NCJRS
National Criminal Justice Reference Service

Office of Justice Programs
BJA BJS NIJ OJJDP OVC SMART

The author(s) shown below used Federal funding provided by the U.S. Department of Justice to prepare the following resource:

Document Title: Cross-Site Analysis and Case Study of STOP Program Grantee Perspectives on Violence Prevention and Mental Health Training Program Implementation

Author(s): Anna Davidson Abella, Ph.D., Amy Vargo, Ph.D., Anna Davidson Abella, Amy Vargo, Oliver Tom Massey, Areana Cruz, Lisa Coy, Nathaniel von der Embse, Melissa Johnson, John Martin, Vanessa Reeves

Document Number: 308883

Date Received: August 2024

Award Number: 2020-RF-CX-0001

This resource has not been published by the U.S. Department of Justice. This resource is being made publicly available through the Office of Justice Programs' National Criminal Justice Reference Service.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

National Institute of Justice

Federal ID: 2020-RF-CX-0001

Cross-Site Analysis and Case Study of STOP Program Grantee Perspectives on Violence Prevention and Mental Health Training Program Implementation

Principal Investigator Contact Information:
Anna Davidson Abella, PhD
13301 Bruce B. Downs Blvd, MHC 2413
Department of Child and Family Studies
University of South Florida
Tampa, FL 33612
Phone: (813) 974-3739 (work) / (813) 528-6607 (cell)
Email: aldavids@usf.edu

Amy Vargo, PhD
13301 Bruce B. Downs Blvd, MHC 2413
Department of Child and Family Studies
University of South Florida
Tampa, FL 33612
Phone: (813) 974-5356 (work) / (813) 310-2971 (cell)
Email: avargo@usf.edu

Contributing Authors
Anna Davidson Abella, Amy Vargo, Oliver Tom Massey, Areana Cruz, Lisa Coy, Nathaniel von der Embse, Melissa Johnson, John Martin, Vanessa Reeves

Submitted by: Silvia Alvarez
Senior Sponsored Research Administrator
silviaa@usf.edu

Submitted June 30, 2023

DUNS: 069687242
EIN: 59-3102112

University of South Florida
4202 E. Fowler Avenue
Tampa, FL 22612

Vendor #: 593102114

Project Period: 1/1/21 – 6/30/23

Reporting End Date: 6/30/23

Final Research Report

Table of Contents

Major Goals and Objectives 6

  Activities/Accomplishments 6

Research Questions 8

Methods 9

  Cross-Site Survey 9

    Survey Procedures 11

    Survey Analysis 12

  Case Study 12

    Case Study Procedures 12

    Case Study Analysis 14

Applicability 15

Changes in Approach/Design 15

Results 16

  Cross-site Survey Results 16

    Characteristics 16

    Respondent Role 17

  Analysis of Research Questions 19

    RQ1: Stakeholder Involvement in Implementation 19

    RQ2: Addressing Community Needs 22

    RQ3: Barriers and Facilitators to Implementation 30

    RQ4: Factors Associated with Satisfaction and RQ5: Opportunities for Informing Implementation 34

  Case Study Results 38

    Characteristics 38

    Respondent Role 40

    Vision 40

    Leadership Drivers 44

    Organizational Drivers 48

    Competency Drivers 51

    Local Environment/Contextual Variables 52

    Improvement Cycles 58

    Impact/Outcomes 60

  Discussion 64

Limitations 64
Implications 65
Artifacts 68
Products 68
Data Sets 68
Dissemination Activities 69
References 71
Appendix A: Cross-Site Survey 75
Appendix B: Case Study Interview Protocol 86
Appendix C: Case Study Interview Code Book 88
Appendix D: Descriptives for SMHCI Subscales 92
Appendix E: MANOVA Tables for SMHCI and NIRN Implementation by Population Category 93
Appendix F: BJA Regional Demarcations 100

List of Tables

Table 1: Progress on Goals and Objectives 7

Table 2: NIRN Stages of Implementation (Adapted) 10

Table 3: Data Collected at Each Case Study Site 15

Table 4: Respondent Role for Wave 1 and Wave 2 of the Cross-Site Survey 18

Table 5: Implementation Team Member Type at each Wave 21

Table 6: Implementation Components Across Sites by Survey Wave 24

Table 7: Descriptive Statistics and ANOVA Results for SMHCI Subscale and Primary Implementation. 27

Table 8: ANOVA Results for Population Category Differences in the NIRN Implementation Need Subscale 29

Table 9: Summary of Open Feedback on Barriers to Implementation 33

Table 10: Summary of Open Feedback on Facilitators of Implementation 34

Table 11: Descriptive Statistics and Correlations for Overall Satisfaction, Implementation Stage, and SMHCI and Implementation Subscales 37

Table 12: Case Study Site Characteristics and Program Components 39

Table D1: Wave 1 Descriptives for NIRN Implementation and SMHCI Subscales 92

Table D2: Wave 2 Descriptives for NIRN Implementation and SMHCI Subscales 92

Table E1: Wave 1 Means and Results for SMHCI Subscale MANOVAs by Population Category……...93

Table E2: Wave 1 Means and Results for NIRN Implementation Subscale MANOVAs by Population Category……...95

Table E3: Wave 2 Means and Results for SMHCI Subscale MANOVAs by Population Category……...96

Table E4: Wave 1 Means and Results for NIRN Implementation Subscale MANOVAs by Population Category……...98

List of Figures

Figure 1: Regional Distribution for Wave 1 and Wave 2 Survey Respondents 16

Figure 2: Population Category Distribution for Wave 1 and Wave 2 Survey Respondents........................ 17

Figure 3: Respondents' Years of Experience in Current Role at Wave 1 and Wave 2 18

Figure 4: Respondents' Familiarity with BJA STOP Program(s) at Wave 1 and Wave 2 19

