam, Huang, and Konold) have no financial interest. This project has a Research and Evaluation

Virginia in 2001 and has been widely disseminated through an independent training organization, School Threat Assessment Consultants, LLC. The CSTAG program is designed for use by a school-based multidisciplinary team including members representing school administration, law enforcement, mental health, and other staff selected by the school (e.g., a school nurse, teacher, special education coordinator). Teams typically participate in a one-day workshop led by an authorized CSTAG trainer.

There are several features of CSTAG that distinguish it from other models of threat assessment:

1) CSTAG has a detailed, 155-page manual with explicit instructions and a 5-step decision-tree that uses a triage approach.

2) CSTAG introduces the concepts of transient and substantive threats as a critical distinction that allows teams to more easily resolve threats that are not serious and concentrate efforts on a small number of more serious threats.

3) Training for multidisciplinary teams is standardized in an interactive workshop that has been evaluated in several studies.

4) CSTAG is the only model supported by controlled studies demonstrating its effectiveness.

An independent study by Penn State University researchers compared the content of the CSTAG model to 11 other threat assessment models (Hall et al., 2020). The authors identified 86 components of the CSTAG model (e.g., defining threats, specifying team member roles, procedures for conducting threat assessment) and found that no model contained more than 57% of the components found in CSTAG. The study concluded, "Based on the findings from the current study, it appears as though online threat assessment resources, while helpful, are not quite as comprehensive as Cornell's CSTAG. Containing an average of just over one-third of the CSTAG components, the evaluated resources were subsequently missing an average of nearly two-thirds of essential information" (p 55).

One notable feature of CSTAG training is that teams are ready to begin conducting threat assessments by the end of the workshop. Seven studies have evaluated the one-day workshop used to train school teams to use the CSTAG model (Allen, Cornell, Lorek, & Sheras, 2008; Cornell, Allen, & Fan, 2012; Cornell, Gregory, & Fan, 2011; Cornell et al., 2009; Cornell et al., 2004; Strong & Cornell, 2008; Stohlman, Konold, & Cornell, 2020).

The most recent national study of CSTAG training evaluated changes in knowledge of threat assessment in a sample of 4,666 school personnel (Stohlman, Konold, & Cornell, 2020). Across 100 workshops conducted by 9 trainers, all occupation groups showed large and statistically significant increases in their knowledge of threat assessment from pretest to posttest. On average, participants achieved threat classification accuracy scores of 75% after completing the workshop. Over 95% of participants provided positive evaluations of the workshop, including that the training improved their understanding of student threat assessment, had the right amount of practical information, and will be helpful in responding to student threats. After the workshop, 98% of participants agreed that they understood the basic concepts and guidelines for conducting a threat assessment and were motivated

Investigator Independence and Integrity Plan approved by the U. S. Dept of Justice that includes an independent advisory board of national experts in school climate and safety research who reviewed this report.

to use threat assessment principles in their schools. Since a goal of PD is to create a multidisciplinary team with a common knowledge base and perspective, it is noteworthy that comparable changes were observed across school administrators, counselors, psychologists, social workers, and school resource officers. The results of this study provide a standard to compare with results in Florida.

Professional Development Options

Florida school districts have both in-person and online options to provide CSTAG PD to school personnel. They can use their Florida-based trainers to conduct one-day PD workshops (sometimes divided into two half-days). These workshops were designed for in-person training but in some cases have been conducted on Zoom. Schools can use their own trainers at no cost or could pay for an outside trainer (primarily from School Threat Assessment Consultants) to conduct a workshop for their staff.

The Covid-19 Pandemic led many schools to cease in-person PD and request an online option. To meet this need, Dr. Cornell collaborated with a school safety company named Navigate360 to create a for-purchase e-learning program. The e-learning program covers the same material as the in-person CSTAG workshop but has two parts: in Level 1, school staff complete a series of asynchronous online modules working independently and at their own pace; in Level 2, they meet as teams to complete a series of case exercises on Zoom under the direction of a CSTAG trainer.

In-person Professional Development

According to workshop evaluation records, between January 24, 2019 and December 6, 2022, at least 9,750 persons were trained through in-person CSTAG workshops. Approximately 53 trainers conducted approximately 190 workshops of more than 5 persons. Trainers conducting the workshops represented 60 districts, 2 university-affiliated lab schools, the Florida Virtual School and the Florida School for the Deaf and Blind. These trainers were selected by their district to become CSTAG trainers. They included personnel with positions such as assistant principal, chief of police, director of mental health services, school psychologist, school safety specialist, and school resource officer. An additional 13 workshops were conducted by four trainers associated with School Threat Assessment Consultants (Dr. Cornell and 3 others) and one Sandy Hook Promise trainer.

The total of 190 workshops were identified because the trainer had participants complete the standard online CSTAG evaluation and more than 5 people completed the evaluation on the same date. There are an unknown number of additional in-person workshops conducted by trainers who did not use the online evaluation system.

Trainers asked participants to complete pre- and post-workshop surveys (hosted on Qualtrics) to evaluate their experience (Appendix A). Although the surveys were anonymous, demographic information including gender, occupation, and experience with threat assessment were collected. Participants were asked to generate a personal code so that pre and post surveys could be matched without knowing their names.

Sample. For purposes of this report, we analyzed data for the workshops conducted between January 2019 and February 2022. In this time period, 5,659 participants completed the pre-workshop survey and 4,542 participants completed the post-workshop survey. The sample was reduced because either some participants declined to complete one or both surveys or they did not enter the same personal code on both surveys. Among these participants, we were able to match completed pre- and post-workshop data for 3,452 participants using their personal code. This sample does not include participants from workshops that might have been conducted without anyone completing the online evaluation or participants who completed the workshop since February 2022.

Demographics. The sample was 2,649 (76.7%) female, 798 (23.1%) male, and 5 (.1%) other/prefer not to respond.

Prior Experience. Of 3,452 participants, 985 (28.5%) reported no prior training in threat assessment, 1,426 (41.3%) had less than 5 hours of training, and 1,041 (30.1%) had 5 or more hours of training. Similarly, 1,090 (31.6%) had not worked on a threat assessment team, 1,243 (36%) had worked on fewer than 5 cases, and 1,119 (32.4%) had worked on 5 or more cases.

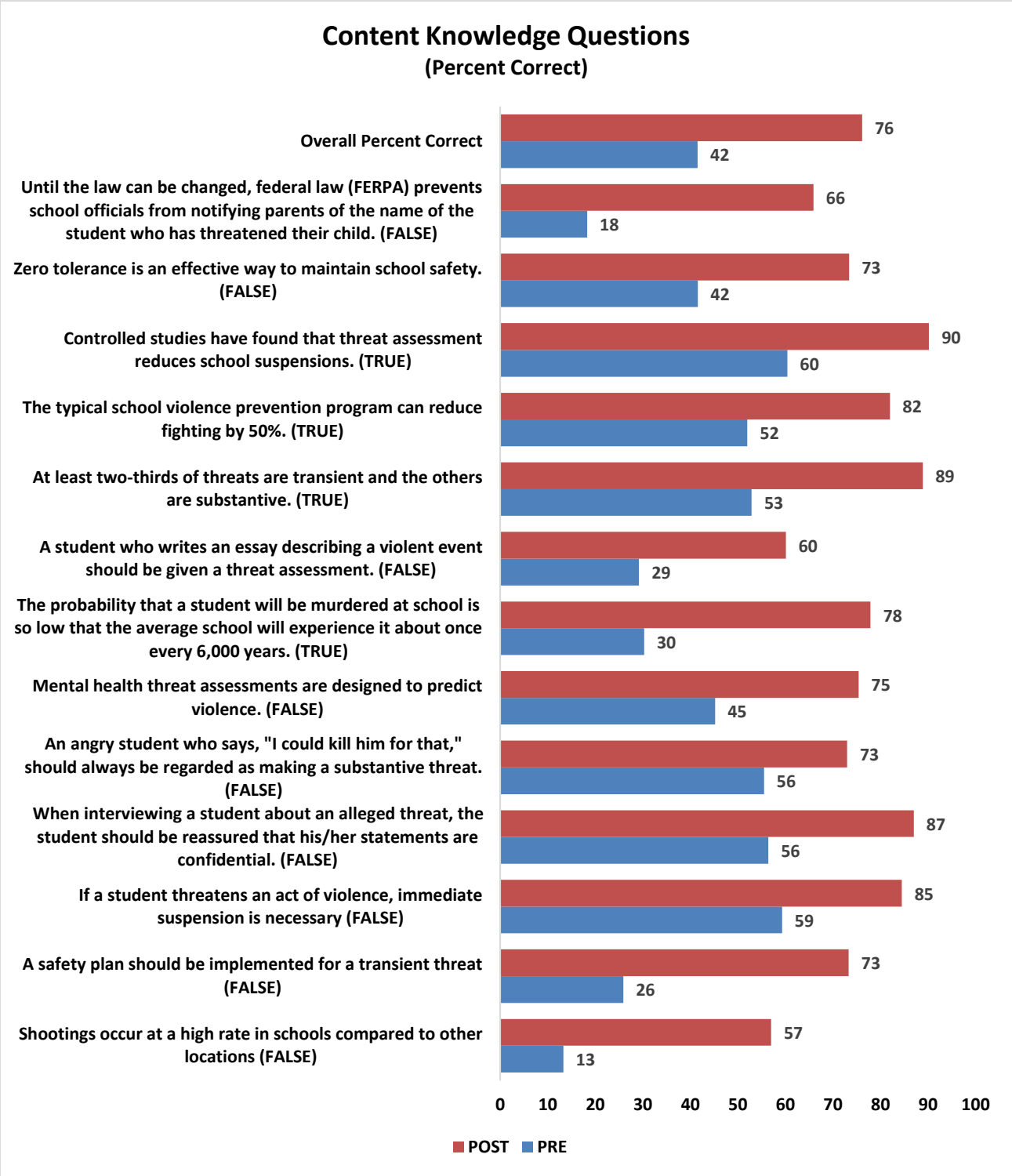
Occupation. Participants were primarily in mental health (n = 1,424, 41.3%), administration (1,336, 38.7%), teaching/instruction (318, 9.2%), law enforcement (119, 3.4%), health services (43, 1.2%), and non-law enforcement school safety/security (32, 0.9%), with another 180 (5.2%) indicating they were in another position. Those in other positions reported positions of office staff, student services, program specialist, paraprofessional, district leadership, academic coach, academic advisor, etc.

Measures of Learning. Participants completed a 13-item test of their knowledge of threat assessment, classified 4 case vignettes, and answered 5 questions evaluating the workshop experience.

Content Knowledge

Participant knowledge of threat assessment improved significantly from 42% pre-workshop to 76% post-workshop, $M = 5.4$ ($SD = 2.8$) to $M = 9.9$ ($SD = 2.2$), t (3411) = 88.1, $p < .001$, Cohen's $d = 1.5$. This improvement was practically and statistically meaningful. See Appendix A for raw responses.

We examined the correlation (Pearson's r) between participants' prior experience with threat assessment and their pre- and post-knowledge scores. Prior training in threat assessment was weakly positively correlated .26 ($p < .001$) with pre-knowledge. The correlation between prior training in threat assessment and post-knowledge scores was very low ($r = .04$, $p = .014$) as was the correlation between prior training post-knowledge scores was $r = -.04$ ($p = .02$) after controlling for pre-knowledge scores. Prior case work on a threat assessment team was weakly positively correlated .295 ($p < .001$) with pre-knowledge. The correlation between prior case work on a threat assessment team and post-knowledge scores was very low ($r = .081$, $p < .001$). Prior case work was not significantly correlated -.009 ($p = .61$) with post-knowledge scores after controlling for pre-knowledge scores.


Content Knowledge Questions
(Percent Correct)
Overall Percent Correct
76
42
Until the law can be changed, federal law (FERPA) prevents school officials from notifying parents of the name of the student who has threatened their child. (FALSE)
66
18
Zero tolerance is an effective way to maintain school safety. (FALSE)
73
42
Controlled studies have found that threat assessment reduces school suspensions. (TRUE)
90
60
The typical school violence prevention program can reduce fighting by 50%. (TRUE)
82
52
At least two-thirds of threats are transient and the others are substantive. (TRUE)
89
53
A student who writes an essay describing a violent event should be given a threat assessment. (FALSE)
60
29
The probability that a student will be murdered at school is so low that the average school will experience it about once every 6,000 years. (TRUE)
78
30
Mental health threat assessments are designed to predict violence. (FALSE)
75
45
An angry student who says, "I could kill him for that," should always be regarded as making a substantive threat. (FALSE)
73
56
When interviewing a student about an alleged threat, the student should be reassured that his/her statements are confidential. (FALSE)
87
56
If a student threatens an act of violence, immediate suspension is necessary (FALSE)
85
59
A safety plan should be implemented for a transient threat (FALSE)
73
26
Shootings occur at a high rate in schools compared to other locations (FALSE)
57
13
0 10 20 30 40 50 60 70 80 90 100
POST
PRE

We examined knowledge scores separately for each occupation. Increases in knowledge scores ranged from a 32% gain for mental health professionals (44.6 to 76.9%) and security personnel (33.8% to 66.2%) to a 45% gain for nurses/health professionals (26.9 to 72.3%). After adjusting for pre-workshop scores, pairwise comparisons with a Bonferroni adjustment indicated no statistically significant difference in post-workshop scores between occupation. This means that all occupations performed equally well on the post-workshop knowledge test.

	Administration (n = 1,332)	Teaching (n = 315)	Law Enforcement (n = 119)	Mental Health (n = 1,409)	Safety and Security (n = 32)	Nurse/ Health Pro (n = 43)	Other (n = 176)
Pre % Correct (13 items)	43.1%	31.5%	36.9%	44.6%	33.8%	26.9%	34.6%
Post % Correct (13 items)	76.9%	73.1%	73.1%	76.9%	66.2%	72.3%	72.3%

In addition to the knowledge questions, participants were asked to classify four threat assessment cases as No Threat, Transient Threat, Serious Substantive Threat, or Very Serious Substantive Threat. The table below shows the percentage who answered correctly.

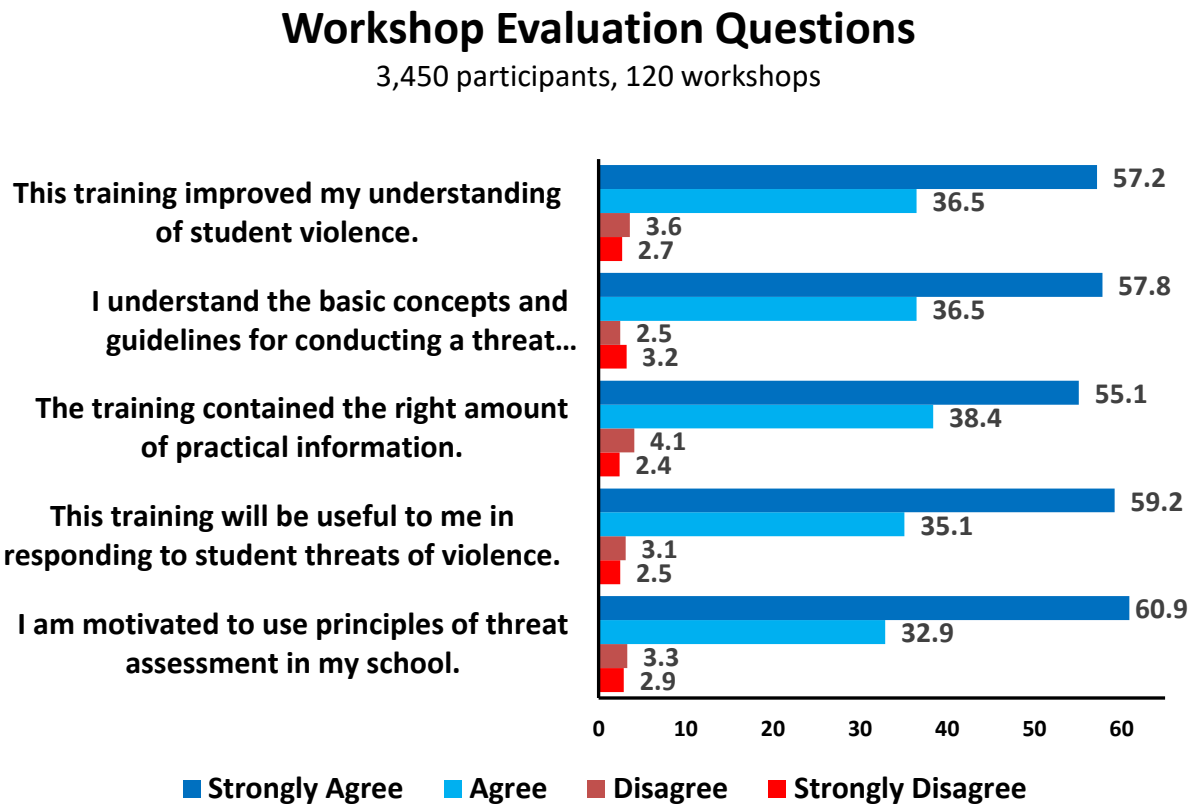
Item	Correct Classification	Correct n (%)
An angry student says, "I'm gonna kill you." On interview, the student says she has no plans to harm the classmate and she just lost her temper. She agrees to apologize.	Transient	2,912 (84.3%)
A student tells a friend that he will beat up Joe in the parking lot after school. On interview, the student is uncooperative and says that what he does after school is his own business.	Serious Substantive	3,049 (88.3%)
A student screams obscene insults at a teacher and then storms out of the room. On interview, the student says that the teacher is not fair.	No Threat	1,623 (47%)
A student is found with a list of student names under the heading, "Scheduled to die." On interview, the student is sullen and quiet. You do not believe he was simply trying to get attention.	Very Serious Substantive	2,834 (82%)

More than 82% of participants were able to accurately classify transient, serious substantive, and very serious substantive cases. Fewer participants (47%) were able to classify a case that was not a threat. This result is consistent with those in other studies using this instrument (Stohlman et al., 2020). It is

possible that educators may regard a student tirade directed at a teacher as a serious matter that merits a threat assessment. To test this hypothesis, the "no threat" category could be assessed with scenarios that do not involve aggression directed toward a teacher in the future.

