Threat Assessment and Management Training in Florida Schools

Technical Report

3-1-23

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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[1] and colleagues at the University of

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[1] 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 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.

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 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
POST: 76
PRE: 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)
POST: 66
PRE: 18

Zero tolerance is an effective way to maintain school safety. (FALSE)
POST: 73
PRE: 42

Controlled studies have found that threat assessment reduces school suspensions. (TRUE)
POST: 90
PRE: 60

The typical school violence prevention program can reduce fighting by 50%. (TRUE)
POST: 82
PRE: 52

At least two-thirds of threats are transient and the others are substantive. (TRUE)
POST: 89
PRE: 53

A student who writes an essay describing a violent event should be given a threat assessment. (FALSE)
POST: 60
PRE: 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)
POST: 78
PRE: 30

Mental health threat assessments are designed to predict violence. (FALSE)
POST: 75
PRE: 45

An angry student who says, "I could kill him for that," should always be regarded as making a substantive threat. (FALSE)
POST: 73
PRE: 56

When interviewing a student about an alleged threat, the student should be reassured that his/her statements are confidential. (FALSE)
POST: 87
PRE: 56

If a student threatens an act of violence, immediate suspension is necessary (FALSE)
POST: 85
PRE: 59

A safety plan should be implemented for a transient threat (FALSE)
POST: 73
PRE: 26

Shootings occur at a high rate in schools compared to other locations (FALSE)
POST: 57
PRE: 13

Legend: 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.
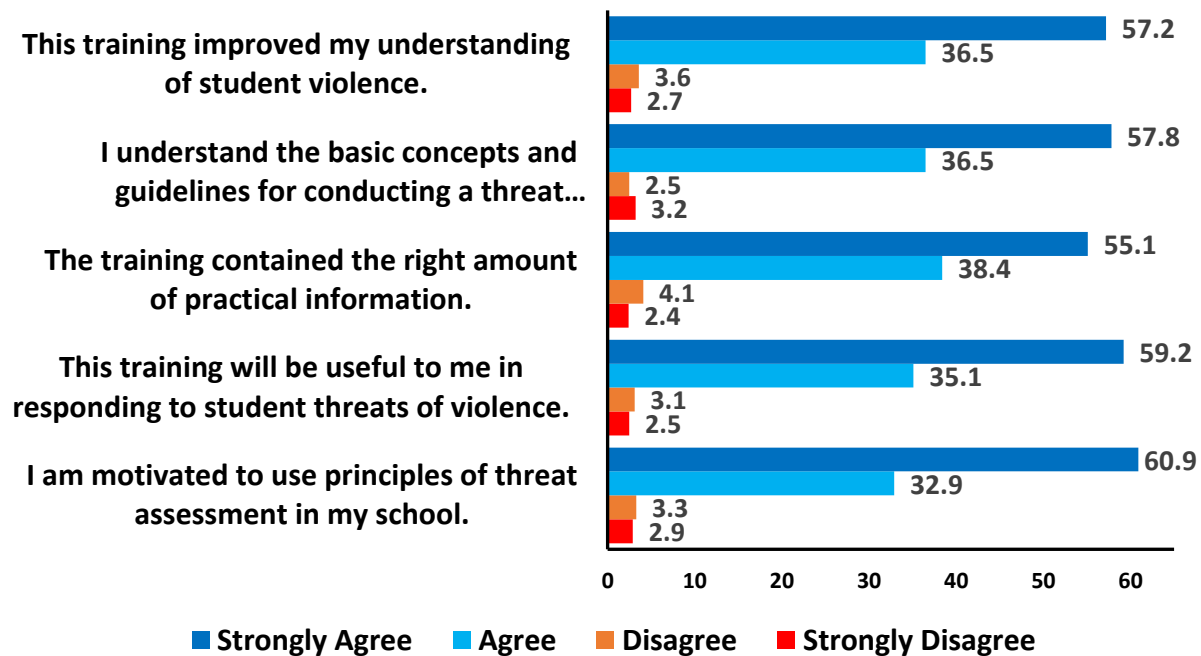
Workshop Evaluations

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 Evaluation Questions
3,450 participants, 120 workshops

This training improved my understanding of student violence.
57.2
36.5
3.6
2.7

I understand the basic concepts and guidelines for conducting a threat…
57.8
36.5
2.5
3.2

The training contained the right amount of practical information.
55.1
38.4
4.1
2.4

This training will be useful to me in responding to student threats of violence.
59.2
35.1
3.1
2.5

I am motivated to use principles of threat assessment in my school.
60.9
32.9
3.3
2.9