Figure 5: Implementation Stage Activity by Survey Wave 21

Figure 6: Primary Implementation Stage by Wave 22

Figure 7: SMHCI Supplement 1: Problem Severity Responses by Wave 25

Figure 8: SCMHI Subscale Responses by Wave... 26

Figure 9: NIRN Implementation Subscale Responses by Wave 29

Figure 10: SMHCI Supplement 2: Barriers Responses by Wave 31

Figure 11: Extent of COVID Impact by Wave 32

Figure 12: Mean Overall Satisfaction by Wave 35

Major Goals and Objectives

In response to the Students, Teachers, and Officers Preventing (STOP) School Violence Act of 2018 (H.R. 4909), 128 grantees across the U.S. were awarded funding through the Bureau of Justice Assistance (BJA) in 2018 and 2019 to improve school safety by implementing programs in the Violence Prevention and Mental Health Training category. The major goals of this study were to 1) understand the challenges and facilitators of implementing violence prevention and mental health training programs through a broad cross-site analysis, 2) assess contextual factors influencing implementation, as well as regional and population variances through targeted, comprehensive case studies, and 3) provide evidence to inform program implementation in violence prevention and mental health programs in schools to improve program outcomes and sustainability. Understanding the environment of implementation, grantees' capacity to carry out planned activities, and the perspectives of implementation team members are critical components to learning what factors support and inhibit implementation and ultimately, the extent to which programming will be replicable and scalable as federal funding continues to support mental health and violence prevention initiatives.

The study was conducted at two levels: 1) a cross-site analysis of grantees who have been awarded funding in the Violence Prevention and Mental Health Training category over the two award years (2018 and 2019), and 2) a case study analysis of six grantee sites.

Activities/Accomplishments

Table 1 below outlines activities associated with each of the major goals and objectives, as well as progress towards each. Each objective was met, though some challenges with recruitment and carrying out a school-based study in a post-pandemic environment led to somewhat lower response rates than anticipated.

Table 1

Progress on Goals and Objectives

Goals	Objectives	Activities	Measures	Progress
1. Gather STOP grantee feedback on implementation of violence prevention and mental health training programs through broad cross-site analysis	1.1 Determine stage of implementation for each site 1.2 Assess perspectives on challenges and facilitators of implementation 1.3 Assess capacity for mental health support in schools 1.4 Assess level of satisfaction with program implementation	1. Distribute electronic survey with domains pertaining to Objectives 1-4 in Goal 1 to 2 contacts from each of the 43 grantee sites in 2018 and 2 contacts from each of the 85 grantee sites in 2019	1. Approximately 40% of grantee sites will complete the survey	1. The cross-site survey was administered in July 2021 (40% response rate, N = 52) and August 2022 (34% response rate, N = 38).
2. Assess contextual factors influencing implementation, as well as regional and population variances through targeted, comprehensive case study	2. Determine site-specific factors that have contributed to perceived challenges or effectiveness in implementation at 10 select sites (1 site from each of the population categories for each award year)	2.1 Conduct document review at each of the 10 case study sites 2.2 Conduct remote observations with key planning groups or coalitions from each of the 10 case study sites 2.3 Conduct semi-structured interviews stakeholders from each of the 10 case study sites	2.1 A representative from each site will share select materials with the study team (e.g., evaluation plans, MOUs, training materials) 2.2 Observations will be conducted quarterly at each site and notes will be taken using a structured protocol 2.3 5-10 stakeholders from each site will complete recorded interviews	2.1 Recruitment began 8/2/21 and letters of commitment were secured from 7 sites. 2.2 Site observations began 11/3/21. 2.3 Stakeholders are being identified at each of the 7 sites
3. Provide evidence to inform program implementation in violence prevention and mental health programs in schools to improve program outcomes and sustainability	3.1 Disseminate findings to NIJ and grantee community to contribute to ongoing implementation efforts	3.1.1 Develop reports, and/or presentations, inform the field of challenges of implementation of violence prevention and mental health programs	3.1.1 Semi-annual reports will be approved by NIJ and a webinar will be developed to address all sites 3.1.2 The study team will develop presentations for case study sites by the end of the study period	3.1.1 4 RPPRs were submitted and a webinar was conducted 4/18/23. 3.1.2 An animated presentation has been developed as well as an evaluation brief to share with grantees.
	3.2 Disseminate findings to the education, criminal justice, and evaluation research communities	3.2 Develop manuscripts on findings through peer-reviewed academic journals	3.2 Two manuscripts will be submitted to academic journals after the study period concludes	3.2 One manuscript has been submitted and one is under development.

Research Questions

The federal STOP legislation emerged from recognition of the rising prevalence of youth mental illness in recent decades, increased incidence of school violence, and lack of consistency or awareness in applying implementation science to programs and services in schools. To address these areas of need, the central questions for this study have built on existing knowledge of challenges in school-based program implementation in the areas of violence prevention and mental health and are intended to drive input on opportunities for utilizing implementation science to strengthen effectiveness of programs. The following research questions were used to guide the study:

1) How have diverse stakeholders (e.g., school administrators, school-based and community mental health professionals, teachers, students and families, law enforcement/SROs, policymakers) been involved in the various stages of implementation?
2) How have violence prevention and mental health training programs reflected community needs?
3) What are the perceived barriers and facilitators to implementing violence prevention and mental health training programs across grantee sites?
4) How do various components of the implementation process contribute to satisfaction with implementation at different stages among stakeholders?
5) What measures are in place to evaluate and inform continuous implementation processes, and where do opportunities and needs exist for incorporating feedback to strengthen overall implementation?

The COVID-19 pandemic was an unexpected event that coincided with the initial stages of the study, when schools were just returning to in-person modalities after lock downs and were grappling with yet another facet of school safety while also determining how to best adapt STOP programming in a greatly changed environment. Therefore, the study team also incorporated inquiries about the impact of the pandemic into study methodologies.

Methods

A mixed-method study was used to understand implementation capacity, barriers, and facilitators at a broad level through a cross-site survey as well as a locally contextualized level through case studies. Several study-related documents are appended to this report, and these and other materials are also available in the National Archive of Criminal Justice Data (NACJD).

Cross-Site Survey

The cross-site survey was composed of four key measures and three individual items designed to address the multifaceted set of research questions and included 79 items in all (see Appendix A). The first measure was designed to assess the profile of the grantee agency, including the respondent's role and experience, program characteristics, and use of grant funds. Survey respondents were asked to identify team members based on the School Health and Performance Evaluation (SHAPE) district profile, which outlines 27 potential staff or community members who may be involved with mental health supports (National Center for School Mental Health, 2019). SHAPE is a publicly available platform that offers resources and supports to school communities to help improve school mental health efforts. The full district profile is a tool used to help school districts understand current functioning of their mental health supports and identify areas for improvement; the staffing section was used for the cross-site survey to help identify which roles were being used to support school violence prevention and mental health training efforts funded by STOP grants.