Workshop Evaluations

Finally, participants answered five questions evaluating their experience of the workshop and their motivation to implement the program. Approximately 94% of participants agreed or strongly agreed that the training improved their understanding of student violence, that they understood the basic concepts and guidelines of threat assessment, and that the training contained practical information and would be helpful when responding to student threats of violence. Approximately 94% of participants also reported that they are motivated to use threat assessment in their schools.



Item	Strongly Disagree	Disagree	Agree	Strongly Agree
This training improved my understanding of student violence	2.7%	3.6%	36.5%	57.2%
I understand the basic concepts and guidelines for conducting a threat assessment	3.2%	2.5%	36.5%	57.8%
This training contained the right amount of practical information	2.4%	4.1%	38.4%	55.1%

The training will be helpful to me in responding to student threats of violence	2.5%	3.1%	35.1%	59.2%
I am motivated to use principles of threat assessment in my school	2.9%	3.3%	32.9%	60.9%

Workshop evaluations were consistently positive across occupations except for the small group of nurse/health professionals. We reviewed the six comments from the nurse/health professionals. Two of these comments were positive (e.g., “great training”) and the four negative comments related to workshop length and lack of interactivity (e.g., “such a long day to sit and listen to a lecture with very little audience interaction”).

Administration (n = 1,336)

Item	Strongly Disagree	Disagree	Agree	Strongly Agree
This training improved my understanding of student violence	3.0%	2.9%	36.2%	57.9%
I understand the basic concepts and guidelines for conducting a threat assessment	3.4%	2.1%	35.4%	59.0%
This training contained the right amount of practical information	2.8%	4.0%	37.4%	55.9%
The training will be helpful to me in responding to student threats of violence	2.7%	2.6%	34.7%	60.0%
I am motivated to use principles of threat assessment in my school	3.3%	2.5%	31.3%	62.9%

Teaching (n = 318)

Item	Strongly Disagree	Disagree	Agree	Strongly Agree
This training improved my understanding of student violence	5.0	6.9	36.2	51.9
I understand the basic concepts and guidelines for conducting a threat assessment	6.6	6.6	34.3	52.5
This training contained the right amount of practical information	4.1	8.2	38.1	49.4
The training will be helpful to me in responding to student threats of violence	4.4	7.9	36.2	51.6
I am motivated to use principles of threat assessment in my school	6.0	7.2	31.4	55.3

Law Enforcement (n = 119)

Item	Strongly Disagree	Disagree	Agree	Strongly Agree
This training improved my understanding of student violence	1.7	2.5	34.5	61.3
I understand the basic concepts and guidelines for conducting a threat assessment	1.7	1.7	34.5	62.2

This training contained the right amount of practical information	1.7	2.5	32.8	63.0
The training will be helpful to me in responding to student threats of violence	1.7	1.7	31.9	64.7
I am motivated to use principles of threat assessment in my school	1.7	2.5	27.7	68.1

Mental Health (n = 1,424)

Item	Strongly Disagree	Disagree	Agree	Strongly Agree
This training improved my understanding of student violence	2.0	3.1	37.3	57.7
I understand the basic concepts and guidelines for conducting a threat assessment	2.5	1.2	38.1	58.3
This training contained the right amount of practical information	1.7	2.9	40.3	44.1
The training will be helpful to me in responding to student threats of violence	2.0	2.2	35.5	60.3
I am motivated to use principles of threat assessment in my school	2.0	2.5	34.8	60.7

Safety and Security (n = 32)

Item	Strongly Disagree	Disagree	Agree	Strongly Agree
This training improved my understanding of student violence	0	0	21.9	78.1
I understand the basic concepts and guidelines for conducting a threat assessment	0	0	21.9	78.1
This training contained the right amount of practical information	0	0	31.3	68.8
The training will be helpful to me in responding to student threats of violence	0	0	21.9	78.1
I am motivated to use principles of threat assessment in my school	0	0	19.9	81.3

Nurse/Heath Professional (n = 43)

Item	Strongly Disagree	Disagree	Agree	Strongly Agree
This training improved my understanding of student violence	4.7	20.9	48.8	25.6
I understand the basic concepts and guidelines for conducting a threat assessment	4.7	25.6	39.5	30.2
This training contained the right amount of practical information	2.3	25.6	37.2	34.9

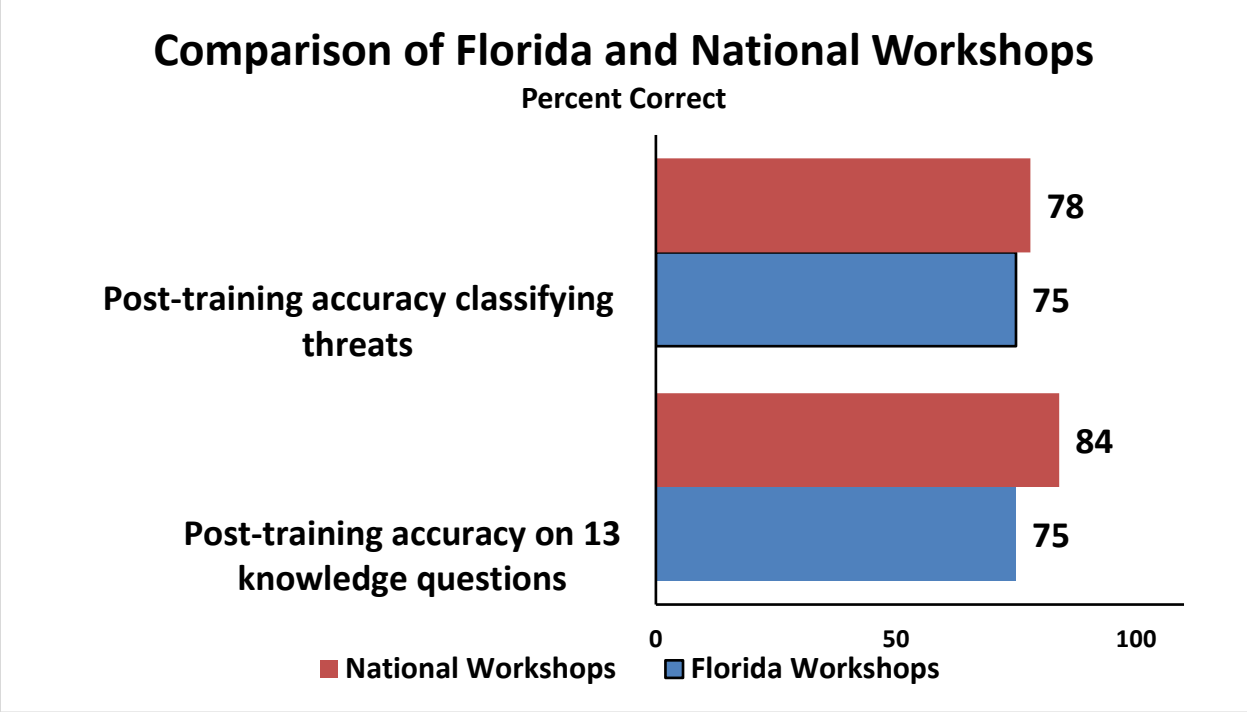
The training will be helpful to me in responding to student threats of violence	4.7	20.9	39.5	34.9
I am motivated to use principles of threat assessment in my school	4.7	23.3	41.9	23.3

Other (n = 180)

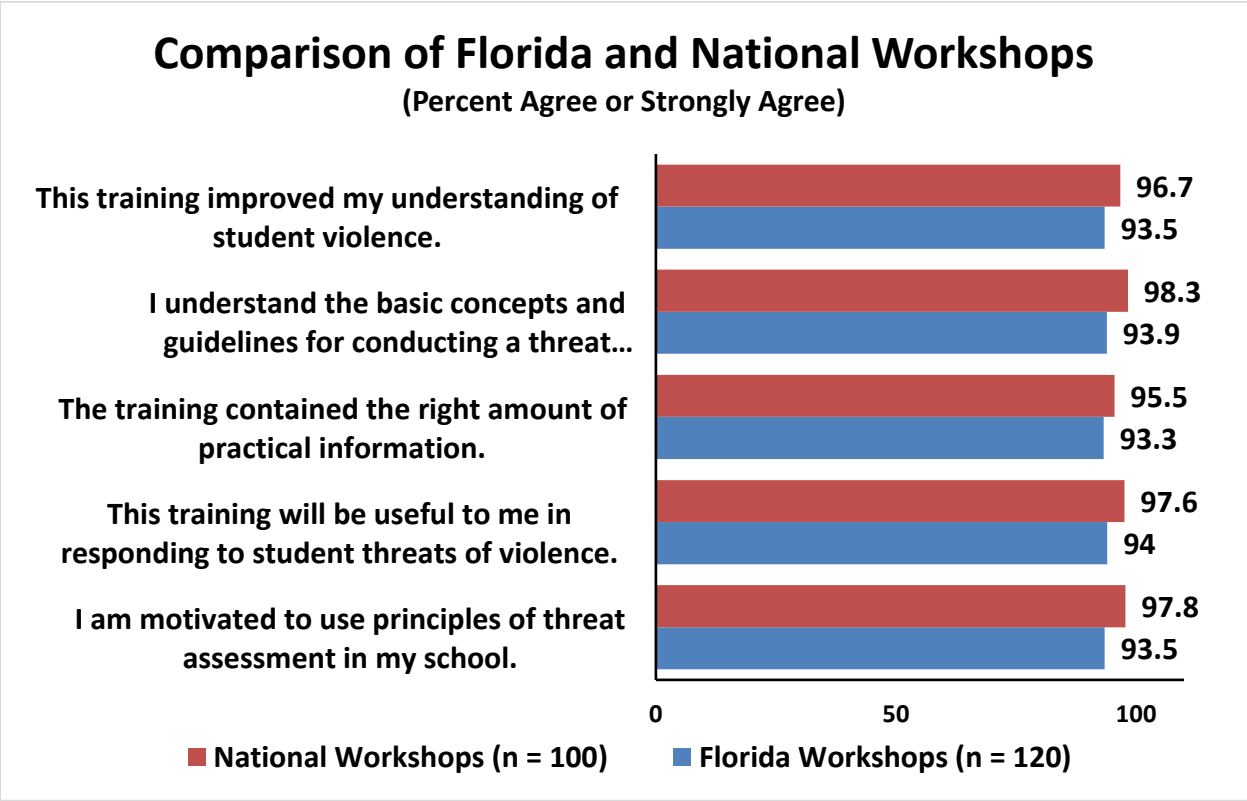
Item	Strongly Disagree	Disagree	Agree	Strongly Agree
This training improved my understanding of student violence	2.8	3.9	33.9	59.4
I understand the basic concepts and guidelines for conducting a threat assessment	2.8	3.9	40.0	53.3
This training contained the right amount of practical information	2.8	3.3	37.8	56.1
The training will be helpful to me in responding to student threats of violence	3.3	2.8	36.7	57.2
I am motivated to use principles of threat assessment in my school	2.8	3.9	36.7	56.7

Comparison of Participant Content Knowledge in Florida Workshops and National Workshops

A sub-sample of 3,075 of the 3,452 participants were trained by Florida trainers. Knowledge outcomes for these locally-trained participants were compared to the outcomes reported in Stohlman et al., 2020 of 4,666 participants trained by 9 national trainers. As shown in the chart below, participants in the Florida workshops had lower scores on post-workshop content knowledge questions (75%) than participants in the national sample (84%). Florida participants classified threats (75%) almost as accurately as participants in the national sample (78%). Participants in Florida workshops gave consistently positive ratings of their workshop experience, only slightly below the ratings for the national workshops (see chart below).

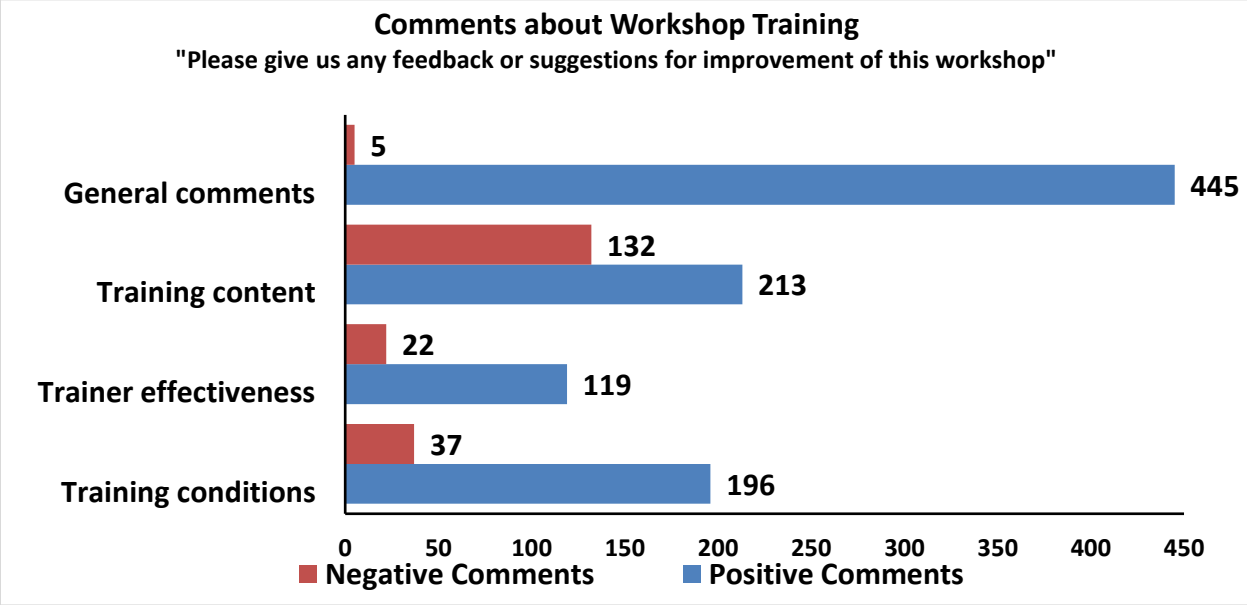


Overall, outcomes for participants trained in Florida by local trainers and those trained in national workshops yield comparable results. This is important given that Florida trainers are less experienced than the national trainers. However, this comparison does not include an unknown number of Florida workshops that did not make use of the online evaluation system.



Participant Written Comments

Participants were invited to make written comments on the workshop in response to the question "Please give us any feedback or suggestions for improvement of this workshop." There were 980 comments coded by two coders as positive or negative in the categories of general comments, training content, trainer effectiveness, and training conditions. (See chart below; comments could be coded into more than one category.) In each category, most of the comments were positive. Initial inter-rater agreement ranged from 85% (training content) to 93.3% (trainer effectiveness). Discrepancies in coding were collaboratively agreed upon by the raters after discussion. Illustrative examples for each category of comments are provided below.



Positive general comments included:

- awesome workshop
- Enjoyed it
- Excellent
- great job
- it was good

Negative general comments included:

- Ugh
- Given the information presented today, give time to make plans for our schools.
- I would say more than 90% of audience members were disengaged most of the day. I am disappointed.

Positive comments about training content:

- Great and full of information
- Great and practical content.
- Great details and examples
- scenarios and role plays were very helpful
- Quality information without fluff

- The training did a great job of building on our knowledge of the threat assessment procedures.
- Very informative

Because there were more negative comments about training content than the other categories, we reviewed these responses. Themes for this category of comments included: too much information for the length of training, the data presented were old, over-emphasis on less practical content for actually implementing TA (e.g., background on school shootings, research outcomes), a need for more examples, and differentiated training/examples based on prior experience implementing TA and by grade level. Below are comments that exemplify these themes.

Negative comments about training content:

- much of the data that was presented was nearly a decade old, therefore it made it difficult for me to accept the most of the data presented.
- A couple of the comics were well-intended, but so not funny-One in particular.
- Definitely need a more thorough analysis of why violence is so prevalent in our society and how it manifests as entitlement and misogyny.
- There was a lot of data provided that took up a lot of time. I feel like more time could've been spent going over actual procedures or examples on how to implement.
- I believe the process in the schools should have been discussed more. A lot of administrative professionals disregard or don't know that mental health professionals (school psychologists, social workers, LMHPs) need to be involved right away to complete the threat assessment before SRO involvement or possibly even with the SRO. Most administration I have encountered try handling it on their own with the SRO, which is not best practice.
- A few more case studies, a little more in depth would be enjoyable.
- Consider tailoring to training level of learners
- Could there be differentiated trainings so that newer employees go through the whole training and others go through a review?