0   10   20   30   40   50   60

■ **Strongly Agree**   ■ **Agree**   ■ **Disagree**   ■ **Strongly Disagree**

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)

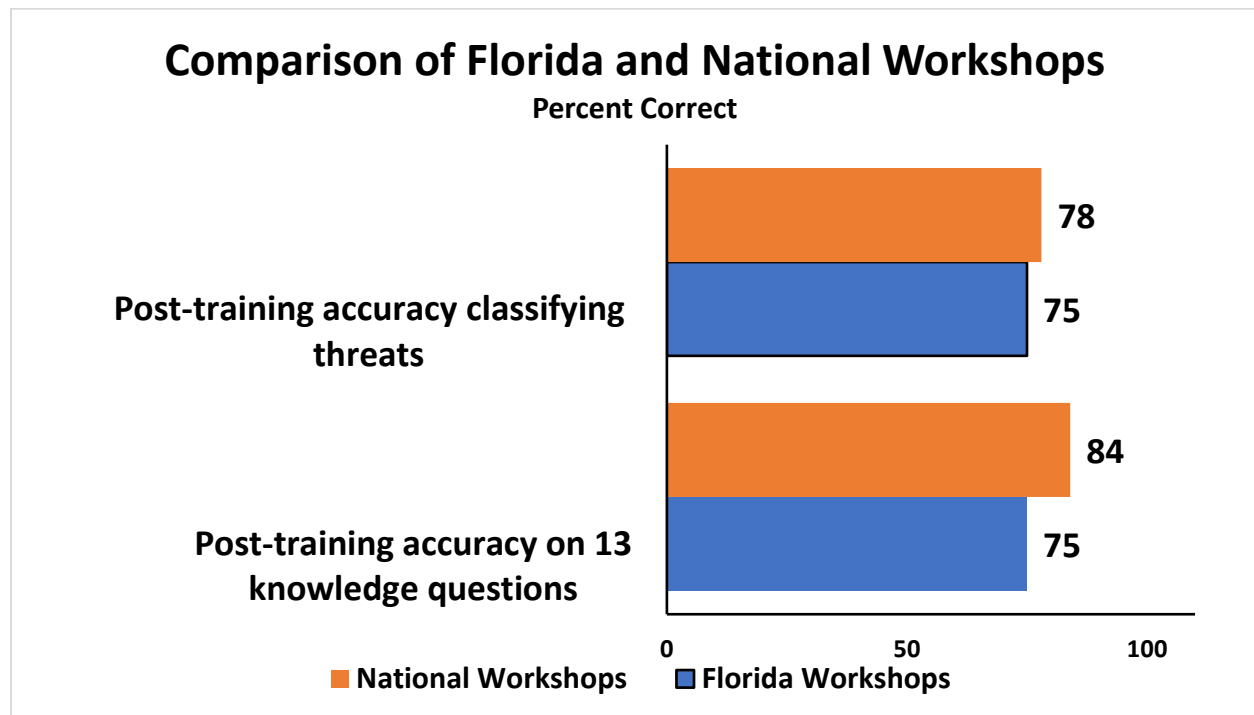| Item	Strongly Disagree	Disagree	Agree	Strongly Agree
This training improved my understanding of student violence	0	0	21.9	78.1
I understand the basic concepts and guidelines for conducting a threat assessment	0	0	21.9	78.1
This training contained the right amount of practical information	0	0	31.3	68.8
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)