For the second section, the National Implementation Research Network (NIRN) Stages of Implementation were used to assess STOP grantees' stage of implementation (Bertram et al., 2015). Respondents were provided definitions of the four implementation stages—Exploration, Installation, Initial Implementation, and Full Implementation (see Table 2)—and were then asked to indicate their stage of implementation on a slider scale with options from 1 (no activity for that stage) to 10 (engagement in full range of activities for that stage). Because of the overlapping nature of implementation stages, this response option allowed respondents to select their level of activity in each stage.

Table 2

NIRN Stages of Implementation (Adapted)

Stage	Definition
Exploration	Identifying the need for change Learning about possible innovations that may provide solutions Learning about what it takes to implement the innovation effectively Developing a team to support the work as it progresses through the stages Growing stakeholders and champions Assessing and creating readiness for change Developing communication processes to support the work Deciding to proceed (or not)
Installation	Securing and developing supports needed to put new practice into place as intended Developing feedback loops between practice and leadership levels Gathering feedback on how new practices are being implemented
Initial Implementation	Trying out new skills and practices Gaining competency with implementation processes Gathering data to assess how implementation is going Developing improvement strategies based on the data Refining implementation supports based on data
Full Implementation	Skillfully using innovation that is well-integrated into the repertoire of practitioners Maintaining routine and effective support by successive administrations

The School Mental Health Capacity Instrument (SMHCI) was used to assess the capacity of schools across sites to address the mental health needs of students (Feigenberg, et al., 2010). The 27-item SMHCI was developed to provide a quantitative assessment of schools' mental health capacity at a given point and includes three subscales: Intervention, Early Recognition and Referral, and Prevention and Promotion. The SMHCI has been shown to have strong internal consistency ($\alpha = .95$) and test-retest reliability ($r = .77$), as well as strong criterion-related validity (t [162] = -3.38, $p = .001$). Language was condensed on some items to improve readability. Additionally, two supplementary sections from the SMHCI were included to understand the context of sites' capacity to address mental health: Problem Severity and Barriers to Mental Health in Schools.

To assess implementation capacity, the NIRN Hexagon Tool (Metz & Louison, 2019) was used. This measure assesses overall implementation capacity with six subscales: need, evidence, fit, usability,

capacity, and supports. The number of overall questions from the tool was reduced from 49 to 24 for brevity, with each subscale containing 3-7 key questions for the domain. The study team removed items that may be seen as redundant, both within the implementation measure and in conjunction with the SMHCI. Further reductions were made to select items that best represented the six domains to avoid overburdening respondents with a lengthy survey. Language was also revised to improve readability. Items were rated on a five-point agreement scale that ranged from 1 = strongly disagree to 5 = strongly agree.

Finally, in response to the COVID epidemic, the original survey design was amended to include questions about COVID-19's impact on program implementation and overall satisfaction. These questions used Likert scale or numeric scale responses. Each major section of the survey included the option to provide open feedback.

Survey Procedures

The cross-site survey was distributed as a Qualtrics link via email to all 2018 and 2019 BJA grantees who received funding in the Violence Prevention and Mental Health Training category at two time points: July 2021 (Wave 1) and July 2022 (Wave 2). A description of the study and informed consent form was included in the recruitment email (available in the NACJD archive). The survey link was sent to all 2018 and 2019 grantees, which included 219 contacts from 128 sites for each wave. In anticipation of low response rates during the pandemic and post-pandemic environment, the survey was open to all contacts at each interval to obtain as many responses as possible. In instances where contacts were no longer in a relevant role, the study team attempted to identify appropriate representatives, re-send the survey, and update the contact list. For each wave, reminder emails were sent at 2-week intervals for 10 weeks. To help offset some of the challenges in recruiting respondents during an especially challenging time for schools, recipients who completed the survey received a $10 Amazon.com electronic gift card. The study team also coordinated with the BJA Senior Policy Advisor, as someone who was familiar to grantees, to forward the original survey email request as a final effort to increase the response rate. There were 52 completed responses for Wave 1 (40% response rate) and 38 completed responses for

Wave 2 (34%). Sixteen of the respondents completed the survey during both Waves, while the remaining respondents for each wave were unique.

Survey Analysis

Survey analysis was conducted using SPSS quantitative data analysis software (v. 27). Identifying information was removed to protect confidentiality. Descriptive statistics were used to assess baseline responses at each wave and to evaluate normality among key study variables, and reliability analyses were conducted on each of the mental health capacity and implementation subscales. One-way ANOVAs were conducted to evaluate whether mental health and implementation capacity subscales differed by implementation stage. Analyses of population category differences were conducted within each wave using MANOVAs to assess whether this factor contributed to significant differences among respondents in implementation. A Mann-Whitney U test was used to compare responses to the mental health and implementation capacity subscales between Wave 1 and Wave 2. Finally, to understand whether satisfaction with implementation was associated with mental health or implementation capacity, a correlation analysis using Kendall's Tau-b was used to examine implementation stage, overall satisfaction, mental health capacity, and implementation capacity.

Case Study

The primary goal of the case study was to describe implementation efforts, track adaptations, and identify lessons learned and recommendations that might benefit future grantees project implementation efforts across regions. Semi-structured interviews and meeting observations were conducted to assess implementation capacity and activity more comprehensively and to understand contextual factors that contributed to broader patterns observed from the cross-site survey.

Case Study Procedures

A stratified random sampling technique was used to select potential participants for the case studies. A list of grantees was stratified by grant year, region, and population category. Three rounds of recruitment emails were sent to primary contacts beginning in July 2021 to randomly selected grantees

within these categories. The email explained the purpose of the study, outlined their expected commitments, and invited them to participate in the case study. If grantees declined, they were excluded from future recruitments. For interested grantees, the study team held virtual meetings further explaining the study. Six sites were recruited and ultimately participated in the study (one site completed a letter of commitment but subsequently withdrew).