Positive comments about trainer effectiveness:

- Great speaker
- Awesome presenter.
- [Name] is amazingly gifted
- Course instructors were very knowledgeable and the information was presented in a way that will help me conduct threat assessments in school more effectively and correctly
- Great insight from very knowledgeable instructor, who gave opportunities for questions and comments

Negative comments about trainer effectiveness:

- For our team to have 6-7 uninterrupted hours together, we accomplished nothing as a team. We were read at the entire time. I can read the same slides off the packet.
- Unfortunately, the presenter did not seem to have a firm grasp on the information presented. She read slides, took very long pauses while reading slides before presenting them. The entire morning made me question her stance on the issue at hand. It was my understanding that we would be learning prevention strategies; however, she constantly made light of the subject and

even at one point said that 300-ish school shootings was "nothing" compared to other settings. I am insulted by her lackadaisical and nonchalant attitude about it.
- Less reading from slides.
- Is an intern qualified to train this when they haven't even worked in a school?
- … the speaker was very difficult to understand, voice went in and out of an audible range and was not engaging with the audience. Made for a very long and uninteresting day. I think our team will do better to read the content on our own to implement our game plan.
- Workshop was extremely "sit and get". Studies show people retain more information when they teach others, or repeat what they learn to others. Show what you know model! Most of the information could have been relayed in an email.

Positive comments about training conditions:
- It was nice to mix into different tables with folks who didn't know me and vice versa
- I enjoyed the online platform. I like having the visuals available and broken down as we discussed the steps of the threat assessment process
- I enjoyed … the allotted time to reflect and break.
- the breaks helped to keep engagement. Nice to see everyone, albeit on zoom.
- Thanks for the food and drinks!

Negative comments about training conditions:
- The audio of the presentation was hard to hear and understand at times.
- Please end on time.
- Such a long day to sit and listen to a lecture with very little audience interaction.
- The workshop was too long and there was too much information given to take it all in.
- There is far too many people in the room at once. There is not room to move chairs around for everyone to see the presenter. I spent the entire training only looking at the tv, as I could not see the presenters. The trainings need to be on a slightly smaller scale in the future, if possible.
- This training would be better if each school complete team was at the training the same time.

Online Professional Development Program

The online program provided by Navigate360 consisted of two parts, Level 1 and Level 2, that cover the same content as the in-person, full-day workshop described above. The online program differs from the full-day workshop in presentation and evaluation. Level 1 is an asynchronous interactive, e-learning program that includes a series of slides narrated by four experienced trainers. It covers the basics of CSTAG and is comprised of 8 modules. Changes in participant content knowledge are assessed through 45 questions that participants answer prior to and after completing the program (Appendix B). There are more knowledge questions for the online program than the in-person workshop to ensure that participants learn the material on each module and do not skip any sections. Participants who scored below 80 on the assessment are allowed to take it again. For these reasons, it is not feasible to compare learning scores for the in-person workshop versus the online program.

Completion of Level 1 prepares participants to move to Level 2, where they apply what they learned in the Level 1 program to a series of case exercises. Participants attend the synchronous live Level 2 on Zoom with others on their threat assessment team. Learning is evaluated with questions about a series of case vignettes administered after the program. Data for both Level 1 and Level 2 evaluations were

obtained from Navigate360, the company that hosts the program. The data released to the researchers included demographic information regarding gender, occupation and prior training or experience with threat assessment, but no names or other identifying information.

Level 1 Online Program

Between February 1, 2021 and December 6, 2022, 4,198 Florida school staff completed the Level 1 program.

Sample. Between February 1, 2021 and May 7, 2022, 3,371 Florida school staff completed the Level 1 program (Appendix B). Of these, 3,291 participants completed the pre and post survey and also reported their role. This sample does not include staff who completed the level 1 training since May 2022.

Districts. Participants were from 8 Florida districts.

Demographics. The sample was 2,276 (69.2%) female, 896 (27.3%) male, and 116 (3.5%) other/prefer not to respond, with 3 (0.1%) missing gender information.

Prior Experience. Of participants, 488 (14.8%) had no prior training in threat assessment, 1,355 (41.2%) had less than 5 hours of training, and 1,442 (43.8%) had 5 or more hours of training with 6 participants not reporting training (0.2%). There were 620 (18.8%) participants who had not worked on a threat assessment team and 2,669 (81.1%) with some experience on a team (2 missing a response).

Occupation. Participants were primarily in administration (n = 1,192, 36.2%), mental health (n = 1,080, 32.8%), and law enforcement (n = 357, 10.8%) with another 662 (20.1%) in other roles, including teachers.

Level 1 Content Knowledge

A paired t-test indicated participant knowledge of threat assessment significantly improved from 46% correct at pre-test to 92% at post-test; M = 46.3 (SD = 17.3) to M = 92.2 (SD = 7.2), t (3290) = 148.6, p < .001, Cohen's d = 2.6. Note that these results reflect the most recent score that a participant received since they could repeat the assessment if initially, they scored lower than 80% on the post-assessment.

We examined the correlation between participants' prior experience with threat assessment and their pre- and post-test scores. Correlations were very low for prior training in threat assessment and knowledge scores (r = .099, p < .001 with pre-test and r = .046, p = .008 with post-test scores). The correlation between prior training and post-test scores was r = .035 (p = .047) with after controlling for pre-test scores. Prior hours on a threat assessment team (0 = none, 1 = some) was very weakly correlated .162 (p < .001) with pre-test scores. The correlation between prior hours on a threat assessment team and post-test scores was r = .037, p = .033. Prior case work was not significantly correlated (r = .017, p = .332) with post-knowledge scores after controlling for pre-knowledge scores.

By occupation. Increases in knowledge scores were similar for mental health professionals, law enforcement, and administrators, ranging from 46.4% gain for mental health professionals (46.2% to 92.6%), 46.1% for law enforcement (46.8% to 92.9%), to 45.8% gain for administrators (46.2% to 92.0%).

Analysis of covariance was used to determine whether differences existed in participant post-Level 1 scores based on their role, after adjusting for pre-Level 1 scores, $F(3, 3286) = 3.75$, $p = .001$, partial $\eta^2 = .003$. Pairwise comparisons with a Bonferroni adjustment indicated a small but statistically significant difference in post-Level 1 scores between administrators and mental health professionals ($p = .03$). No other significant differences existed by participant role in post-Level 1 scores after controlling for pre-Level 1 scores.

	Administration (n = 1080)	Law Enforcement (n = 357)	Mental Health (n = 1853)
Pre % Correct (45 items)	46.2%	46.8%	46.2%
Post % Correct (45 items)	92.0%	92.9%	92.6%

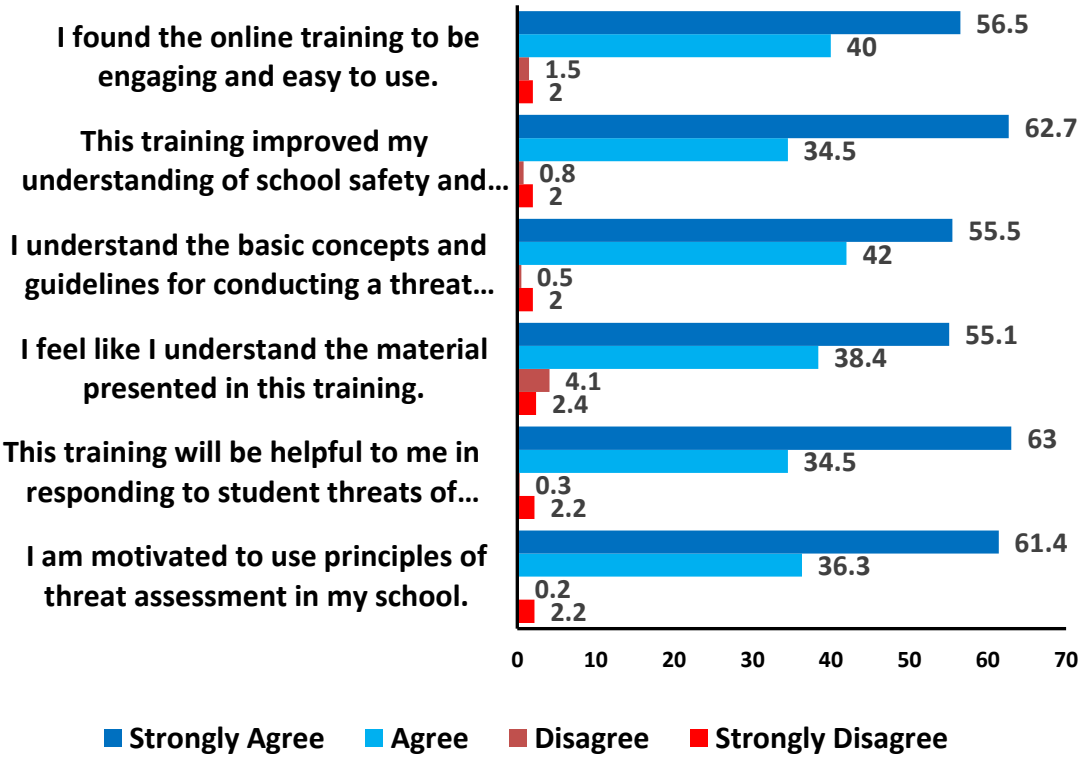
Level 1 Program Evaluation

More than 95% of participants agreed or strongly agreed that completing the Level 1 program improved their understanding of student violence, that they understood the basic concepts and guidelines of threat assessment, and that program contained practical information and would be helpful when responding to student threats of violence. Almost all (97%) of participants reported that they are motivated to use threat assessment in their schools. Participants (97%) indicated they perceived the Level 1 program to be engaging and the material understandable. Note that the low number of responses (approximately 650) included in these analyses is due to changes in how the evaluation question responses were recorded in the Navigate360 software. For a period of time the evaluation questions were recorded anonymously and could not be linked to the participant's demographic information.

Item	Strongly Disagree n (%)	Disagree n (%)	Agree n (%)	Strongly Agree n (%)
This training improved my understanding of school safety and student violence. (n = 648)	13 (2.0%)	5 (0.8%)	224 (34.5%)	406 (62.7%)
I understand the basic concepts and guidelines for conducting a threat assessment and am now ready for the next step. (n = 649)	13 (2.0%)	0 (0.0%)	252 (38.8%)	385 (59.2%)
The training will be helpful to me in responding to student threats of violence. (n = 643)	14 (2.2%)	2 (0.3%)	222 (34.5%)	406 (63.0%)
I am motivated to use principles of threat assessment in my school. (n = 641)	14 (2.2%)	1 (0.2%)	233 (36.3%)	394 (61.4%)
I feel like I understand the material presented in this training. (n = 651)	13 (2.0%)	3 (0.5%)	274 (42.0%)	362 (55.5%)
I found the online training to be engaging and easy to use. (n = 654)	13 (2.0%)	10 (1.5%)	262 (40.0%)	370 (56.5%)

Level 1 Online Evaluation

Approximately 650 participants



Level 2 Online Program

Between Feb 1, 2021 and December 6, 2022, 2,218 Florida school staff completed the Level 2 program. This 4-hour program was conducted by an experienced trainer on Zoom. The trainer reviewed the CSTAG threat assessment process and then participants worked in break-out rooms with their threat assessment teams to complete a series of case exercises. At the conclusion of Level 2 program, participants completed an online assessment of their ability to classify hypothetical threat cases and choose appropriate interventions. They also completed six evaluation questions concerning the Level 2 experience.

Sample. Between February 1, 2021 and May 7, 2022, 1,726 Florida school staff completed the Level 2 program and also reported their role. Note that the results below do not include staff who completed the Level 2 training after May, 2022.

Districts. Participants were from 4 Florida school districts.

Demographics. 1,216 (70.5%) female, 446 (25.8%) male, and 64 (3.7%) other/prefer not to respond.

Prior Experience. Of participants, 274 (15.9%) had no prior training in threat assessment, 709 (41.1%) had less than 5 hours of training, and 737 (42.7%) had 5 or more hours of training with 5 participants not

reporting prior training experience (0.3%). Of participants, 378 (21.9%) had not worked on a threat assessment team and 1,347 (78.0%) had some experience on a team. One participant did not respond.

Occupation. Participants were in administration (n = 652, 37.75%), mental health (n = 552, 31.96%), and law enforcement (n = 144, 8.34%) with another 378 (21.89%) in other roles, including teachers.

Level 2 Knowledge Application Questions

The Level 2 assessment consisted of 23 questions in which the participants were asked to apply their knowledge to a series of hypothetical threat cases. For example, participants were given a scenario and asked to classify the type of threat and select appropriate responses based on their knowledge of the CSTAG decision tree. These questions were administered following completion of the Level 2 program. Overall, participants scored an average of 89.0% (SD = 13.9) on the post-level 2 application questions. See Appendix C for raw results on each item.

Level 2 Online Program Evaluation

Following completion of the Level 2 program, approximately 99% of participants agreed or strongly agreed that the training was engaging, that they understood the material, that it improved their understanding of student violence, that they understand how to use the CSTAG model, and that training would be helpful when responding to student threats of violence. Approximately 99% of participants also reported that they are motivated to use threat assessment in their schools.

Item	Strongly Disagree n (%)	Disagree n (%)	Agree n (%)	Strongly Agree n (%)
I found the workshop to be engaging.	8 (0.6%)	4 (0.3%)	251 (19.0%)	1,059 (80.1%)
I understand the material presented in this training.	8 (0.6%)	0 (0.0%)	267 (20.2%)	1,047 (79.2%)
This training improved my understanding of school safety and student violence.	9 (0.7%)	4 (0.3%)	248 (18.8%)	1,061 (80.3%)
I understand how to use the CSTAG model.	10 (0.8%)	3 (0.2%)	322 (24.4%)	987 (74.7%)
This training will be helpful to me in responding to student threats of violence	10 (0.6%)	4 (0.3%)	247 (18.7%)	1,061 (80.3%)
I am motivated to use CSTAG in my school.	11 (0.8%)	3 (0.2%)	270 (20.4%)	1,038 (78.5%)

Conclusions and Recommendations

To date, at least 13,948 persons have received CSTAG PD through either in-person workshops or online programs. This report summarizes results for 3,452 participants in in-person workshops and 3,291 who completed the Level 1 online program. Both groups showed a substantial improvement in threat assessment knowledge. Participants completing the online program had knowledge increases from 46% pre- to 92% post-Level 1 program and participants completing in-person workshops had increases from 42% pre- to 76% post-workshop on a different assessment. In addition, for both online and in-person PD, more than 93% of participants had positive perceptions of the PD, indicating satisfaction with the training and motivation to implement the threat assessment program. A smaller group of 1,726 participants completed the Level 2 program, which was conducted on Zoom. This group scored high (89%) on a post-Level 2 assessment and 99% gave positive evaluations of their experience.

Based on these results, the following recommendations are offered:

1. Both the online and in-person PD demonstrated that participants made large gains in knowledge and reported positive evaluations of their experience. Both forms of PD produced comparable results across participant discipline, which is important because threat assessment requires a multidisciplinary team. The two forms differ primarily in how they are scheduled, what kind of facility is required, and how much they require from a local trainer. To conduct an in-person workshop, districts must schedule a common date when teams can be pulled from their regular school duties for an entire day. They have must a high-quality facility, and the workshop leader must be highly knowledgeable in threat assessment and PD pedagogy.
   The online program has two parts (Levels 1 and 2); the first part can be completed by participants on their own schedule and the second part requires a common meeting time for a synchronous Zoom session. It is important that districts choose the PD format that will best meet the needs of their personnel.
2. It would be useful for the Office of Safe Schools to maintain a record of who from each school has completed the PD. Completion could be reported by school districts to verify that each school has a trained team. This would also be useful in that if a staff member transfers schools, there would be a record of their PD participation.
3. An unknown number of workshops were conducted without having participants complete an evaluation. The Office of Safe Schools might consider requiring participants to complete a standard evaluation that could be used to verify PD completion and identify trainers and/or districts in need of support. More complete data would also reduce potential bias in the evaluation results (e.g., if evaluations were not collected in workshops by less capable trainers).
4. The Office of Safe Schools has identified a need to increase capacity for PD implementation. There are several strategies to increase PD opportunities for threat assessment team members.
   a. Increase the number of trainers by holding more train-the-trainer programs. These train-the-trainer programs can be conducted by Dr. Cornell or another qualified trainer of trainers. However, see item (5) below regarding the selection of trainers.
   b. Ask trainers to conduct more workshops. Although approximately 20,000 trained staff are needed, a large number (approximately 14,000) have already participated in PD. A cadre of 100 trainers who each conducted 5 workshops of 20 participants would provide PD to 10,000 team members per year, which should easily exceed normal turnover needs.

    c. The Office of Safe Schools should clarify that trainers can provide PD for any district in Florida. Regional workshops could draw participants from multiple districts.
    d. Encourage workshops with more participants. Workshops conducted for fewer than 10 participants are inefficient. Nationwide, threat assessment workshops often have 50-100 participants.
    e. Some districts are using the commercially available online program provided by Navigate360, which provides a high level of standardization.
5. Threat assessment trainers may need support to increase their productivity. The written comments provide useful guidance on assuring a high-quality workshop experience. It would be helpful if district administrations facilitated PD by ensuring that:
    a. Time is allocated for staff to participate in PD.
    b. Provide a suitable space for training.
    c. Encourage schools to send their teams for training on designated dates. Whenever possible, all members of a given school team should attend the same training.
6. It is important that trainers be carefully selected by their districts. The written comments identified some variation among trainers in their instructional skills.
    a. Whenever possible, trainers should have demonstrated expertise in threat assessment.
    b. Trainers should be capable of leading PD workshops.
    c. Trainers should be motivated to become trainers.
    d. Trainers should be capable of serving as coaches who supervise and support the implementation of threat assessment in their schools. The CSTAG model encourages trainers to be coaches as well as trainers.