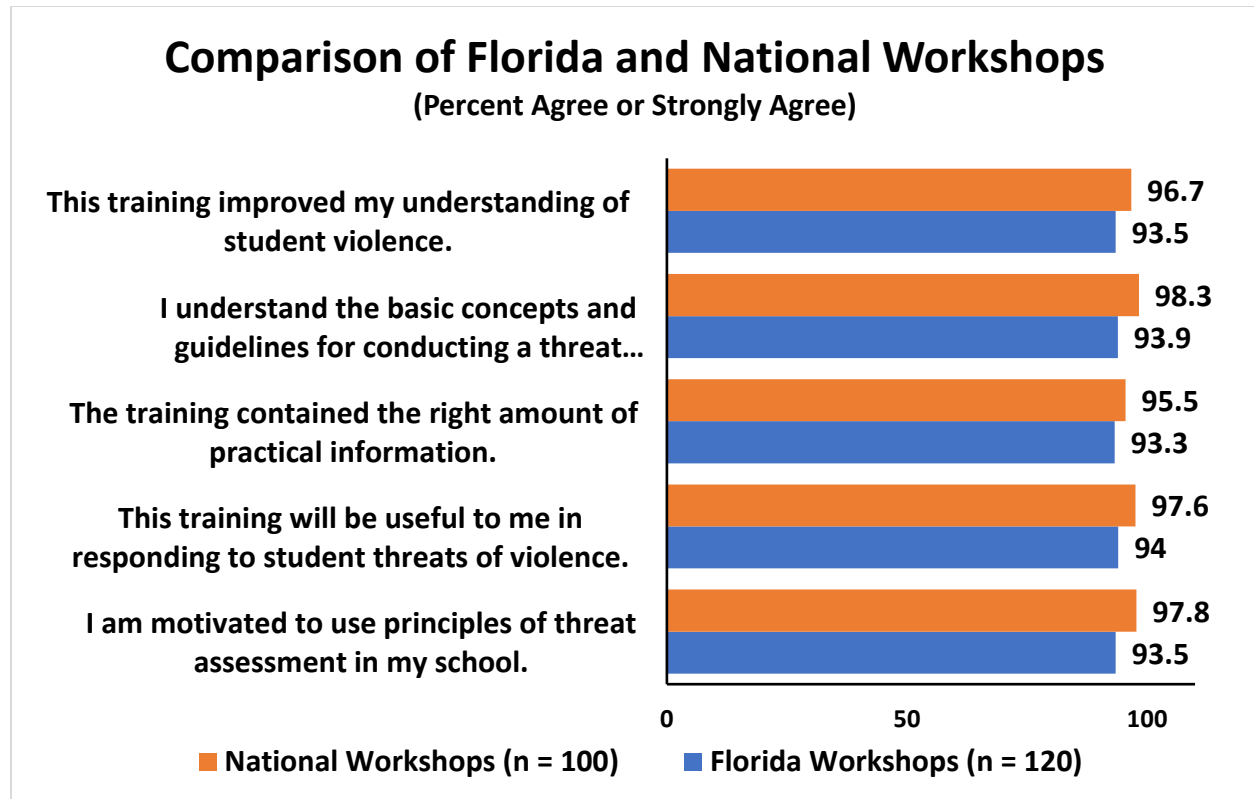| Item	Strongly Disagree	Disagree	Agree	Strongly Agree
This training improved my understanding of student violence	4.7	20.9	48.8	25.6
I understand the basic concepts and guidelines for conducting a threat assessment	4.7	25.6	39.5	30.2
This training contained the right amount of practical information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

Comparison of Florida and National Workshops
Percent Correct

Post-training accuracy classifying threats: National Workshops 78, Florida Workshops 75

Post-training accuracy on 13 knowledge questions: National Workshops 84, Florida Workshops 75

■ National Workshops □ Florida Workshops

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.

Comparison of Florida and National Workshops
(Percent Agree or Strongly Agree)

Item	National Workshops (n = 100)	Florida Workshops (n = 120)
This training improved my understanding of student violence.	96.7	93.5
I understand the basic concepts and guidelines for conducting a threat…	98.3	93.9
The training contained the right amount of practical information.	95.5	93.3
This training will be useful to me in responding to student threats of violence.	97.6	94
I am motivated to use principles of threat assessment in my school.	97.8	93.5

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.

Comments about Workshop Training

"Please give us any feedback or suggestions for improvement of this workshop"