Because sites were recruited during the 2021/2022 school year when schools across the US were determining procedures for returning to in-person or hybrid school after pandemic-related closures the previous spring, there were unanticipated challenges to recruiting a larger sample. Some grantees responded saying they would like to participate in the study but did not have the capacity given the intensity of their other responsibilities at the time, and it was clear from survey and case study data that many grantees were facing unprecedented challenges during this period. However, given these challenges, the sample size was diverse in terms of region and population category, and it was sufficient for understanding unique factors that may affect implementation at each site. Participating sites were distributed across the Midwest, East, and South regions and population categories 1 – state with a population greater than 5 million, 3 – urban area or large county with a population greater than 500,000, and 4 – suburban area or medium county with a population between 100,000 and 500,000.

Study activities for case study sites included conducting stakeholder interviews and meeting observations and collecting project-related documents for document review. Table 3 outlines the data collected from each site. Initial meetings were held with key contacts from case study agencies to identify stakeholders to participate in interviews, determine whether there were relevant project meetings to observe, and discuss types of documents that may be useful for review. Interviews were scheduled according to participants' availability, and all were conducted virtually via Microsoft Teams. The interview protocol (Appendix B) contained 25 questions and drew from implementation science frameworks, including NIRN's Implementation Drivers (Aarons, et al., 2011; Fixsen, et al., 2009) and Improvement Cycles (NIRN, n.d.), as well as the Western and Pacific Child Welfare Center Implementation Center's Framework for Implementing Systems Change in Child Welfare (Western and

Pacific Implementation Center [WPIC], 2009). Interviewers obtained verbal consent from participants after describing the study and answering any questions from participants. With permission, interviews were recorded to produce transcripts for analysis.

Document review was used by the study team to provide additional context for programs and trainings, though a formal analysis was not conducted. Document types were different for each site and primarily included informational materials, grant applications, presentations, and some reports. Documents were transferred via email and stored by the study team on a secure, encrypted drive. Observations of project-related meetings were conducted virtually using Microsoft Teams. The number of meetings observed for each site ranged from zero to three. Meeting types varied considerably, and a standard observation protocol proved unfeasible to use; instead, open notes were taken to inform the study and provide context for program components and implementation activities.

Table 3

Data Collected at Each Case Study Site

Site	Interviews	Observations	Documents
Case Study Site 1	6	3	108
Case Study Site 2	3	3	22
Case Study Site 3	3	1	29
Case Study Site 4	4	--	7
Case Study Site 5	5	--	7
Case Study Site 6	1	1	14
Total	22	8	187

Case Study Analysis

The study team conducted an in-depth qualitative analysis of the case study findings using a team-based approach and a combination of inductive and deductive thematic analysis. Interview transcripts were first reviewed by multiple team members according to themes derived from the interview protocol to produce related codes. Transcripts were then reviewed for additional emerging themes. These combined themes were developed into a code list, which produced 53 codes within eight groups: Vision,

Leadership Drivers, Organizational Drivers, Competency Drivers, Local Environment and Contextual Variables, Improvement Cycles, and Impact/Outcomes (see Appendix C for code book). Inter-rater agreement was calculated among three team members who independently coded a select transcript, resulting in a 70% agreement rate at the group level. After discussion of discrepancies in coding and revisions to the code book, inter-rater agreement was re-calculated resulting in a 96% agreement rate at the group level. Remaining transcripts were coded using Atlas.ti qualitative data analysis software, and a code report was produced to guide the following discussion of findings. Identifying information about sites has been excluded or redacted to protect confidentiality.

Applicability

Applicability and implications of findings from this study are elaborated in the Discussion section.

Changes in Approach/Design

A few significant changes were made in approach or design. To address the challenge of obtaining responses to recruitment and completion of the cross-site survey, the initial timeline was lengthened, and additional prompts were sent. Some of the anticipated analysis for the cross-site survey was adjusted, as there were not enough participants who completed the survey at both waves to do a paired samples analysis. Comparison was still used to assess differences between groups by survey wave. Additionally, formal analyses were not conducted of meeting observations or document review for the case study because of the significant differences in meetings and documents shared across sites. These materials were still used to inform the study team’s understanding of program components and implementation activities.

Results

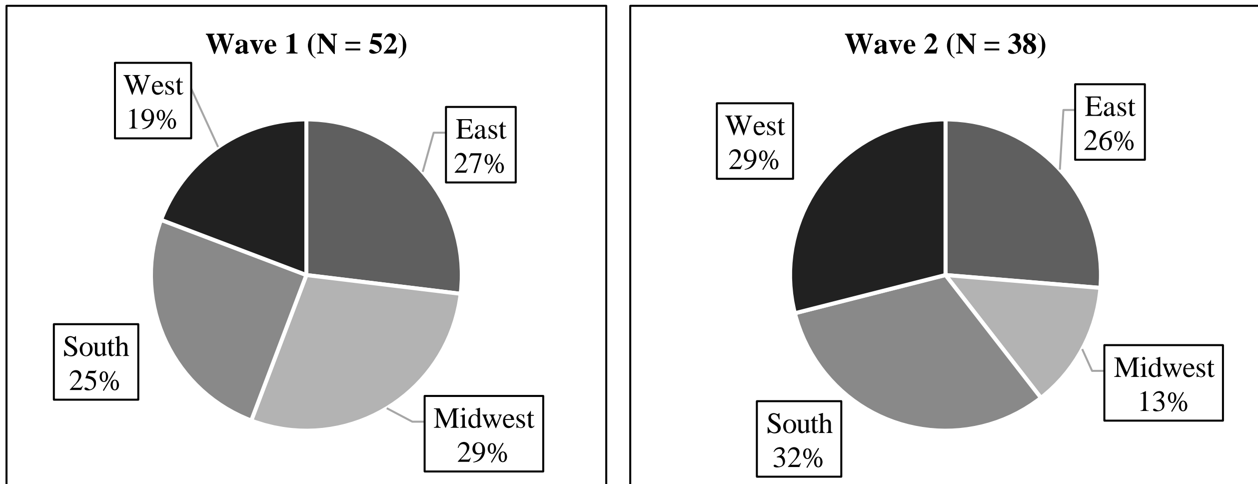
Cross-site Survey Results

Characteristics

According to BJA-defined geographic categories of East, Midwest, South, and West (see Appendix F for details on state regional demarcations), survey respondents were relatively equally distributed across regions in Wave 1 and had slightly more variation in Wave 2 (see Figure 1). The largest proportion was from Wave 1 was from the Midwest (29%) and the smallest was from the South (19%). In Wave 2, the largest proportion was from the South (32%) and the smallest was from the Midwest (13%).