Ultimately, the results and recommendations presented in this report should be considered in the broader context of Florida's recent efforts to transform school safety. In 2019, following the shooting at Marjorie Stoneman Douglas High School, Florida undertook an ambitious plan to transform the safety of Florida schools with multiple changes in security and prevention measures, including the mandate to establish threat assessment teams in all Florida schools. The Florida Department of Education recruited a cadre of trainers to provide PD to threat assessment teams in every school in the CSTAG model. Most of this PD has taken place during the Covid-19 Pandemic. It is important to acknowledge the Florida Department of Education has had to overcome several challenges to achieve their goal of providing PD to all threat assessment team members in all schools. In addition to the contextual challenges noted above, it would be helpful if the districts had administrative procedures and guidance to facilitate training, implementation, and oversight of threat assessment teams. Implementation matters will be covered in a separate report examining case-level data for students who received a threat assessment.

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Appendix B1: Pre- and Post-In-Person Workshop Content Knowledge Assessment

Item		Agree n (%)	Disagree n (%)	I don't know n (%)
Until the law can be changed, federal law (FERPA) prevents school officials from notifying parents of the name of the student who has threatened their child (FALSE)	Pre[4]	1949 (56.4%)	633 (18.3%)	868 (25.1%)
	Post[4]	1077 (31.2%)	2276 (65.9%)	97 (2.8%)
Zero tolerance is an effective way to maintain school safety (FALSE)	Pre[7]	1385 (40.1%)	1438 (41.6%)	624 (18.1%)
	Post[7]	823 (23.8%)	2536 (73.4%)	88 (2.5%)
Controlled studies have found that threat assessment reduces school suspensions (TRUE)	Pre[6]	2086 (60.4%)	237 (6.9%)	1125 (32.6%)
	Post[6]	3114 (90.2%)	175 (5.1%)	159 (4.6%)
The typical school violence prevention program can reduce fighting by 50% (TRUE)	Pre[6]	1797 (52.0%)	225 (6.5%)	1426 (41.3%)
	Post[5]	2831 (82.0%)	183 (5.3%)	435 (12.6%)
At least two-thirds of threats are transient and the others are substantive (TRUE)	Pre[6]	1826 (52.9%)	180 (5.2%)	1442 (41.7%)
	Post[7]	3069 (88.9%)	244 (7.1%)	134 (3.9%)
A student who writes an essay describing a violent event should be given a threat assessment (FALSE)	Pre[4]	1793 (51.9%)	1010 (29.2%)	647 (18.7%)
	Post[4]	1237 (35.8%)	2077 (60.1%)	137 (4.0%)
The probability that a student will be murdered at school is so low that the average school will experience it about once every 6,000 years (TRUE)	Pre[8]	1045 (30.3%)	1054 (30.5%)	1347 (39.0%)
	Post[3]	2691 (77.9%)	467 (13.5%)	293 (8.5%)
Mental health threat assessments are designed to predict violence (FALSE)	Pre[6]	1249 (36.2%)	1561 (45.2%)	638 (18.5%)
	Post[2]	793 (23.0%)	2606 (75.4%)	53 (1.5%)
An angry student who says, "I could kill him for that," should always be regarded as making a substantive threat (FALSE)	Pre[5]	1091 (31.6%)	1917 (55.5%)	441 (12.8%)
	Post[1]	884 (25.6%)	2520 (73.0%)	49 (1.4%)
When interviewing a student about an alleged threat, the student should be reassured that his/her statements are confidential (FALSE)	Pre[2]	1048 (30.3%)	1948 (56.4%)	456 (13.2%)
	Post[2]	417 (12.1%)	3005 (87.0%)	30 (0.9%)
If a student threatens an act of violence, immediate suspension is necessary (FALSE)	Pre[1]	941 (27.2%)	2047 (59.3%)	465 (13.5%)
	Post[1]	479 (13.9%)	2920 (84.5%)	54 (1.6%)
A safety plan should be implemented for a transient threat (FALSE)	Pre[2]	2103 (60.9%)	895 (25.9%)	454 (13.1%)
	Post	884 (25.6%)	2532 (73.3%)	38 (1.1%)
Shootings occur at a high rate in schools compared to other locations (FALSE)	Pre	2668 (77.2%)	458 (13.3%)	328 (9.5%)
	Post	1406 (40.7%)	1969 (57.0%)	79 (2.3%)

Note. Superscript corresponds to the number of participants who did not respond to this item.

Appendix B2: Pre- and Post- Level 1 Content Knowledge Assessment

Item		Agree N (%)	Disagree N (%)	IDK N (%)
Until the law can be changed, federal law (FERPA) prevents school officials from notifying parents of the name of the student who has threatened their child (FALSE)	Pre[1]	2390 (72.6%)	448 (13.6%)	452 (13.7%)
	Post	301 (9.1%)	2987 (90.8%)	3 (0.1%)
Zero tolerance is an effective way to maintain school safety (FALSE)	Pre[1]	1771 (53.8%)	1209 (36.7%)	310 (9.4%)
	Post	64 (1.9%)	3225 (98.0%)	2 (0.1%)
Controlled studies have found that threat assessment reduces school suspensions (TRUE)	Pre[1]	1958 (59.5%)	373 (11.3%)	959 (29.1%)
	Post	3253 (98.8%)	37 (1.1%)	2 (0.1%)
About ¾ of threats are transient and ¼ are substantive (TRUE)	Pre[1]	21158 (65.6%)	1611 (4.9%)	971 (29.5%)
	Post	3170 (96.3%)	115 (3.5%)	6 (0.2%)
A student who writes an essay describing a violent event should be given a threat assessment (FALSE)	Pre[1]	1589 (48.3%)	1354 (41.2%)	347 (10.5%)
	Post	367 (11.2%)	2890 (87.8%)	34 (1.0%)
The probability that a student will be murdered at school is so low that the average school will experience it about once every 6,000 years (TRUE)	Pre[1]	777 (23.6%)	1525 (46.4%)	988 (30.0%)
	Post	3160 (96.0%)	128 (3.9%)	3 (0.1%)
Mental health threat assessments are designed to predict violence (FALSE)	Pre[1]	1184 (36.0%)	1705 (51.8%)	401 (12.2%)
	Post	183 (5.6%)	3105 (94.3%)	3 (0.1%)
An angry student who says, "I could kill him for that," should always be regarded as making a substantive threat (FALSE)	Pre[1]	793 (24.1%)	2308 (70.2%)	189 (5.7%)
	Post	154 (4.7%)	3129 (95.1%)	8 (0.2%)
When interviewing a student about an alleged threat, the student should be reassured that his/her statements are confidential (FALSE)	Pre	1086 (33.0%)	1938 (58.9%)	267 (8.1%)
	Post	76 (2.3%)	3213 (97.6%)	2 (0.1%)
If a student threatens an act of violence, immediate suspension is necessary (FALSE)	Pre	872 (26.5%)	2186 (66.4%)	233 (7.1%)
	Post	37 (1.1%)	3249 (98.7%)	5 (0.2%)
A safety plan should be implemented for a transient threat (FALSE)	Pre	1488 (45.25%)	1621 (49.3%)	182 (5.5%)
	Post	140 (4.3%)	3143 (95.5%)	8 (0.2%)
Violence in schools has increased over the past 10 years (FALSE)	Pre	2873 (87.3%)	323 (9.8%)	95 (2.9%)
	Post	513 (15.6%)	2775 (84.3%)	3 (0.1%)
School threat assessment involves determining the security of the school building and how students and staff can be protected from attack (FALSE)	Pre[1]	1981 (60.2%)	1043 (31.7%)	266 (8.1%)
	Post	296 (9.0%)	2990 (90.9%)	5 (0.2%)
Threat assessment is a kind of crisis response plan (FALSE)	Pre[1]	2294 (69.7%)	759 (23.1%	237 (7.2%)
	Post	157 (4.8%)	3130 (95.1%)	4 (0.1%)

Schools must be prepared to conduct an emergency threat assessment if a gunman is identified on grounds (FALSE)	Pre[1]	1407 (42.8%)	1510 (45.9%)	373 (11.3%)
	Post	222 (6.7%)	3068 (93.2%)	1 (0.0%)
Threat assessments should be conducted by a single well-trained and competent school staff member who consults with the school administer when needed (FALSE)	Pre[2]	510 (15.5%)	2638 (80.2%)	141 (4.3%)
	Post	54 (1.6%)	3237 (98.4%)	0 (0.0%)
One distinguishing feature of the CSTAG model is that it uses a 10-step decision tree (FALSE)	Pre[2]	959 (29.2%)	395 (12.0%)	1935 (58.8%)
	Post	464 (14.1%)	2818 (85.6%)	9 (0.3%)
The CSTAG model emphasizes problem-solving over disciplinary consequences (TRUE)	Pre[2]	2125 (64.6%)	80 (2.4%)	1084 (33.0%)
	Post	3259 (99.0%)	32 (1.0%)	0 (0.0%)
For every shooting in a school, there are an equal number of shootings outside of the school (FALSE)	Pre[2]	273 (8.3%)	2034 (61.8%)	982 (29.9%)
	Post	83 (2.5%)	3205 (97.4%)	3 (0.1%)
Most of the students who threaten to commit a homicide at school are suicidal (FALSE)	Pre[2]	612 (18.6%)	1815 (55.2%)	862 (26.2%)
	Post	199 (6.0%)	3080 (93.6%)	12 (0.4%)
One of the most common motives for a school homicide is gang conflict (TRUE)	Pre[2]	695 (21.1%)	1748 (53.1%)	846 (25.7%)
	Post	3146 (95.6%)	144 (4.4%)	1 (0.0%)
The three main pathways to homicidal violence are conflict, antisocial, and psychotic pathways (TRUE)	Pre[2]	2216 (67.4%)	192 (5.8%)	881 (26.8%)
	Post	3240 (98.5%)	50 (1.5%)	1 (0.0%)
Threat assessment relies on a statistical profile of the typical school shooter (FALSE)	Pre[2]	671 (20.4%)	1737 (52.8%)	881 (26.8%)
	Post	75 (2.3%)	3215 (97.7%)	1 (0.0%)
You cannot prevent something unless you have a reasonably good prediction that it is going to happen (FALSE)	Pre[2]	1034 (31.4%)	1913 (58.2%)	342 (10.4%)
	Post	261 (7.9%)	3029 (92.0%)	1 (0.0%)
In the CSTAG model, you cover five steps for each case (FALSE)	Pre[2]	853 (25.9%)	474 (14.4%)	1962 (59.7%)
	Post	540 (16.4%)	2745 (83.4%)	6 (0.2%)
A serious substantive threat typically involves a threat to fight someone (TRUE)	Pre[2]	921 (28.0%)	1872 (56.9%)	496 (15.1%)
	Post	2742 (83.3%)	541 (16.4%)	8 (0.2%)
The most important response to a substantive threat is to take protective action (TRUE)	Pre[2]	2764 (84.0%)	170 (5.2%)	355 (10.8%)
	Post	3153 (95.8%)	136 (4.1%)	2 (0.1%)
In many cases, a statement like, “I am going to kill you for that” can be resolved as a transient threat (TRUE)	Pre[2]	2270 (69.0%)	508 (15.4%)	511 (15.5%)
	Post	3119 (94.8%)	151 (4.6%)	21 (0.6%)
In the CSTAG model, understanding why the student made a threat is key to preventing the threat from being carried out (TRUE)	Pre[2]	2543 (77.3%)	85 (2.6%)	661 (20.1%)
	Post	3273	18	0

		(99.5%)	(0.5%)	(0.0%)
An effective school resource officer will actively enforce school discipline (FALSE)	Pre[2]	844 (25.7%)	2099 (63.8%)	346 (10.5%)
	Post	107 (3.3%)	3183 (96.7%)	1 (0.0%)
The mental health assessment of a student who has made a very serious substantive threat will match the student against the CSTAG profile (FALSE)	Pre[2]	1067 (32.4%)	421 (12.8%)	1801 (54.8%)
	Post	353 (10.7%)	2897 (88.0%)	41 (1.2%)
If a student receiving special education services makes a threat, the threat assessment team will make changes to the student's IEP (FALSE)	Pre[2]	605 (18.4%)	1822 (55.4%)	862 (26.2%)
	Post	309 (9.4%)	2950 (89.6%)	32 (1.0%)
In the Tarasoff case, the psychologist who warned the police that his client was threatening to kill his classmate was found to have failed in his duty (TRUE)	Pre[2]	488 (14.8%)	1119 (34.0%)	1682 (51.1%)
	Post	3077 (93.5%)	212 (6.4%)	2 (0.1%)
The Family Educational Rights and Privacy Act (FERPA) allows teachers to confide their personal observations of a student with others (TRUE)	Pre[2]	950 (28.9%)	1742 (53.0%)	597 (18.2%)
	Post	2904 (88.2%)	381 (11.6%)	6 (0.2%)
The Family Educational Rights and Privacy Act (FERPA) allows schools to maintain a threat assessment record that is separate from the student's educational record (TRUE)	Pre[2]	2081 (63.3%)	477 (14.5%0	731 (22.2%)
	Post	3193 (97.0%)	96 (2.9%)	2 (0.1%)
If a student is receiving special education services, the threat assessment team must work independently of the IEP team to maintain confidentiality (FALSE)	Pre[2]	882 (26.8%)	1694 (51.5%)	713 (21.7%)
	Post	228 (6.9%)	3054 (92.8%)	9 (0.3%)
When the threat assessment team notifies parents that their child has been threatened, they are careful not to reveal the name of the student who made the threat (FALSE)	Pre[2]	2644 (80.4%)	301 (9.2%)	344 (10.5%)
	Post	395 (12.0%)	2888 (87.8%)	8 (0.2%)
The CSTAG model is compatible with a zero tolerance approach to school discipline (FALSE)	Pre[2]	1017 (30.9%)	999 (30.4%)	1273 (38.7%)
	Post	35 (1.1%)	3256 (98.9%)	0 (0.0%)
The CSTAG team makes disciplinary decisions for students they evaluate (FALSE)	Pre[2]	848 (25.8%)	1270 (38.6%)	1171 (35.6%)
	Post	183 (5.6%)	3108 (94.4%)	0 (0.0%)
The CSTAG model makes minimal use of school exclusion (TRUE)	Pre[2]	1300 (39.5%)	328 (10.0%)	1661 (50.5%)
	Post	3192 (97.0%)	95 (2.9%)	4 (0.1%)
Under the CSTAG model, students should never be suspended from school (FALSE)	Pre[2]	98 (3.0%)	2052 (62.4%)	1139 (34.6%)
	Post	12 (3.7%)	3166 (96.2%)	3 (0.1%)
An evidence-based program should be supported by controlled studies (TRUE)	Pre[2]	2678 (81.4%)	107 (3.3%)	504 (15.3%)
	Post	3256 (98.9%)	34 (1.0%)	1 (0.0%)
Research has found the CSTAG model to be more comprehensive than other threat assessment models (TRUE)	Pre[2]	2071 (63.0%)	1177 (35.8%)	41 (1.2%)
	Post	3281 (99.7%)	8 (0.2%)	2 (0.1%)
	Pre[2]	1865 (56.7%)	64 (1.9%)	1360 (41.3%)

The CSTAG model is supported by controlled studies published in refereed journals (TRUE)	Post	3231 (98.2%)	60 (1.8%)	0 (0.0%)
A study found that there were no statistically significant differences in disciplinary and legal outcomes for Black, Hispanic, and White students who received a threat assessment (TRUE)	Pre[2]	621 (18.9%)	1556 (47.3%)	1112 (33.8%)
	Post	3078 (99.9%)	210 (6.4%)	3 (0.1%)

Note. Superscript corresponds to the number of participants who did not respond to this item.

Appendix B3: Online Level 2 Application Questions

Choose the best answer based on the limited information you have available, assuming no other information contradicts what is presented here. In an actual case you would have more information. (**Bold** answers are correct).

1. Damien told two girls to watch him in the parking lot when school is dismissed because he is going to bust up Jordan for disrespecting them. Following the CSTAG decision tree, which of these actions would you take first?
   - **a) Interview Damien (1,693, 98.1%)**
   - b) Make arrangements for Damien to be supervised when school is dismissed. (27, 1.6%)
   - c) Contact Damien's parents (5, 0.3%)
   - d) Advise Damien that he was being suspended from school for threatening to fight someone (1, 0.1%)

2. Damien says that he was just trying to impress the girls and has no intention of fighting anyone, and that he doesn't know Jordan. Jordan says that he and Damien have not gotten along since last year, and that he is worried Damien wants to fight him. What kind of threat is most likely?
   - a) No threat (4, 0.2%)
   - b) Transient threat (1,363, 79.0%)
   - **c) Serious substantive threat (335, 19.4%)**
   - d) Very serious substantive threat (24, 1.4%)

Based on what you have learned from Damien, Jordan, and the 2 girls, which action or actions would you take?

3. Suspend Damien from school
   - ___ Yes (22, 1.3%)
   - **___ No (1,704, 98.7%)**

4. Refer Damien for a mental health evaluation
   - __Yes (0, 0.0%)
   - **__No (1,704, 100.0%)**

5. Contact Damien's parents
   - **___ Yes (813, 47.1%)**
   - ___ No (913, 52.9%)

6. Supervise Damien so that he has no unsupervised contact with Jordan while he is under school supervision.
   - ___ **Yes (1,600, 92.7%)**
   - ___ No (126, 7.3%)

7. Warn Jordan and caution him to avoid contact with Damien until the conflict can be resolved
   - **___ Yes (1,490, 86.3%)**
   - ___ No (236, 13.7%)

8. Find out more about the conflict between the two boys and look for ways to resolve it.
   - ___ **Yes (1,690, 97.9%)**
   - ___ No (36, 2.1%)

9. Two weeks after the first threat assessment, there is a credible report that Damien is planning to shoot Jordan and a separate credible report that he asked someone for help obtaining a gun. When interviewed, Damien admitted that he was angry with Jordan but denied any intent to harm him. "I just don't like the guy and that's not against the law." What kind of threat is most likely?
   - a) No threat (0, 0%)
   - b) Transient threat (9, 0.5%)
   - c) Serious substantive threat (120, 7.0%)
   - d) **Very serious substantive threat (1,597, 92.5%)**

What action or actions in Damien's case are indicated by the CSTAG decision tree?