Category	Negative Comments	Positive Comments
General comments	5	445
Training content	132	213
Trainer effectiveness	22	119
Training conditions	37	196
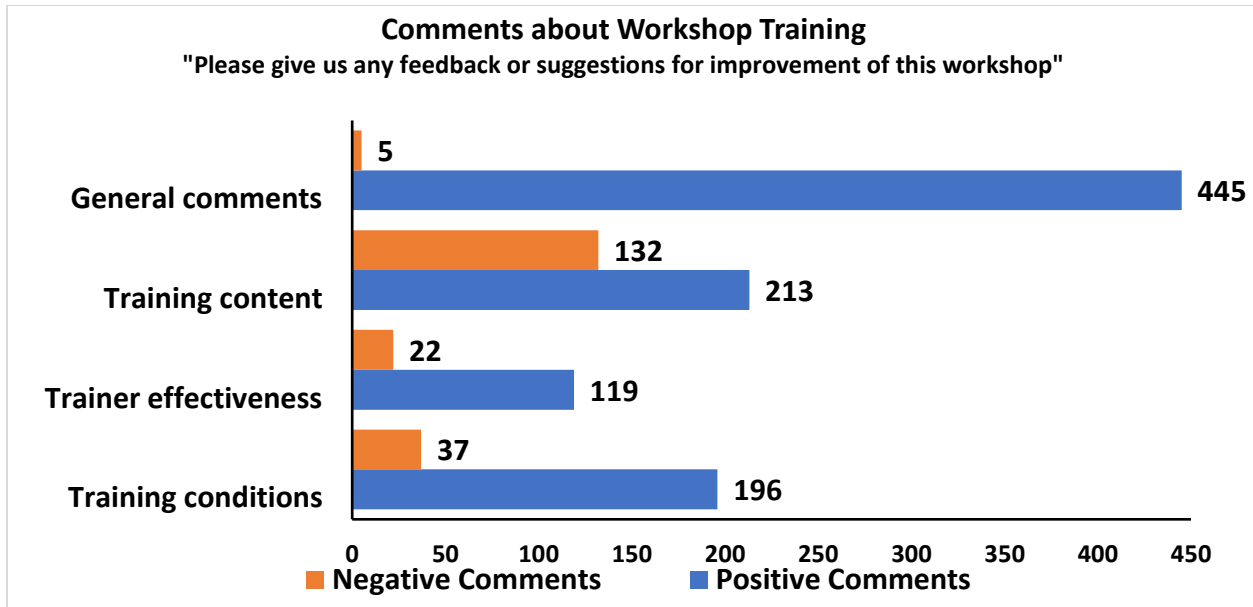
Positive general comments included:
- awesome workshop
- Enjoyed it
- Excellent
- great job
- it was good

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
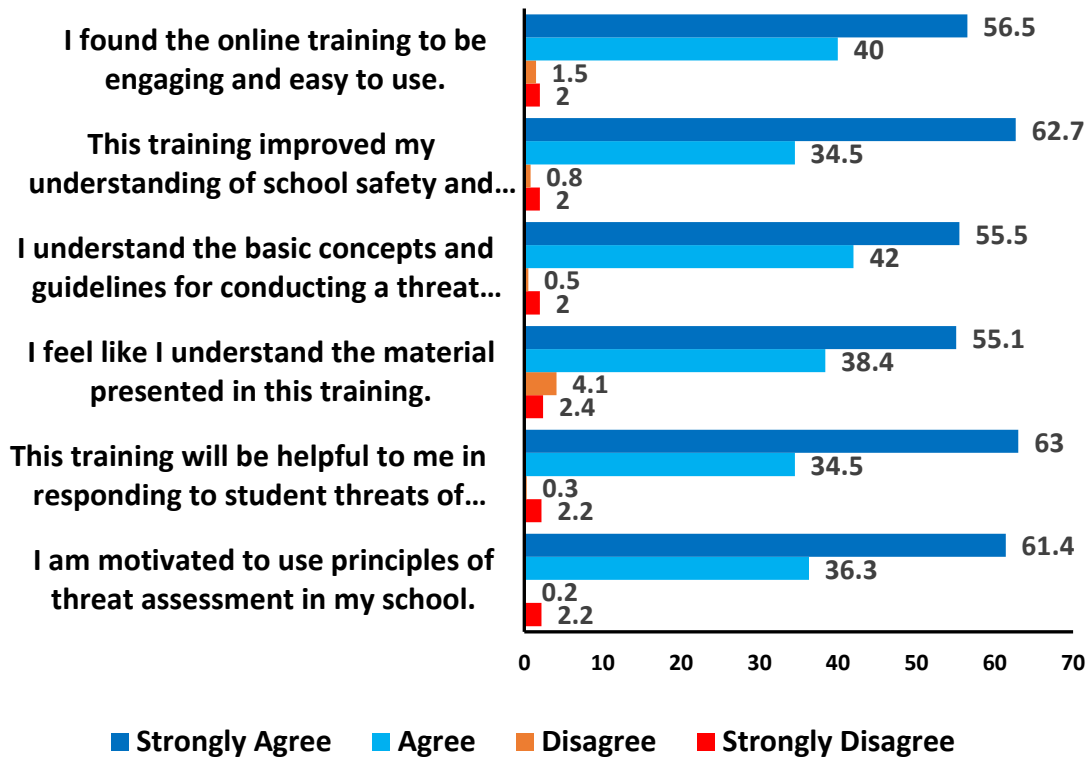
Level 2 Online Program

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 A: 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 B: 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	2775	3

		(15.6%)	(84.3%)	(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 (99.5%)	18 (0.5%)	0 (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%)
	Pre[2]	2644	301	344

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)		(80.4%)	(9.2%)	(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%)
The CSTAG model is supported by controlled studies published in refereed journals (TRUE)	Pre[2]	1865 (56.7%)	64 (1.9%)	1360 (41.3%)
	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 C: 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%)**