Figure 1

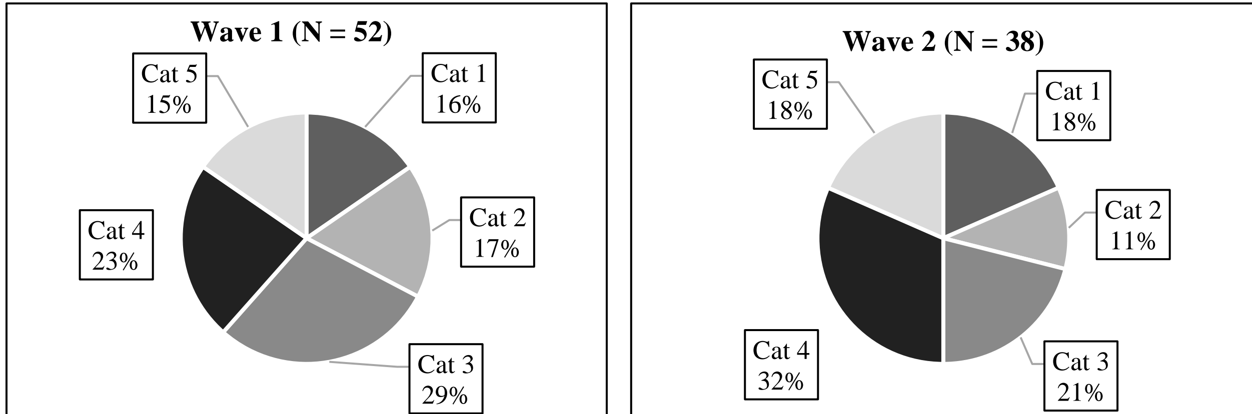
Regional Distribution for Wave 1 and Wave 2 Survey Respondents



All five population categories were represented in both waves, with the smallest proportion of respondents from Category 5 (a rural area or small county with a population of less than 100,000) and the largest proportion from Category 3 (an urban area or large county with a population greater than 500,000) (see Figure 2).

Figure 2

Population Category Distribution for Wave 1 and Wave 2 Survey Respondents



Note. Population categories are as follows:

1 = state with population greater than 5 million
2 = state with population less than 5 million
3 = urban area or large county with population greater than 500,000
4 = suburban area or medium county with population between 100,000 and 500,000
5 = rural area or small county with population less than 100,000

Respondent Role

Table 4 provides a listing of respondent roles for each wave. The role with the highest proportion in Wave 1 was state or local government personnel (n = 16), and for Wave 2 it was school district administrator and state or local administrator (n = 9 for both). One notable difference between the Waves was that there were five law enforcement agency administrators who completed the survey at Wave 1 and none for Wave 2. There were also more state or local administrators and fewer state or local government personnel who completed the survey at Wave 2. The "other" response in Wave 1 was reported by a threat assessment vendor.

Table 4

Respondent Role for Wave 1 and Wave 2 of the Cross-Site Survey

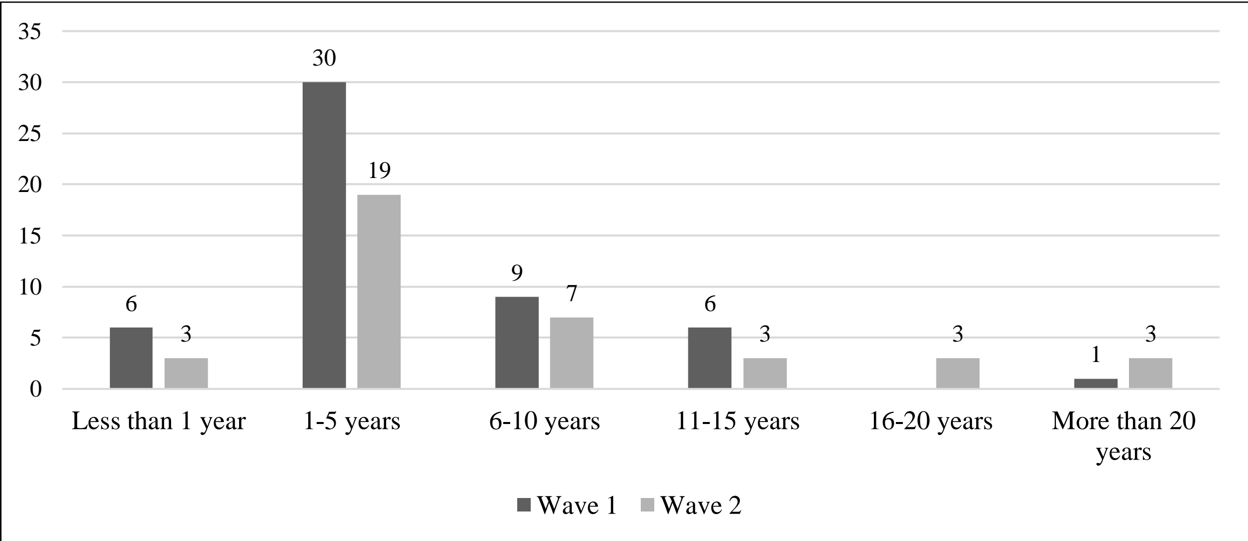
Respondent Role	Wave 1		Wave 2	
	N	%	N	%
State or local government personnel	16	31	7	18
School district administrator	9	17	9	24
State or local administrator	5	10	9	24
Educational or nonprofit agency representative	6	12	4	11
Law enforcement agency administrator	5	10	0	0

School district personnel	5	10	5	13
School administrator	3	6	0	0
Mental health professional	1	2	3	8
School personnel	1	2	1	3
Other	1	2	0	0
Total	52	100%	38	100%

Respondents' years of experience in their current role varied widely, from less than one year to more than 20 years. Across both waves, the most frequent category of experience was between one to five years (Wave 1, n = 30; Wave 2, n = 19) (see Figure 3).