10. Seek a warrant for Damien's arrest
___ Yes (0, 0.0%)
___ No (1,726, 100.0%)

11. Refer Damien for expulsion from school.
___ Yes (23, 1.3%)
___ No (1,703, 98.7%)

12. Suspend Damien from school until he obtains an evaluation indicating that he is not dangerous
___ Yes (164, 9.5%)
___ No (1,526, 90.5%)

13. Contact Jordan and Jordan's parents to warn them of this new threat
___ Yes (927, 53.7%)
___ No (799, 46.3%)

14. Meet with Damien's parents
___ Yes (912, 52.8%)
___ No (814, 47.2%)

15. Refer Damien for a mental health assessment
___ Yes (1,536, 89.0%)
___ No (190, 11.0%)

16. Ask your law enforcement representative to investigate the threat
___ Yes (1,670, 96.8%)
___ No (56, 3.2%)

17. Suspend Damien from school or place him in a suspension center until a safety plan can be prepared.
___ Yes (1,448, 84.0%)
___ No (278, 16.1%)

18. Sixteen-year-old Martin posted a photo of himself wearing a black trenchcoat and holding a shotgun. Several students reported the post and said that Martin is creepy. When interviewed, Martin said that he is a big fan of an old movie called *The Matrix* and was just showing off. He offered to take down the post and apologize to anyone who was offended. Based on the information available, what kind of threat is most likely?
a) No threat (245, 14.2%)
b) Transient threat (1,249, 72.4%)
c) Serious substantive threat (105, 6.1%)
d) Very serious substantive threat (127, 7.4%)

19. In a meeting with the cheerleading coach, Mrs. Chua threatened to "burn down this school" if her daughter is not placed on the cheerleading squad. When interviewed the next day, Mrs. Chua apologized and said she had no intention to burn down the school, but that she would go to the school board and complain that the try-out process was unfair. Based on the information available, what kind of threat is most likely?
a) No threat (126, 7.3%)
b) Transient threat (1,532, 88.8%)
c) Serious substantive threat (51, 3.0%)
d) Very serious substantive threat (17, 1.0%)

You conducted a threat assessment with Charlie Brown, an otherwise well-behaved 8 year old who had threatened to shoot Lucy because she repeatedly tricked him when they played football. You determined the threat to be transient, but you were evidently wrong because Charlie Brown later brought a handgun to school and tried to shoot Lucy. For what reason or reasons could you be found liable for the violent outcome?

20. You do not have a doctoral degree
___ Yes (2, 0.1%)
___ No (1,724, 99.9%)

21. You did not make a record of your threat assessment
___ Yes (1473, 85.3%)
___ No (253, 14.7%)

22. You did not use the school district's threat assessment protocol
___ Yes (886, 51.3%)

___ No (840, 48.7%)
23. Lucy was gravely injured ___ Yes (113, 6.5%) **___ No (1,613, 93.5%)**

APPENDIX C: *SCHOOL THREAT ASSESSMENT IN FLORIDA: TECHNICAL REPORT OF 2020-2021 CASE DATA.*

Executive Summary

This is a preliminary report of case data from an ongoing project, *Statewide Implementation of School Threat Assessment in Florida* (NIJ 2020-RF-CX-002). Additional data collection and analyses are under way.

Prevalence of Threat Assessment Cases

- A sample of 21 Florida school districts and 2 lab schools reported case data for 1,102 student threat assessments across grades pre-K though 12. Most cases (50%) were in grades 5-9.
- Threats were made by students identified as White (59%), Black (25%), Hispanic (10%), and other racial/ethnic groups (6%). Approximately 76% were boys and 44% received special education services.

Threat Severity

- Most referrals for a threat assessment resulted in a determination that there was no threat (16.4%) or that the case could be readily resolved as transient (not serious) threat (61%). The remaining substantive cases were classified as serious (16%; a threat to fight) or very serious (6.6%; a threat to kill, rape, or use a lethal weapon).
- In 83% of the 621 threats for which outcome data were reported, there was no known attempt to carry out the threat.
- There were 69 threats (11.1%) judged by schools to have been averted when a student attempted to carry them out.
- There were 38 threats (6.1%) reported to have been carried out by the student. Only 3 (0.5%) resulted in serious injury.

Response to Student Threats

- Most students receiving a threat assessment were able to return to their original school (89%), with others transferred to an alternative school (7%), placed on homebound instruction (2.4%), or moved to a virtual school setting (4%).
- 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. In approximately a third (35%) of cases, the threat was resolved with the student giving an explanation or apology. Students were referred for school-based counseling (44%), conflict resolution/restorative groups (31%), mental health services (26%), hospitalization (.2%), or other services (more than one outcome is possible, numbers do not sum to 100%).
- Schools made limited use of out-of-school suspension (26%), in-school suspension (11%), detention after school (2%), or expulsion (2%).
- Law enforcement is included on the threat assessment team, but law enforcement actions are reserved for the most serious cases. A small percentage of students received a legal action, i.e., were charged with an offense (2%), arrested (.5%), placed in juvenile detention (.5%).

Comparison of Black, Hispanic, and White Students

- There were no statistically significant differences (Pearson chi-square test) in disciplinary and legal outcomes between Black and White students or between Hispanic and White students, except that Hispanic students were less likely than White students to receive a school transfer. A logistic regression controlling for additional factors found that the best predictors of disciplinary and legal outcomes were student grade and seriousness of the threat.

Comparison of Students in Special Education and General Education Programs

- There were no statistically significant differences (Pearson chi-square test) in disciplinary and legal outcomes between students in special education and general education programs.

These findings are generally consistent with findings for Virginia public schools after they implemented threat assessment in their public schools (Cornell & Maeng, 2020; Cornell et al., 2017; Cornell et al., 2018). A more comprehensive report will be prepared at the conclusion of this project.

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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.

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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 ongoing project examines threat assessment training and implementation, the kinds of threats identified, and whether threats were resolved without violence in Florida public schools. Of special interest is whether threat assessment is conducted without disproportionate negative consequences for students across diverse groups defined by race, ethnicity, and disability status. This mixed methods project has four broad research questions:

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

Our previous report addressed research question 1 (Maeng, Cornell, & Warren, 2021). This report is a preliminary analysis concerning research questions 2-4 based on threat assessment case data from the 2020-21 school year. Readers are cautioned that these results are based on a subset of Florida public schools that voluntarily submitted data and may not generalize to all Florida schools. Further, these results reflect a unique school year during the COVID-19 Pandemic in which many schools had modified schedules and environments and there were heightened concerns about the mental health of students and staff. We plan to analyze a larger sample from the 2021-22 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 2020-21 academic year. This was explicitly a voluntary request. Case data could be submitted through an electronic Qualtrics survey, as an emailed data file, or in paper format (Appendix A).

Many districts reported that they did not have sufficient staff or time to submit threat assessment case data on a voluntary basis during a stressful school year. We initially received partial data for 3,013 cases from 26 school districts and 2 lab schools. However, several districts submitted incomplete data (e.g., missing one or more of the following: race (n = 739), gender (n = 51), threat classification (n = 214), school responses (n =1,635). Six cases involved non-students and those cases were also excluded. 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 easily be merged. Several districts indicated that they plan to keep more complete records in the future since they now know what will be requested. Multiple districts reported that they will be able to provide data next year.

Therefore, the analytic sample was restricted to 1,102 cases in 21 school districts and 2 lab schools with data on student gender and race, threat classification, and school response.

In instances where schools submitted written descriptions of their actions (e.g., services, disciplinary actions, legal actions) these were reviewed and coded by the research team.

Results

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

Case Demographics

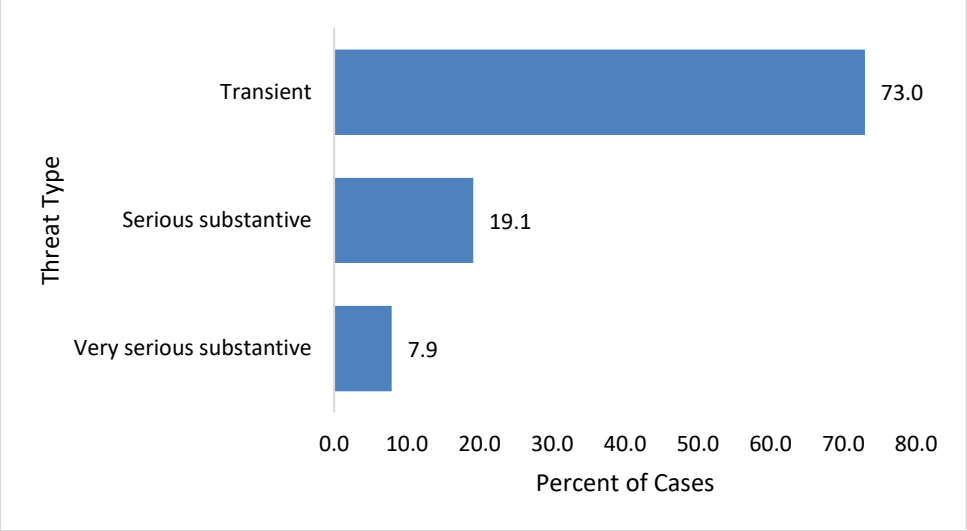
The sample was compared to data from the Florida Department of Education for the general enrollment of the 21 school districts and 2 lab schools. Boys made 76.1% of threats, although they represent 51.4% of the district population. The sample contained a higher proportion of Black and White students and a lower proportion of Hispanic students than the general enrollment. The sample also had a higher proportion of students with disabilities than the general enrollment.

	Sample (1,102 cases)		District enrollment (579,342 students)	
	n	Column %	N	Column %
Gender				
Male	839	76.1%	297,993	51.4%
Female	263	23.9%	281,288	48.6%
Race/Ethnicity				
Black	273	24.8%	115,971	20.0%
Hispanic	110	10.0%	175,829	30.3%
White	653	59.3%	239,047	41.3%
[1]Other	66	6.0%	42,930	7.4%
Disability Status				
Has IEP	480	43.6%	78,783	13.6%
Does not have IEP	600	54.4%	-	-
IEP status not reported	22	2.0%		

Note. Other race (sample) = 4% two or more races, 1.8% other race, 0.2% Asian

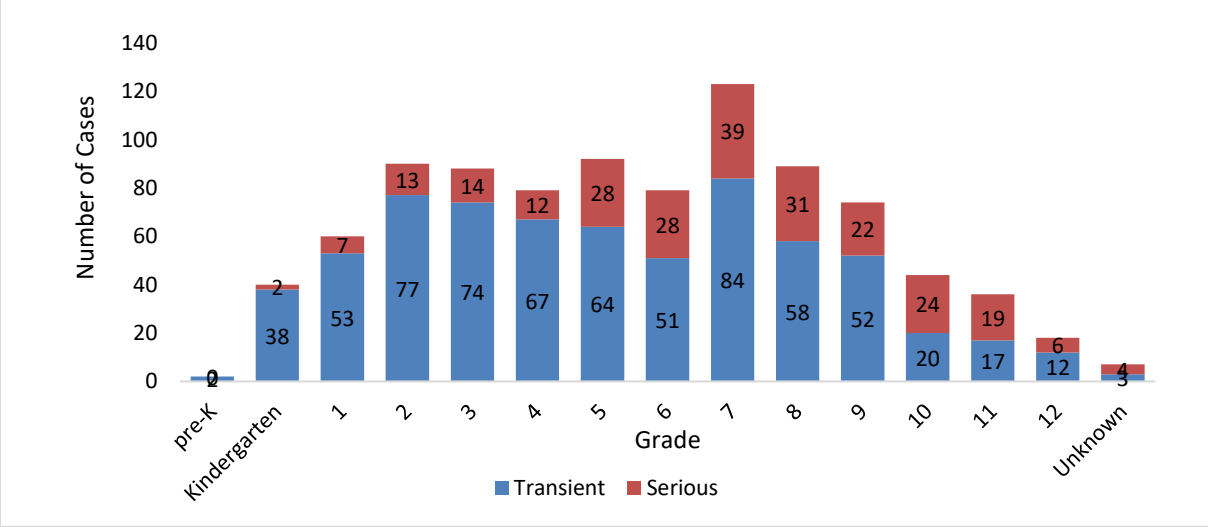
Threat Seriousness

Threat Classification	**Description**	**N = 1,102**
No threat	A potential threat was reported to the threat assessment team and determined not to meet the criteria for a threat	181
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.	672
Serious substantive threat	The threat is to assault, strike, or beat up someone and could not be resolved as a transient threat.	176
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.	73



Threat Severity (n = 921)

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 Severity by Grade (n = 921)

Threat Outcome

Schools recorded whether the threat was carried out for 621 cases. (We have asked that schools include this information in their threat assessment records in the future.) In this subsample, 514 threats were not attempted (82.8%). However, these results do not demonstrate that the threat assessment process prevented the threat from being carried out because there is no control group of threats made without a threat assessment. There is evidence from a survey of high school students that most threats between students are not carried out (Nekvasil & Cornell, 2012).

There were 69 threats (11.1%) judged by schools to have been averted when a student attempted to carry out a threat and was stopped from doing so. There were 38 threats (6.1%) judged by schools to

have been carried out by the student. These are threats that potentially represent a failure of the threat assessment process.

	All Schools (621 cases)	
	n	Column %
No attempt	514	82.8%
Averted	69	11.1%
Carried out	38	6.1%

Of threats carried out, 19 were transient, 11 were classified as serious substantive, and 7 were classified as very serious substantive. The 19 transient cases were judged not to be serious and should not have been attempted or carried out. Of the 19 transient cases, 10 were from the same school district and 5 were from one school and 4 were from another school in that district. Another 4 of these threats were from two different schools in the same district. Students who carried out transient threats were in grades K (n = 2), 2 (n = 4), 4 (n = 1), 6 (n = 1), 7 (n = 4), 8 (n = 5), and 10 (n = 2).

Of these 19 transient threats that were carried out, 4 resulted in no injury and 15 resulted in minor injuries. School responses included: apology (n = 13), conflict/resolution (n = 8), counseling (n = 10). Disciplinary actions included out-of-school suspension (n = 8), in-school suspension (n = 4), and transfer to a different school (n = 5). Five cases resulted in court charges.

Detailed information on these cases is 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". The threat assessment teams in these districts may benefit from more training in classifying threat cases or in implementing conflict resolution interventions.

	No attempt	Averted	Carried out	Total
Very serious substantive	24 (60%)	9 (22.5%)	7 (17.5%)	40 (100%)
Serious substantive	71 (64%)	29 (26.1%)	11 (9.9%)	111 (100%)
Transient	313 (87%)	28 (7.8%)	19 (5.2%)	360 (100%)

Of the 621 threats for which outcome data were available, three (0.48%) resulted in serious injury. These three threats were made by two 7th grade and one 8th grade student from three different schools. Two of the students were male and one student was female. One student had an IEP. One student was White, one was Black, and one was Hispanic. Threat assessment teams classified two of these threats as very serious substantive and one was classified as serious substantive. All three students received an

out-of-school suspension and one was expelled. Law enforcement was involved in all three cases. One student was arrested, two students were charged, and one student was incarcerated.

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 will examine what kinds of responses are associated with different kinds of cases, and whether those actions are associated with differential outcomes.

The number of services students received ranged from 0 to 8 with 20.4% of students receiving no services, 30.9% of students receiving 1 service, 16.6% receiving 2 services, 16% receiving 3 services, 12.3% receiving 4 services, and 3.9% of students receiving 5 or more services.

In almost half of cases, (44%) the student who made the threat received counseling services. In slightly over a third of cases (35.4%), the student who made the threat apologized for making the threat. The student who made the threat participated in conflict resolution/ mediation/restorative circle with the target of their threat in about 30% of cases. In 290 cases (26.3%) students received mental health services (i.e., MH evaluation, in/out of school, Baker Act, met with a school psychologist or social worker.)

"Other" actions taken by school (4.3%) included home visits, wellness/welfare checks, contacting Department of Child and Family Services, not allowing the child to have a backpack or requiring a clear backpack, change in lunch seating/silent lunch, teacher monitoring classwork, referral to art therapist, social skills instruction, change in bus seating, loss of privileges, removal from sports team.

	All Schools (1,102 cases)	
	n	Column %
Counseling	485	44.0%
Apology	390	35.4%
[1]Conflict resolution	332	30.1%
[2]Mental health services	290	26.3%
Parent meeting/conference	127	11.5%
Increase monitoring of subject student	109	9.9%
Other	47	4.3%
Behavior contract developed or reviewed	46	4.2%
Schedule change of subject student	44	4.0%
Safety plan developed or reviewed	42	3.8%
IEP developed or reviewed	41	3.7%
[3]Contact target	16	1.5%
[3] No contact order	12	1.1%
Restorative circle	8	0.7%

Note. Column percentages can exceed 100% because more than one category could be checked. [1] Mental health services include: MH evaluation, MH services in or out of school, Baker Act, met with a school psychologist or social worker. [2] Not included in count of services to student.

Discipline Outcomes

About a third of students (37%) received formal disciplinary consequences, but there was a wide range of actions. Out-of-school suspension was the most common disciplinary response to a student making a threat and occurred in about a quarter of (26.1%) of the cases. In-school suspension was used in 10.9% of cases; 1.6% of students were expelled, and detention was used in only 1.5% of cases. A reprimand was reported in only 7% of cases.

	All TA Cases (n = 1,102)	
	n	Column %
Suspension (out of school)	288	26.1%
Suspension (in school)	120	10.9%
Reprimand/Warning	77	7.0%
Expelled	18	1.6%
Detention (including time out/lunch detention)	16	1.5%
Bus Suspension	16	1.5%
Corporal Punishment	3	0.3%
Suspension (unknown whether ISS or OSS)	3	0.3%
None	691	62.7%

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 available for consultation. They have active involvement in the most serious cases. Only 2.5% (n = 28) cases resulted in legal action (i.e., charge, arrest, placement in juvenile detention). Students were charged in 2.1% of cases, arrested in 6 (0.5%) of cases, and placed in juvenile detention in 6 (0.5%) cases.

	All TA Cases (n = 1,102)	
	n	Column %
Student charged with offense by law enforcement	23	2.1%
Student arrested	6	0.5%
Student incarcerated/placed in juvenile detention	6	0.5%
[1]Other	6	0.5%
None	1065	96.6%

Note. Column percentages can exceed 100% because more than one category could be checked. [1] In 3 cases, the school indicated a legal action was taken, but did not specify what in 3 cases the school indicated "DJJ intervened, probation & mentor".

School Placement

Most students (88.7%) were able to return to their school following a threat assessment, but others (n = 112) were transferred to an alternative school (6.9%), placed on homebound instruction (2.4%), or placed in a virtual school setting (3.5%). Very few students had a change in residence that placed them in a different school (0.4% of students had a parent who withdrew them from school; 0.2% of students were hospitalized resulting in a placement change).

	All Schools (1,102 cases)	
	n	Column %
No change	990	89.8%
Transferred to alternative school	76	6.9%
Placed on homebound instruction	26	2.4%
Placed in a virtual school setting	39	3.5%
Parent withdrew student from school	4	0.4%
Student was hospitalized	2	0.2%
Other	19	1.9%

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

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

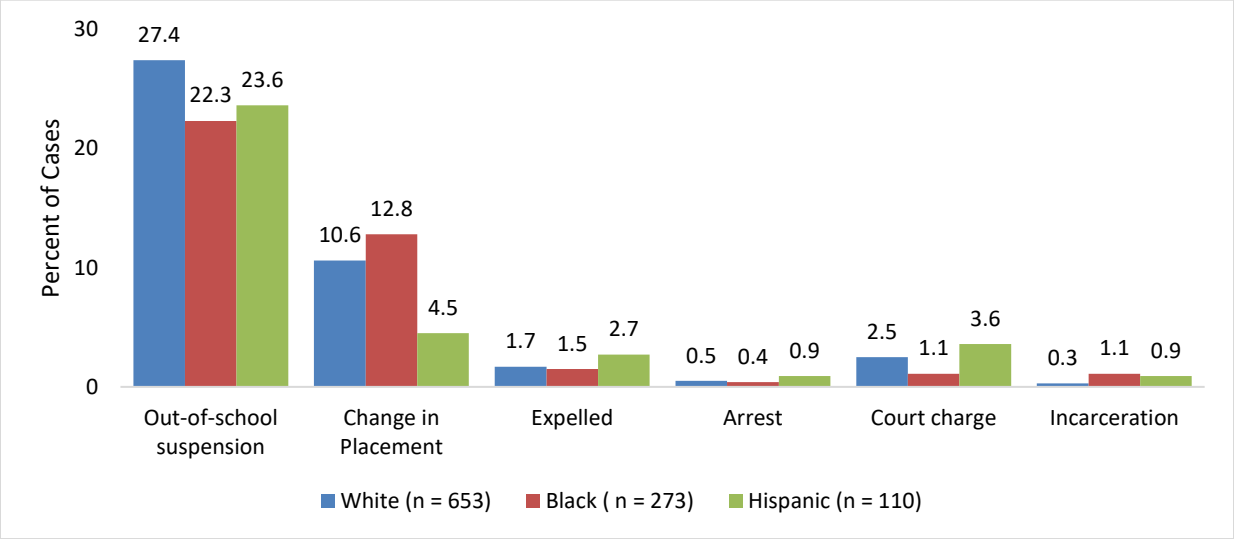
To investigate this question, we compared three groups of students: Black, non-Hispanic students (n = 273); Hispanic students (regardless of race; n = 110), and White, non-Hispanic students (n = 653). We conducted two kinds of statistical analyses on these groups. The first set of analyses used Pearson chi-square tests to examine the association between student group and disciplinary and legal outcomes. 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.

The second set of analyses used logistic regression to examine the association between student group and disciplinary outcomes, controlling for other potential confounding variables of student grade, gender, threat classification, and special education status. These analyses also accounted for the nesting of students in school districts to control for possible district effects.

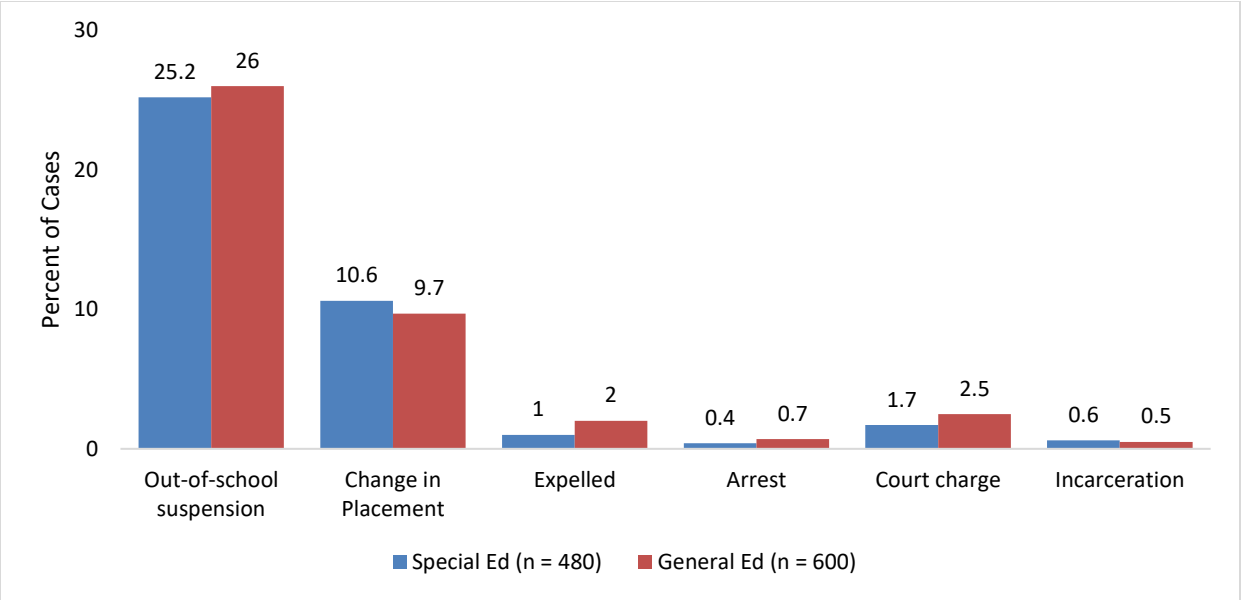
There were no statistically significant differences (Pearson chi-square) in disciplinary and legal outcomes by race and ethnicity except that Hispanic students were less likely than White students to receive a placement change. In other words, there was no disparity between Black and White students who received a threat assessment in whether they were suspended, transferred, or expelled from school, or whether they received a legal action. Similarly, there was no disparity between Hispanic and White students in whether they were suspended, expelled from school, or received a legal action. However, White students (10.6%) were more likely than Hispanic students (4.5%) to receive a placement change.

Outcome	Received Consequence?	Black	Hispanic	Other	White	[1] c^2 Black v White	[1] c^2 Hispanic v White	[1] c^2 Other v White
Suspended out of school	Yes	61	26	22	179	2.6	.68	1.0
	No	212	84	44	474			
Transferred out of school	Yes	35	5	3	69	.98	3.9*	2.4
	No	238	105	63	584			
Expelled from school	Yes	4	3	0	11	.06	.14	.29
	No	269	107	66	642			
Arrested	Yes	1	1	1	3	.00	.00	.05
	No	272	109	65	650			
Court charges	Yes	3	4	0	16	1.7	.16	.72
	No	270	106	66	637			
Incarceration	Yes	3	1	0	2	2.3	.87	.00
	No	270	109	66	651			

Note. *p < .05, continuity correction reported in comparisons where one or more expected cell count < 5.



Disciplinary Outcomes by Race (n = 1,102)



Disciplinary Outcomes by Special Education Status (n = 1,080)

In addition to Pearson chi-square, we conducted logistic regressions for each disciplinary or legal action using independent variables of student age, gender, seriousness of threat (4-point scale ranging from not a threat to very serious substantive threat), three dichotomous race/ethnicity variables (comparing Black, Hispanic, and Other students to White students), and special education (Has IEP yes/no). To account for the non-independence of cases within districts, we used the equivalent of group mean centered predictors together with cluster robust standard errors (Huang & Li, 2021).

Results of the logistic regression analysis were consistent with the chi-square analyses with some additional findings. Older students and students who made more serious threats were more likely to receive suspension, expulsion, change in placement, and legal action. Male students were more likely to receive an expulsion or legal action than female students. Race was not predictive of most outcomes; however, consistent with the Pearson chi-square results, White students were more likely to have a change in placement than Hispanic students. Also consistent with the Pearson chi-square results, special education status was not associated with disciplinary or law enforcement outcomes.

Logistic Regression: School Response

	Out-of-school suspension		Expulsion		[2] Legal Action		Placement Change	
	O.R.	CR S.E.	O.R.	CR S.E.	O.R.	CR S.E.	O.R.	CR S.E.
Age	1.14*	.04	1.35***	.09	1.22*	.09	1.13*	.05
Has IEP	.78	.16	.56	.49	.64	.70	1.08	.35
Female	.75	.17	.11*	.93	3.4*	.51	.94	.36
Threat Classification	1.92***	.10	3.21***	.35	3.5***	.23	2.26***	.23
[1] Race: Black	.85	.17	1.54	.52	.72	.44	.82	.34
[1] Race: Hispanic	.96	.31	.72	.80	1.99	.50	.35*	.50
[1] Race: Other	1.4	.18	.00***	.75	.75	1.38	.46	.72

Note. O.R. is odds ratio, CR S.E. is cluster robust standard error, * significant at $p < .05$, ** significant at $p < .01$, ***significant at $p < .001$. [1] White is the reference group. [2] Legal action includes court charge, arrest, incarceration.

In summary, these results found no evidence that students of color or students in special education programs were treated more punitively than other students in outcomes following a threat assessment in our sample of Florida cases.

Threat Classification and Outcomes

	Out-of-school suspension	Expulsion	Placement Change	Arrest	Court Charge	Incarceration
Very serious substantive (n = 73)	28	7	23	3	5	4
Serious substantive (n = 176)	70	5	35	1	9	2
Transient (n = 672)	167	3	43	1	8	0
No threat (n = 181)	23	3	11	1	1	0
Total	288	18	112	6	23	6

Threat Classification and Demographics

	Male	Female	Has IEP	Race: White	Race: Black	Race: Hispanic	Race: Other
Very serious substantive (n = 73)	58	15	35	33	26	10	4
Serious substantive (n = 176)	131	45	93	87	57	20	12
Transient (n = 672)	515	157	286	424	140	65	43
No threat (n = 181)	135	46	66	109	50	15	7
Total	839	263	480	653	273	110	66

Grade and Outcomes

Grade	Out-of-school suspension	Expulsion	Placement Change	Arrest	Court Charge	Incarceration
preK	0	0	0	0	0	0
Kindergarten	5	0	0	0	0	0
1	11	0	2	0	0	0
2	13	0	2	0	0	0
3	27	0	7	0	0	0
4	20	1	4	0	0	0
5	25	1	10	0	0	0
6	30	2	11	0	3	0
7	41	2	15	2	8	0
8	39	3	22	1	7	1
9	28	4	9	1	1	2
10	24	1	11	1	2	2
11	15	2	15	1	1	1
12	7	9	3	0	1	0
Unknown	3	1	1	0	0	0
Total	288	18	112	6	23	6

Next Steps

These preliminary findings are based on 21 of Florida's 67 school districts and 2 of the 6 lab schools who provided data for the 2020-21 school year. We plan to revise the survey used to collect case data. Revisions will be informed by feedback from our advisory board and stakeholders at the Florida Department of Education Our plan is to examine a larger and more representative sample for the 2021-22 school year.

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Appendix C1: Case Record Survey

Threat Case Report

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.

School district _____

School name _____

School affiliation of person making threat ❑Student ❑Parent ❑Staff ❑Other_____

Affiliation status ❑Current (student, parent, or staff) or ❑ Former (not currently a student, parent, or staff)

Demographics of person making threat ❑ Male ❑ Female ❑ Other _____

Age _____

Race (choose all that apply) ❑ American Indian/Alaska Native ❑ Asian ❑ Black/African American ❑ Native Hawaiian/Pacific Islander ❑ White ❑ Other Race

Hispanic or Latinx ❑ Yes ❑ No

Grade (if person making threat is a current student) preK K 1 2 3 4 5 6 7 8 9 10 11 12 NA

Individual Educational Program (IEP) (**(if person making threat is a current student)** ❑ Yes ❑ No

Section 504 Plan (if person making threat is a current student) ❑ Yes ❑ No

Eligible for Free/Reduced Price Meals (if person making threat is a current student) ❑ Yes ❑ No

Person(s) threatened ❑ one person threatened ❑ more than one person threatened

Who threatened (check all that apply) ❑ student ❑ teacher ❑ school staff member ❑ other, describe____

Threat classification ❑ No Threat ❑ Transient ❑ Serious Substantive ❑ Very Serious Substantive

Threat outcome

❑ Threat not attempted ❑ Threat attempted but averted (e.g., count as averted if no one assaulted) ❑ Threat carried out (e.g., count if carried out if anyone is assaulted, regardless of severity)

Most serious injury to person(s) threatened (only answer when threat carried out):

❑ assault with no injury ❑ minor injury (e.g., bruise, bloody nose) ❑ serious injury (e.g., broken bone, hospitalization)

Social-Behavioral Outcomes for person making threat (if person making threat is a current student)

❑ Person apologized for threat

❑ Person participated in some form of conflict resolution or mediation

❑ Person participated in counseling or mental health services (beyond conflict resolution or mediation)

Consequences for person making threat, (if person making threat is a current student) (check all that apply)

- ❑ Referral for counseling, conflict resolution, or mental health services (includes behavior plans or interventions)
- ❑ In-school suspension for ___ days
- ❑ Out-of-school suspension for ___ days
- ❑ Transfer to a different school
- ❑ In-home instruction, including online program
- ❑ Expulsion
- ❑ Arrest by law enforcement
- ❑ Incarceration (e.g., juvenile detention or jail)
- ❑ Charges in juvenile or adult court
- ❑ Other, describe _____

End of year academic status (if person making threat is a current student)

- ❑ 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)

Appendix C2: Districts in Sample

	Number of Cases	Percent
District 1	119	10.8
District 2	10	.9
District 3	1	.1
District 4	223	20.2
District 5	1	.1
District 6	18	1.6
District 7	10	.9
District 8	24	2.2
District 9	3	.3
District 10	1	.1
District 11	29	2.6
District 12	12	1.1
District 13	86	7.8
District 14	6	.5
District 15	7	.6
District 16	256	23.2
District 17	84	7.6
District 18	49	4.4
District 19	68	6.2
District 20	17	1.5
District 21	1	.1
District 22	28	2.5
District 23	49	4.4
Total	1102	100.0

APPENDIX D: *SCHOOL THREAT ASSESSMENT IN FLORIDA: TECHNICAL REPORT OF 2021-2022 CASE DATA.*

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Table of Contents

Executive Summary 91
Acknowledgements 94
Goals and Objectives 95
Methods 96
Sample 96
Results 97
Case Demographics 97
Cases Per District 99
Threat Classification 102
Threat Attempts 104
Services Provided 107
Discipline Outcomes 108
Law Enforcement Outcomes 109
School Placement 109
Comparison of Virginia and Florida 110
End-of Year Academic and Behavioral Status 110
Disciplinary Outcomes by Race and Ethnicity 113
Disciplinary Outcomes by Disability 118
Conclusions and Recommendations 121
References 129
Appendix A: Case Record Survey 131
Appendix B: Cases Per District 49
Appendix C: Analysis without Outlier Districts 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.

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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.

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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:

9. What are stakeholder reactions to training and implementation of threat assessment in their school?
10. What are the characteristics of threat assessments conducted in Florida public schools?
11. What relationships exist among academic, disciplinary, and legal outcomes for students receiving a threat assessment?
12. 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 %
Gender				
Male	16,557	71.6%	1,284,161	50.6%
Female	5,753	24.9%	1,219,613	48.0%
Race/Ethnicity				
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%
[1]Other	895	4.0%	183,061	7.2%
Disability Status				
[2]Has IEP	7,643	33.0%	370,089	14.6%
Does not have IEP	13,747	59.4%	2,167,647	85.4%
[3]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. [1]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. [2]IEP status not reported for n = 1,744 (7.5%) of students in sample, [3] 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.