Figure 3

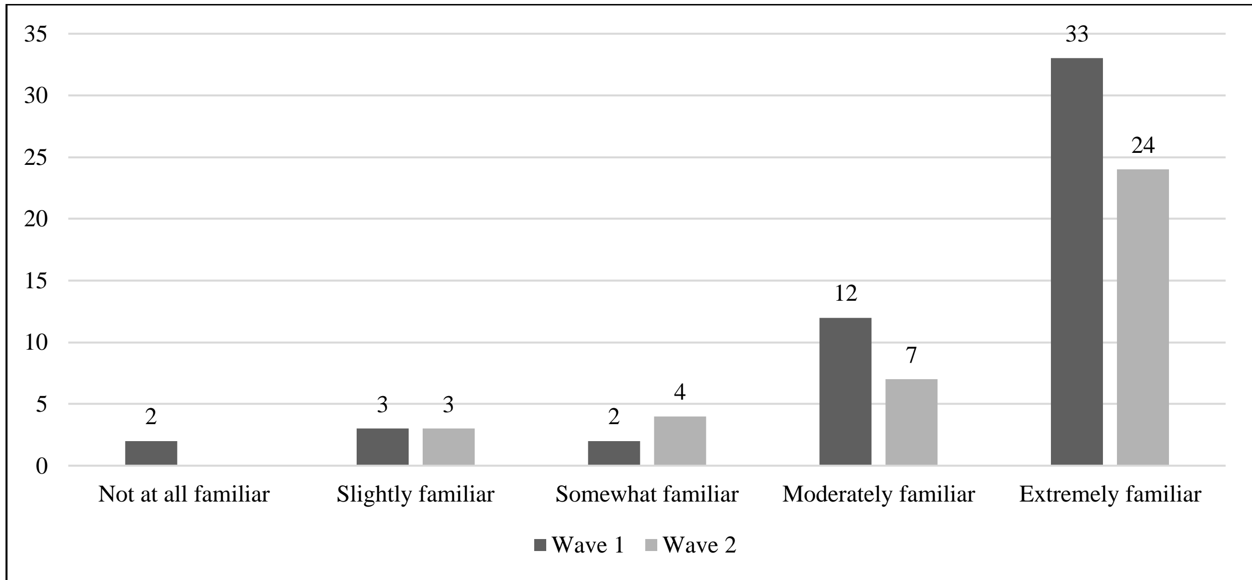
Respondents' Years of Experience in Current Role at Wave 1 (N = 52) and Wave 2 (N = 38)



To help ensure quality responses, the cross-site survey provided a statement requesting the respondent completing the survey should have familiarity with the STOP grants/programs. While the vast majority of respondents reported being extremely familiar or moderately familiar with the implementation of the grant at Wave 1 (87%) and Wave 2 (82%), a small proportion of respondents at both waves reported only being somewhat familiar, slightly familiar, or not at all familiar with the grant (see Figure 4).

Figure 4

Respondents' Familiarity with BJA STOP Program(s) at Wave 1 (N = 52) and Wave 2 (N = 38)



Analysis of Research Questions

RQ1: Stakeholder Involvement in Implementation

The first research question sought to understand how diverse stakeholders have been involved in stages of implementation. A summary of both cross-site survey and case study participants are provided below, including descriptions of how implementation teams were comprised, which program components were used to address needs, and what stages of implementation they were active in.

Implementation Team. A strong implementation team will support successful implementation of new programs and help ensure fidelity and sustainability (Fixsen, et al., 2009; Higgins, Weiner, & Young, 2012). Survey respondents were asked to identify team members based on the School Health and Performance Evaluation (SHAPE) district profile, which outlines 27 potential staff or community members who may be involved with mental health supports (National Center for School Mental Health, 2019). The most frequently reported Implementation Team members at both waves were School Administrator, School Counselor, Teacher, School Social Worker, and School Resource Officer (see Table 5). Other implementation team members included club advisors, safety and security personnel,

community or advocacy agency partners, other local government partners, program vendors or consultants, training personnel, bus drivers, and researchers or evaluators.

Table 5

Implementation Team Member Type at each Wave

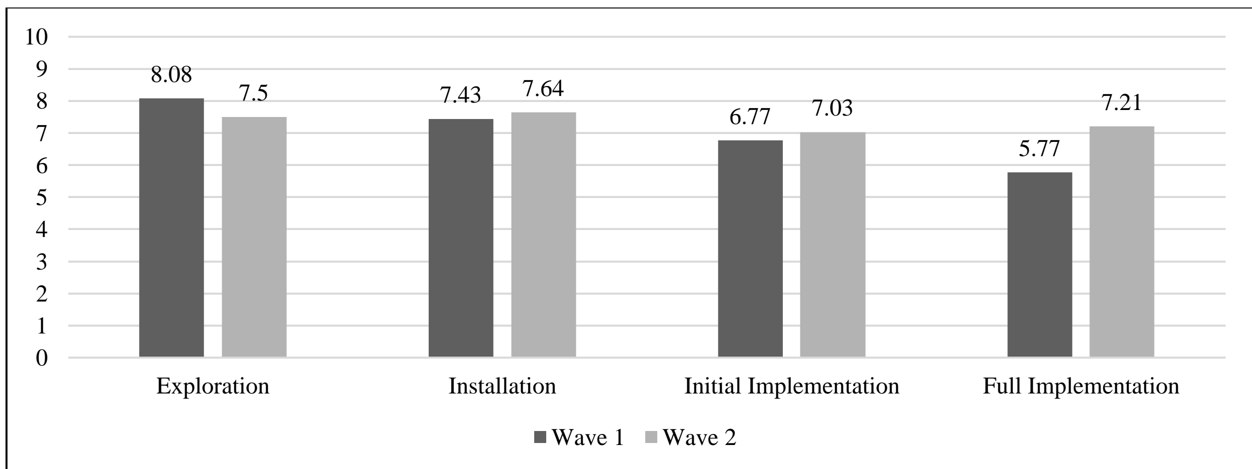
Team Member	Wave 1		Wave 2	
	N	%	N	%
School Administrator (e.g., Principal, Assistant Principal)	43	83	25	66
School Counselor	35	67	21	55
Teacher	30	58	19	50
School Social Worker	26	50	13	34
School Resource Officer	21	40	12	32
Behavior Specialist	19	37	11	29
School Psychologist	19	37	11	29
School Guidance Counselor	19	37	10	26
Law Enforcement Administrator or Officer	17	33	10	26
Professional/Licensed Counselor	13	25	10	26
Community Mental Health Supervisor/ Director	12	23	8	21
School Nurse	13	25	6	16
Youth/Family Advocate	10	19	4	11
Psychologist	8	15	8	21
Parent Liaison or Parent Engagement Coordinator	7	14	2	5
Social Worker	6	12	7	18
Case Manager/ Care Coordinator	6	12	5	13
Substance Abuse Specialist	4	8	5	13
Family Support Partner (Family Member)	3	6	2	5
Cultural Liaison/ Promotor	3	6	1	3
Nurse Practitioner	3	6	1	3
Peer Mediator	2	4	3	8
Psychiatrist	1	2	1	3
Physician	1	2	0	0
Physician Assistant	1	2	0	0
Occupational Therapist	0	0	1	3
School Physician	0	0	0	0
Other	15	29	8	21