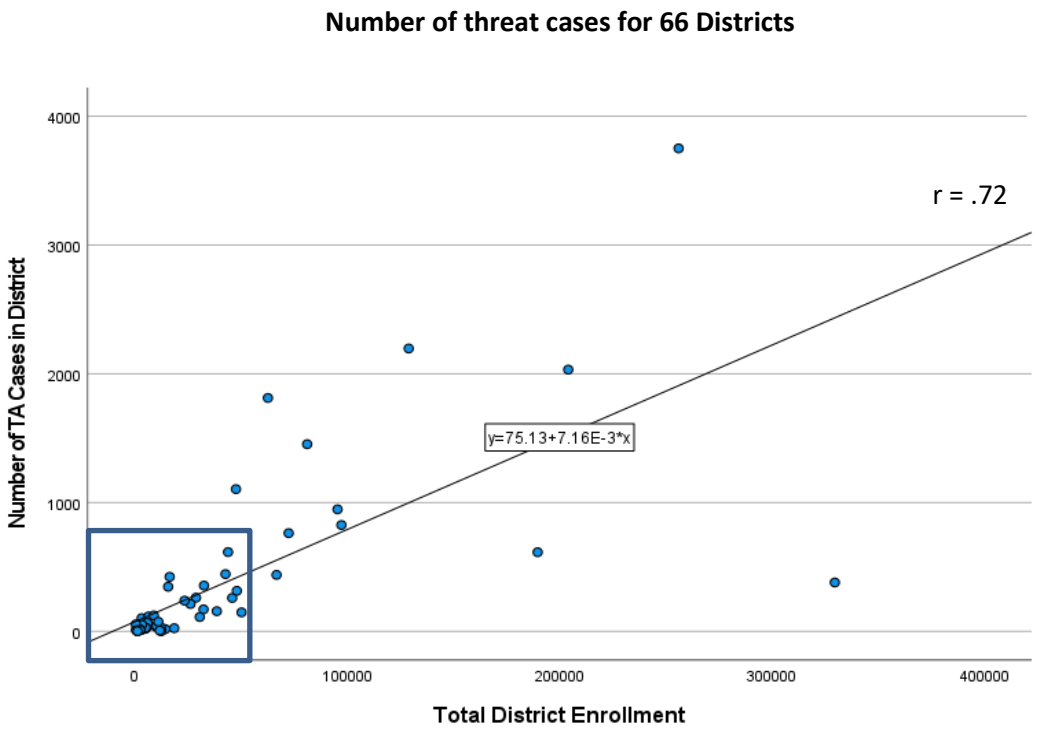
Another potential benefit of threat assessment is that, if the threat is serious, the referral can be a means of preventing violence and identifying a student's need for services. Students with disabilities might engage in higher rates of threatening behavior because of frustrations and conflicts associated 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

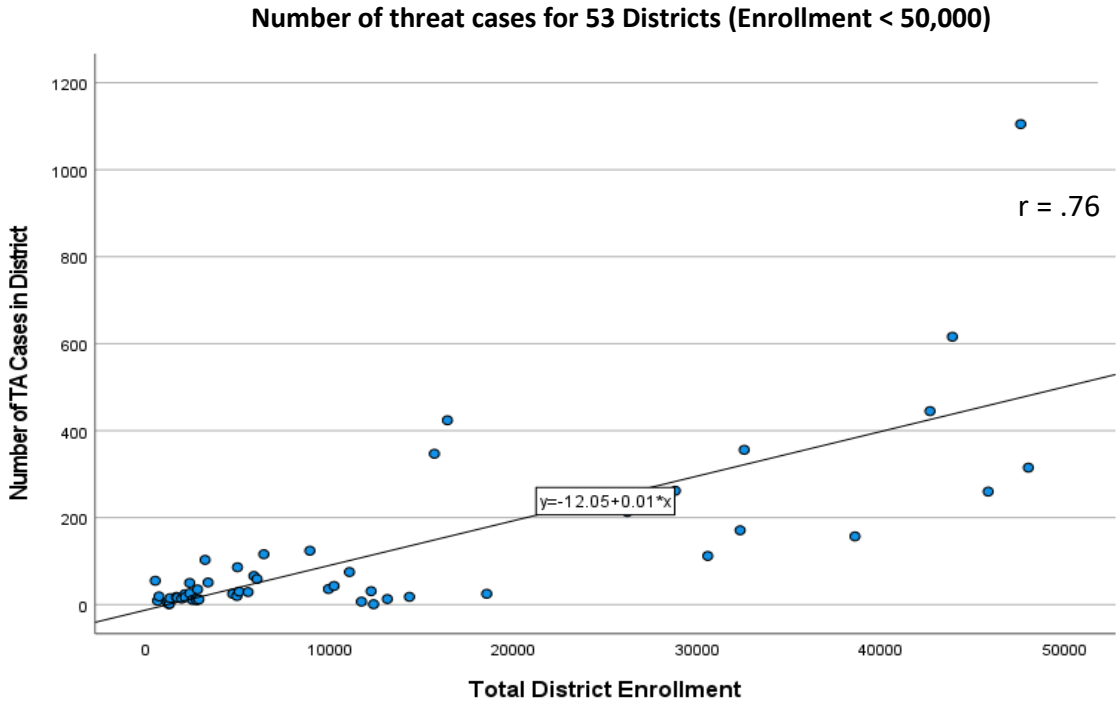
The percent of cases reported relative to district enrollment varied across districts. To protect the confidentiality of districts, the table in Appendix B presents for each district or specialty school the number of threat cases, approximate enrollment, and the approximate percentage of the students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



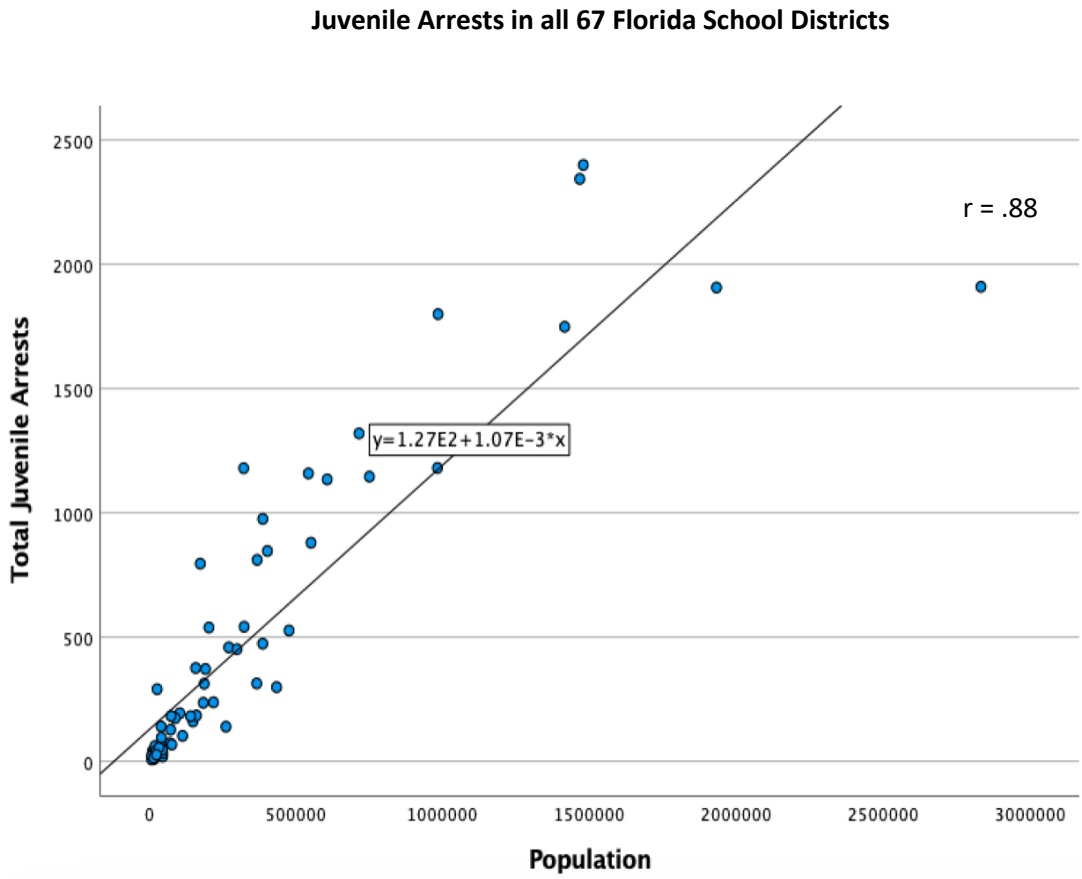
The second scatterplot shows a close-up of the districts and schools with enrollment < 50,000 (found in the box in the first scatterplot).



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.



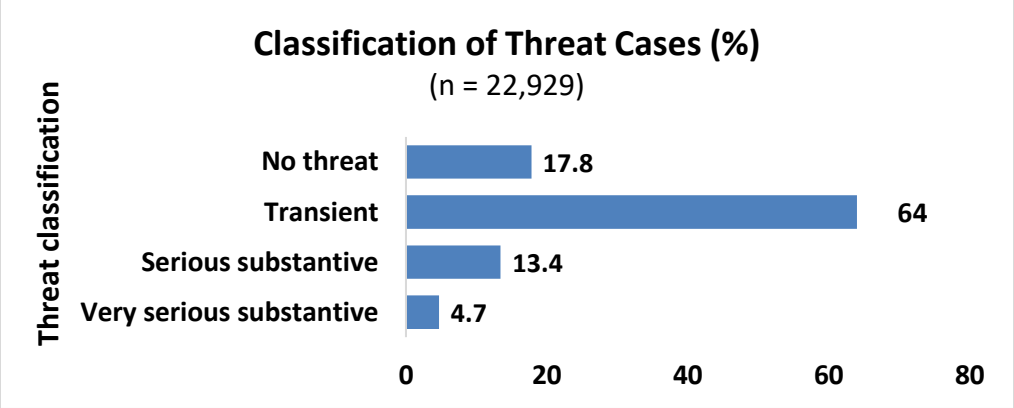
Threat Classification

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).

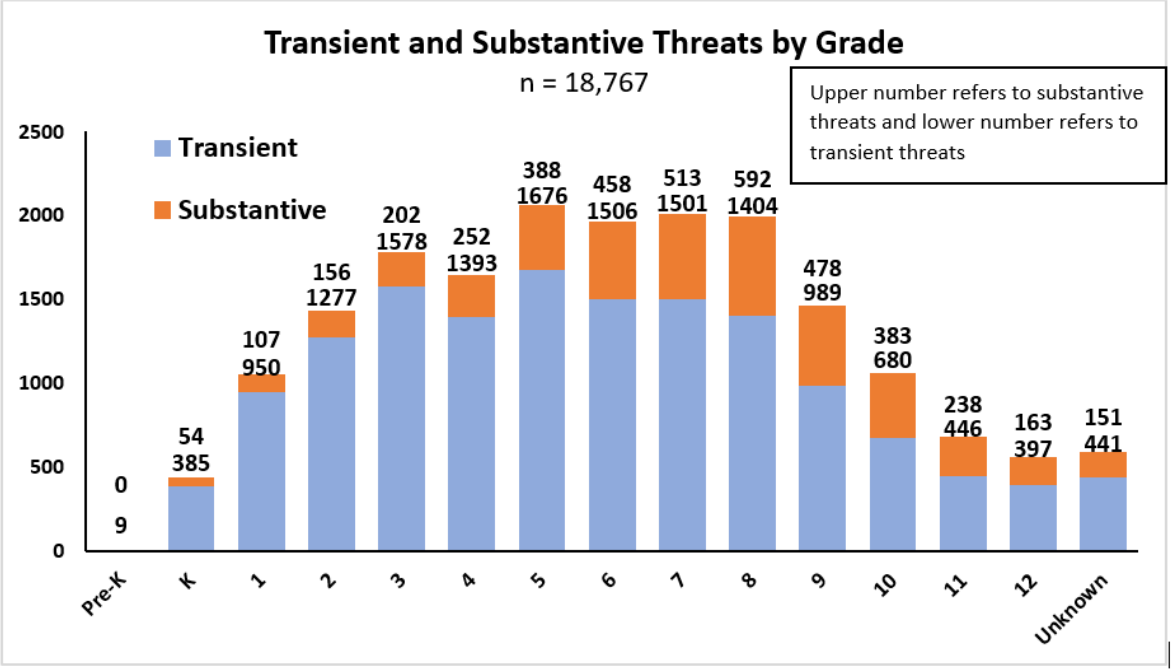
Threat Classification	**Description**	**N = 22,929**
No threat	A potential threat was reported to the threat assessment team and determined not to meet the criteria for a threat	4,087 (17.8%)
Transient threat	The threat is an expression of humor, rhetoric, anger, or frustration that can be resolved with 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).

	All Schools (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.

	No attempt n (row %)	Averted n (row %)	Carried out n (row %)	Total 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%)
Total	12,595	911	839	14,345

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.

	All Schools (23,134 cases)	
	n	Column %
Parent meeting/conference	10,440	45.1
Mental health services[1]	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. [1] 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.

	All TA Cases (n = 23,134)	
	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.

	All TA Cases (n = 22,694)	
	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[1]	2,497	11.0
None	19,659	86.6

Note. Column percentages can exceed 100% because more than one category could be checked. [1] These cases include those in which the district indicated “law enforcement consulted”.

School Placement

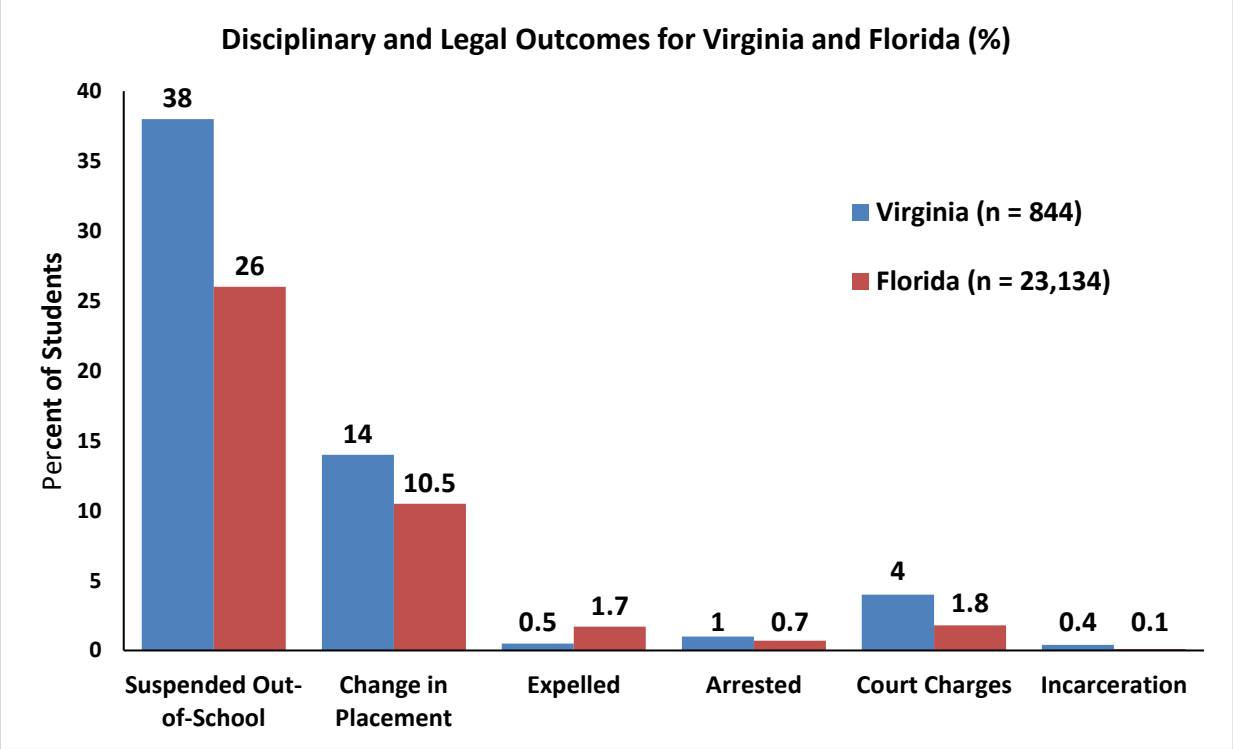
Five districts did not provide placement change information, resulting in a sample of 17,130 cases with school placement information. Most students (90%) were able to return to their school following a threat assessment, but others (n = 898) were transferred to an alternative school (5.2%), placed on 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 9th and 12th 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 the sample. This resulted in little change in findings.

Logistic Regression Results: Disciplinary and Legal Outcomes

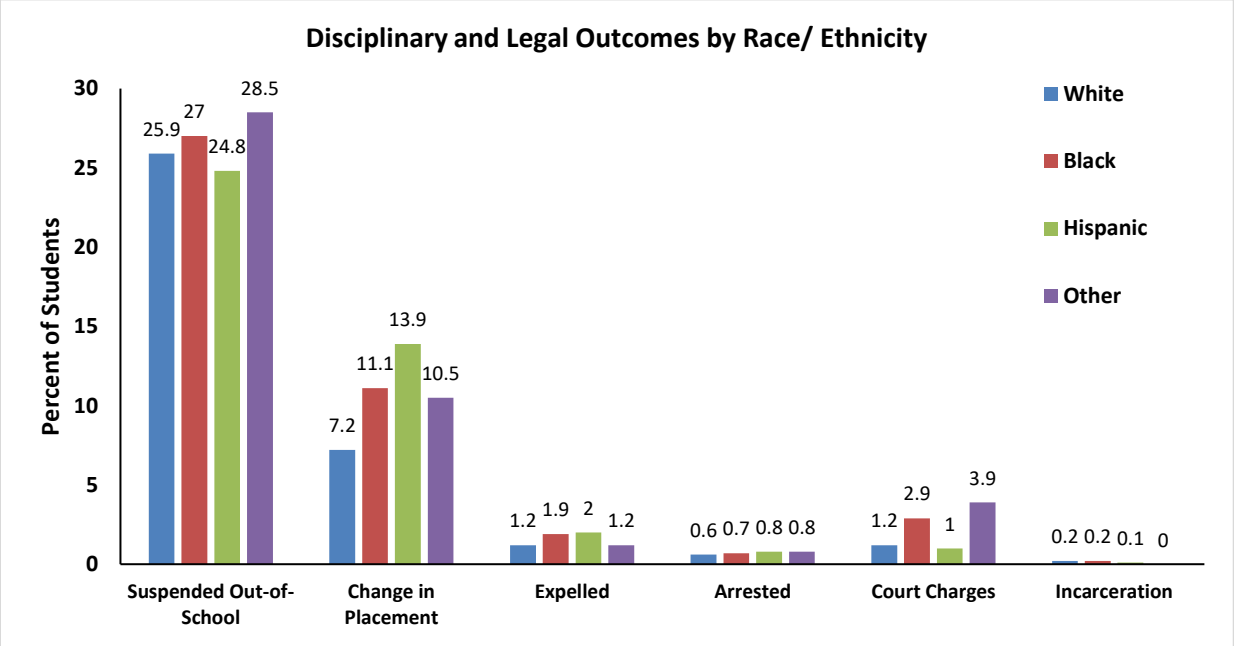
	OSS (n = 23,134) *OR* (CI)	Expulsion (n = 23,134) *OR* (CI)	Legal Action[2] (n = 22,694) *OR* (CI)	Placement Change (n = 17,130) *OR* (CI)
Elementary	0.550***	0.485**	0.789	0.495***
	(0.427, 0.709)	(0.287, 0.819)	(0.429, 1.450)	(0.368, 0.667)
High	1.268**	1.585**	1.782***	1.337*
	(1.071, 1.500)	(1.126,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

Note. OR is odds ratio, CI is 95% confidence interval, * significant at $p < .05$, ** significant at $p < .01$, ***significant at $p < .001$. [1] White is the reference group. [2] 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.stml).

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.

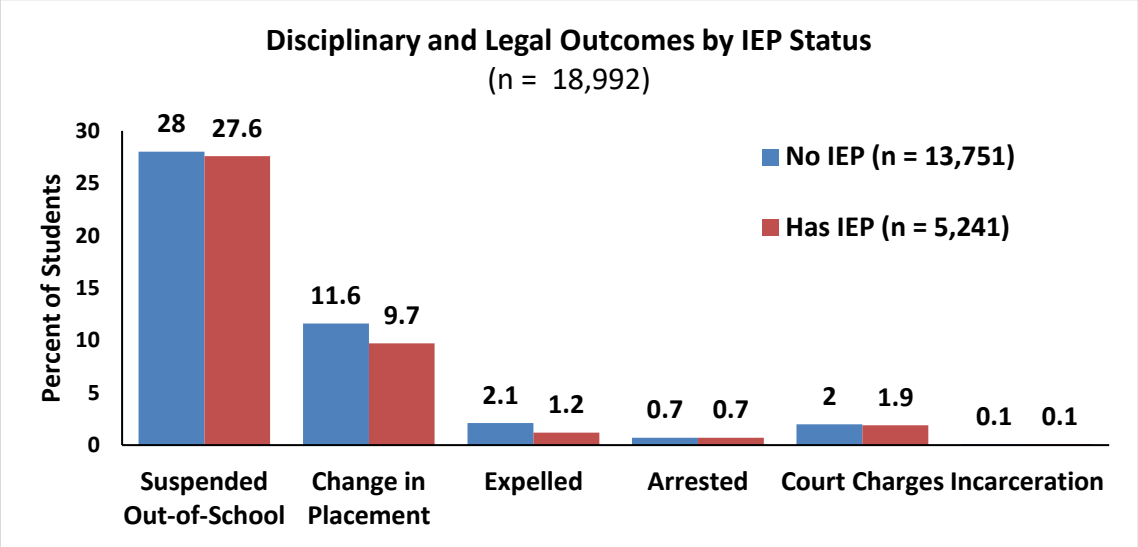
Law Enforcement Action. The unadjusted percentages of students who received a law enforcement action (i.e., arrest, charge, incarceration) following a threat assessment were 1.8% for White students, 3.6% for Black students, and 1.8% for Hispanic students. When statistically adjusted for the other

variables, the adjusted percentages were 2.4% for White students, 2.5% for Black students, and 2.5% for Hispanic students.

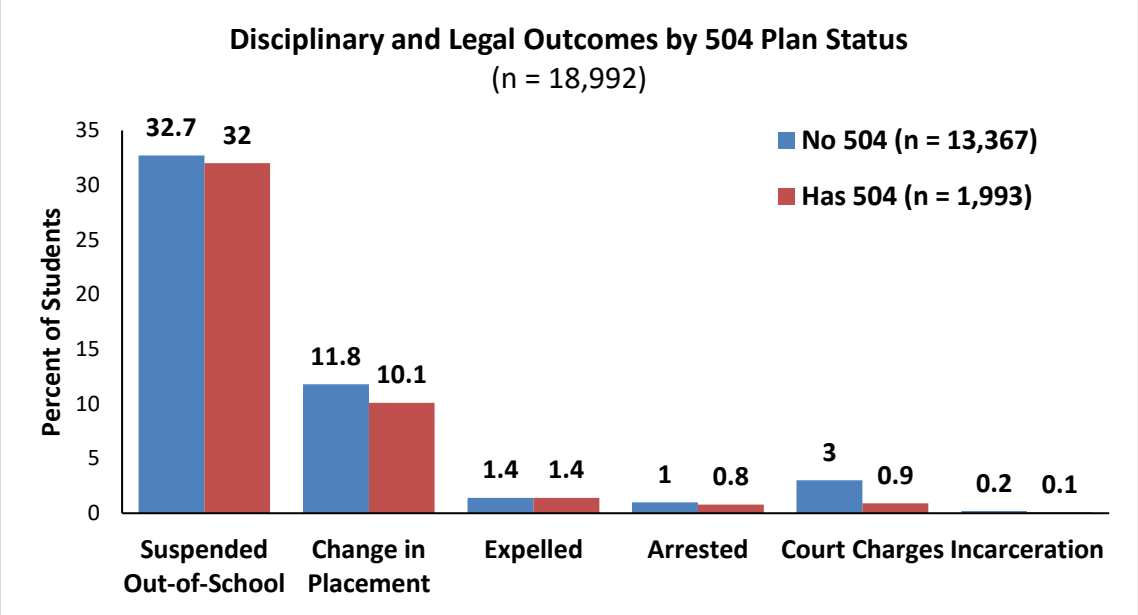
Because of their low frequency, the law enforcement actions of arrest, court charges, and incarceration were combined into a single measure that would be more likely to detect meaningful group differences in the logistic regression. There was no statistically significant difference between Black and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

Outcome	Received Consequence?	Has IEP	Does not have IEP	IEP status unknown	Has 504 Plan	Does not have 504 Plan	504 Plan status unknown
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.stml). 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.

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Appendix D1: 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.

School district _____

School name _____

School affiliation of person making threat ❑Student ❑Parent ❑Staff ❑Other_____

Affiliation status ❑Current (student, parent, or staff) or ❑ Former (not currently a student, parent, or staff)

Demographics of person making threat ❑ Male ❑ Female ❑ Other _____

Age _____

Race (choose all that apply) ❑ American Indian/Alaska Native ❑ Asian ❑ Black/African American ❑ Native Hawaiian/Pacific Islander ❑ White ❑ Other Race

Hispanic or Latinx ❑ Yes ❑ No

Grade (if person making threat is a current student) preK K 1 2 3 4 5 6 7 8 9 10 11 12 NA

Individual Educational Program (IEP) (**(if person making threat is a current student)** ❑ Yes ❑ No ❑ Unknown

Section 504 Plan (if person making threat is a current student) ❑ Yes ❑ No ❑ Unknown

Eligible for Free/Reduced Price Meals (if person making threat is a current student) ❑ Yes ❑ No ❑ Unknown

Person(s) threatened ❑ one person threatened ❑ more than one person threatened

Who threatened (check all that apply) ❑ student ❑ teacher ❑ school staff member ❑ other, describe____

Threat classification ❑ No Threat ❑ Transient ❑ Serious Substantive ❑ Very Serious Substantive

Threat outcome

❑ Threat not attempted (person made no physical attempt to carry out the threat)

❑ Threat attempted but averted (person made physical effort to carry out the threat but was stopped before anyone was assaulted)

❑ Threat carried out (person assaulted someone, regardless of severity)

Most serious injury to person(s) threatened (only answer when threat carried out):

❑ assault with no injury ❑ minor injury (e.g., bruise, bloody nose) ❑ serious injury (e.g., broken bone, hospitalization)

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 D2: 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 D3: 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[2] (n = 18,563)** ***OR*** **(CI)**	**Placement Change (n = 16,750)** ***OR*** **(CI)**
Elementary	0.529***	0.444*	0.783	0.432***
	(0.409, 0.682)	(0.233, 0.848)	(0.423, 1.451)	(0.344, 0.543)
High	1.287*	1.782**	1.950***	1.375*
	(1.058, 1.566)	(1.175, 2.700)	(1.406, 2.704)	(1.045, 1.810)
Grade Unknown	0.621*	1.111	0.864	0.978
	(0.392, 0.983)	(0.375, 3.292)	(0.443, 1.685)	(0.653, 1.464)
Has IEP	0.948	0.391***	0.956	0.831
	(0.833, 1.078)	(0.256, 0.596)	(0.806, 1.134)	(0.605, 1.142)
IEP Unknown	0.531	0.449	1.345	0.310
	(0.159, 1.775)	(0.052, 3.908)	(0.690, 2.619)	(0.081, 1.189)
Has 504 plan	1.105	0.555	0.724*	0.958
	(0.964, 1.266)	(0.242, 1.274)	(0.556, 0.942)	(0.816, 1.126)
504 plan Unknown	0.885	3.689	0.753*	0.888
	(0.650, 1.205)	(0.718, 18.948)	(0.569, 0.997)	(0.418, 1.887)
Race: Black[1]	1.232	1.433***	0.944	1.327**
	(0.998, 1.521)	(1.157, 1.776)	(0.799, 1.115)	(1.095, 1.606)
Ethnicity: Hispanic[1]	1.196**	1.292	1.030	1.284*
	(1.050, 1.362)	(0.926, 1.804)	(0.826, 1.285)	(1.047, 1.575)
Race: Other[1]	0.964	1.246	1.367*	1.353**
	(0.778, 1.194)	(0.682, 2.275)	(1.013, 1.846)	(1.077, 1.700)
Race: Unknown[1]	1.059	1.500	0.825	1.040
	(0.885, 1.269)	(0.801, 2.809)	(0.571, 1.194)	(0.687, 1.576)
Receives FRPM	1.225	0.982	1.043	0.962
	(0.988, 1.520)	(0.780, 1.236)	(0.861, 1.264)	(0.693, 1.337)
FRPM Unknown	1.263	0.315*	1.251	1.522*
	(0.992, 1.608)	(0.114, 0.867)	(0.846, 1.851)	(1.053, 2.198)
Female	0.885***	0.915	1.309***	1.028
	(0.828, 0.946)	(0.713, 1.175)	(1.133, 1.511)	(0.907, 1.165)
Gender Unknown	0.812	1.004	0.785	0.596***

	OSS (n = 19,003) *OR* (CI)	Expulsion (n = 19,003) *OR* (CI)	Legal Action[2] (n = 18,563) *OR* (CI)	Placement Change (n = 16,750) *OR* (CI)
	(0.480, 1.372)	(0.538, 1.872)	(0.605, 1.019)	(0.464, 0.765)
Transient Threat	1.436	1.046	0.536***	1.536*
	(0.843, 2.444)	(0.494, 2.217)	(0.400, 0.719)	(1.080, 2.186)
Serious Substantive Threat	3.747***	5.462***	0.996	5.812***
	(1.971, 7.125)	(3.028, 9.854)	(0.472, 2.100)	(4.426, 7.633)
Very Serious Substantive Threat	3.804***	17.035***	2.528	10.581***
	(1.732, 8.357)	(9.247, 31.383)	(0.653, 9.778)	(6.577, 17.021)
Threat Classification Unknown	0.483	0.005	0.945	0.642
	(0.153, 1.529)	(0.000003, 7.954)	(0.451, 1.977)	(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 $p < .001$. [1] White is the reference group. [2] 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 *OR*s that were statistically significant in the original analyses are statistically significant in the analyses above and the *OR*s that were not statistically significant in the original analyses are not statistically significant in the analyses above, with two exceptions. For legal actions, the *OR*s 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.

APPENDIX E: PUBLICATIONS AND PRESENTATIONS

Publications

Cornell, D., & Maeng, J.L. (2024). *School Threat Assessment Toolkit*. National Center for School Safety https://www.nc2s.org/resource/school-threat-assessment-toolkit/

Maeng, J.L., Cornell, D., Edwards, K. (2023). Threat assessment and disparities in school discipline. *Journal of Threat Assessment and Management*. https://dx.doi.org/10.1037/tam0000213

Publications in Progress

Kerere, J., Cornell, D., & Maeng, J., (under review). Student attempts of violence following a school threat assessment.

Cornell, D., Kerere, J., Konold, T., Maeng, J., Afolabi, K., Huang, F., & Cowley, D. (under review). Referral rates for school threat assessment.

Cornell, D., Winter, S., Maeng, J., Huang, F., & Kerere, J. (in progress). Racial/Ethnic parity in disciplinary outcomes following a school threat assessment.

Kerere, J., Cornell, D., Huang, F., & Maeng, J. (in progress). School violence following a behavioral threat assessment.

Presentations

Kerere, J., Cornell, D., Konold, T., Maeng, J., Afolabi, K., Cowley, D., & Huang, F. (accepted). *How frequently do schools conduct threat assessments?* [Poster presentation]. Annual Meeting of the American Psychological Association, Seattle, WA. (August 2024).

Kerere, J., Cornell, D., Maeng, J., & Huang, F. (under review). *Equity in Law Enforcement Outcomes Following a School Threat Assessment* [Paper presentation]. Society for Prevention Research Annual Meeting, Washington, DC.

Maeng, J. L., Cowley, D., Cornell, D. G. & Huang, F. (April 2024). *How do schools support students after a threat assessment?* [Paper presentation]. Annual meeting of the American Educational Research Association, Philadelphia, PA.

Kerere, J., & Cornell, D. (March 2024). *School violence following a behavioral threat assessment* [Paper presentation]. American Psychology-Law Society Conference, Los Angeles, CA.

Kerere, J., Cornell, D. G., & Maeng, J. L. (August 2023). *Student attempts of violence following a school threat assessment.* [Poster presentation]. Annual meeting of the American Psychological Association, Washington, D.C.

Our work was shared by Dr. Catherine Bradshaw, advisory panel chair, at the NCSS STOP School Violence Conference in Richmond, VA in July 2023.

Cornell, D. (July 2023). *School threat assessment as a safe, fair, and effective practice in Ohio schools.* Keynote for Ohio School Safety Summit. Columbus, OH.

Cornell, D. (June 2023). *Comprehensive school threat assessment guidelines.* Invited workshop for the Utah School Safety Conference. Salt Lake City, UT.

Cornell, D. (March 2023). *Questions of fairness and equity in threat assessment.* Plenary presentation for Colorado State Threat Assessment Symposium. Lone Tree, CO.

Cornell, D. (February 2023). *Before the gunman arrives: The role of the school resource officer in threat assessment.* Keynote presentation for the 2023 School Safety Conference of the Committee for Policing and Safeguarding Schools, New York State Sheriff's Association. Saratoga Springs, NY.

Cornell, D. (February 2023). *Best practices in behavioral threat assessment for schools.* Webinar for Moving Behavioral Threat Assessment Forward: Implementing Best Practices and Overcoming Barriers for WestEd Justice & Prevention Research Center.

Cornell, D. (February 2023). *School threat assessment as a violence prevention strategy*. Online presentation for the School Violence Prevention Virtual Summit of the University of Michigan Injury Prevention Center.

Cornell, D. (January 2023). Online panel member for School Behavioral Threat Assessment Roundtable. Mental Health Technology Transfer Center, Stanford University School of Medicine.

Maeng, J. L. & Cornell, D. G. (November 2022). *Threat assessment in Florida schools.* [Paper presentation]. Annual meeting of the American Society of Criminology, Atlanta, GA.

Cornell, D., Maeng, J., & Edwards, K. (August 2022). *Use of threat assessment to reduce racial disparities in discipline.* [Paper presentation]. American Psychological Association National Convention. Minneapolis, MN.

Cornell, D. & Maeng, J. L. (July 2022). *School threat assessment for verbal and physical aggression*. Presentation for ISRA. Ottawa, CN.

Selected News Media Recognition

Blad, E., (July 24, 2023). A state mandated school threat assessment. Here's what it meant for students. *Education Week*

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