Implementation Stage. Respondents were asked to indicate their stage of implementation by using a slider scale from 1-10 to indicate the level of activity they were engaged in within each of the

NIRN Implementation Stages. Means were calculated for each wave to summarize each group's activity level. Figure 5 shows the implementation stages each wave was engaged in. In both waves, there are high levels of activity at all stages. While it is typical for activities to continue across implementation stages, it is noteworthy that the early stages—Exploration and Installation—have such high levels of activity at both waves, given that respondents would have been one or two years into their programs. This is likely a reflection of the significant delays and adaptations that were caused by the COVID-19 pandemic. Several respondents shared in open feedback that they needed to re-examine components or consider new strategies for implementation due to changes in schools and the broader community that were out of their control. Wave 2 shows somewhat more activity in the later stages of implementation (Initial Implementation and Full Implementation) compared to Wave 1, which is expected given that Wave two responded approximately one year after Wave 1.

Figure 5

Implementation Stage Activity by Survey Wave

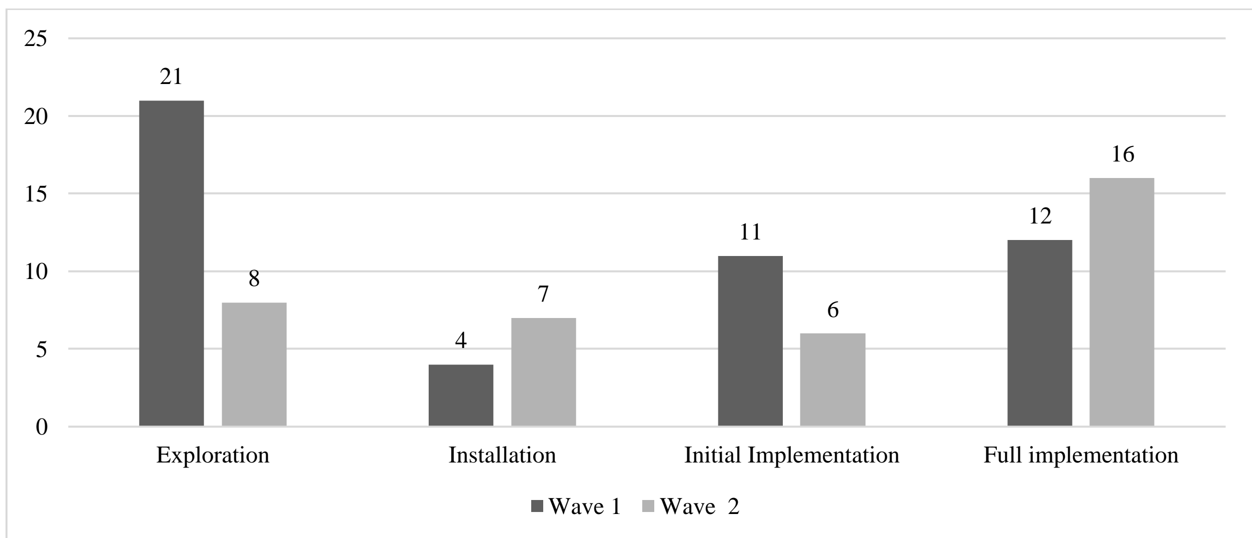


The four implementation stage variables were transformed into a single variable whereby respondents were assigned a primary implementation stage. This was done by using the stage that indicated the highest level of activity as the primary stage; when multiple stages had the same score, the value for the latest stage was used. Figure 6 shows the number of respondents in each of the four

implementation stages by wave. For Wave 1, the majority are in the exploration stage (n = 21), while for Wave 2, most are in the full implementation stage (n = 16). These results suggest that several sites had successfully progressed in their implementation efforts, and even for some sites not at full implementation, progress had been made. As implementation is an ongoing process, it is expected that some early or middle stage work remains to be accomplished. However, this data also shows that primary stages of implementation were still mixed at each point; some grantees were primarily in the Full Implementation stage within two years of their grant period, and some were still in the Exploration stage at the same point. In addition to demonstrating the cyclical nature of program implementation, this pattern also likely reflects the ongoing efforts many grantees reported in continually adapting program components or facing delays due to the COVID-19 pandemic.

Figure 6

Primary Implementation Stage by Wave



RQ2: Addressing Community Needs

The second research question was aimed at understanding how identification of violence prevention and mental health training programs been representative of community needs. The cross-site survey provides insight into the components that were used address mental health and violence prevention

needs, how STOP funds were used across grantee agencies, and how responses to the mental health and implementation capacity scales demonstrated consideration of and response to community needs.

Implementation Components. Survey respondents were asked to identify which components of their programs were being implemented. Almost all respondents reported having training or education for school personnel (Wave 1, 92%; Wave 2, 90%). Student education or evidence-based programs were the second most frequent, with 77% of Wave 1 and 76% of Wave 2 respondents reporting this component. Next, 50% of Wave 2 and 42% of Wave 2 respondents indicated having a threat assessment or reporting system, and the least reported component was the development or implementation of a crisis response team in conjunction with law enforcement (Wave 1, 27%, Wave 2, 24%). Respondents who reported "other" components described strategic planning processes, enhancing bus surveillance and bus driver education, and holding a youth summit to solicit youth perspectives on school safety and violence, and providing education to the community (e.g., parents and other agencies).

Table 6

Implementation Components Across Sites by Survey Wave

Component	Wave 1		Wave 2	
	N	%	N	%
School Personnel Training or Education	48	92%	34	90%
Mental Health Training for School Personnel	34	71%	30	79%
Violence Prevention Training for School Personnel	31	60%	28	74%
Student Education or Evidence-Based Program	40	77%	29	76%
Violence Prevention Education for Students (e.g., presentations)	27	52%	19	50%
Mental Health Education for Students	27	52%	20	53%
Evidence-based Violence Prevention Program for Students	25	48%	22	58%
Threat Assessment or Reporting System	26	50%	16	42%
Development or Operation of a Threat Assessment System or Protocol	24	46%	14	37%
Devp or Operation of Anonymous School Violence Reporting System	17	33%	11	29%
Devp/Implementation of Crisis Response Team w/ Law Enforcement	14	27%	9	24%
Other	4	8%	5	13%

While these program components made up the core of implementation activities, survey respondents shared more detail in open feedback about how the STOP grant funds contributed to their schools. Training was emphasized most consistently, and respondents shared ways that teachers, school

resource officers, and other school personnel were trained to recognize signs of mental illness, suicidality, and self-harm; identify risk behaviors and warning signs of violence; learn trauma-informed practices to create a sense of "felt safety;" and understand how to intervene and support youth. Social and emotional learning was also part of professional development, which included topics such as social inclusion, connectedness, and social supports. Respondents also frequently discussed implementing evidence-based programs for students that either served as a stand-alone program or complemented other initiatives. Examples of programs or models that were mentioned included Sandy Hook Promise[1] initiatives (e.g., SAVE Promise Clubs and Sandy Hook Promise Know the Signs trainings), Youth Mental Health First Aid[2], the PREPaRE program for mental health professionals[3], the ALICE[4] training for threat assessment, the Building Assets Reducing Risks (BARR) model[5], and Restorative Practices. Respondents also reported using the STOP funds to improve schools' infrastructures, such as improving threat assessment and follow-up from incident reporting, hiring additional school personnel, and revising crisis plans. Several respondents reported developing school safety resource centers that included threat reporting, threat assessment consultation, and guidance on best practices in school safety. Additionally, respondents in both waves highlighted the establishment of community partnerships and collaborations (e.g., interagency advisory committees) and community outreach and education. Multiple respondents shared that a major benefit of the STOP funds was that it alleviated significant funding burdens to schools and districts and allowed them to better develop a continuum of care rather than singular components.

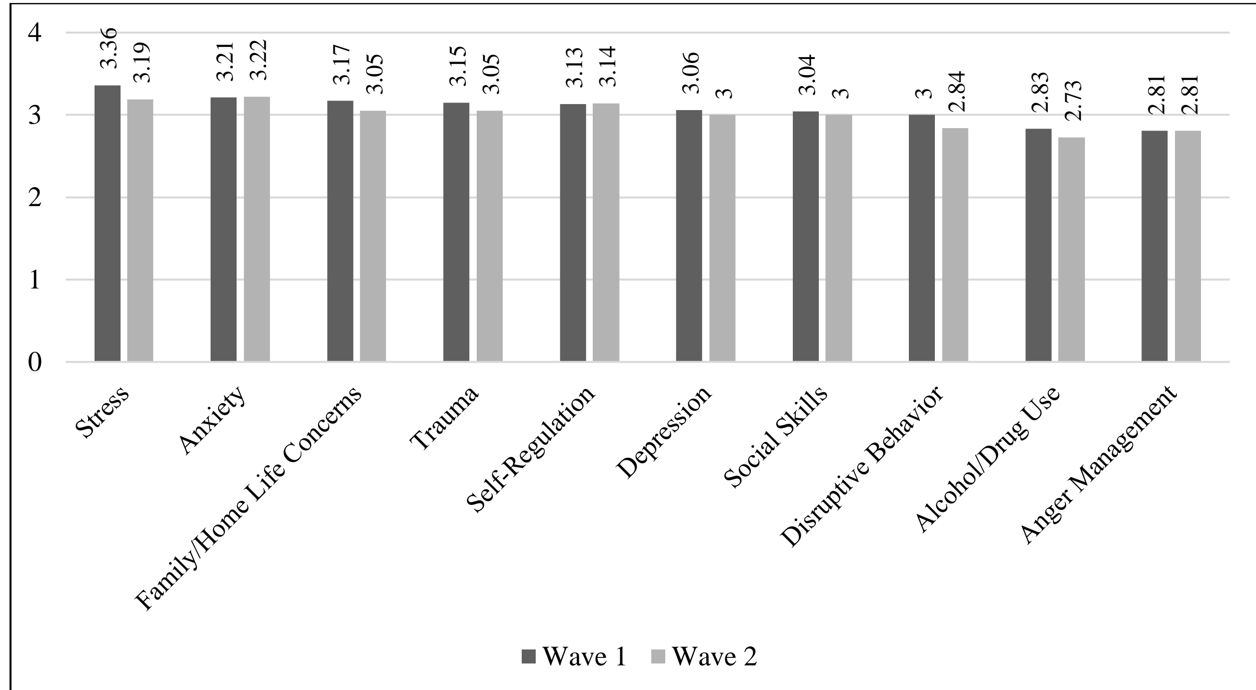
School Mental Health Problem Severity. The School Mental Health Capacity Instrument (SMHCI) was used to provide insight into how well grantees felt their agencies were able to support mental health services and initiatives at schools. The SMHCI Supplement 1 addressed mental health problem severity. Ten problem areas were included in this domain: Disruptive Behavior, Depression,

[1] https://www.sandyhookpromise.org/
[2] https://www.mentalhealthfirstaid.org/population-focused-modules/youth/
[3] https://www.nasponline.org/professional-development/prepare-training-curriculum/about-prepare
[4] https://www.alicetraining.com/
[5] https://barrcenter.org/

Anxiety, Trauma/Violence Exposure, Alcohol/Drug Use, Anger Management, Social Skills, Stress, Family/Home Life Concerns, and Self-regulation. Responses were based on a 4-point scale, where 1 = Not a problem at all, 2 = A little bit of a problem, 3 = A moderate problem, and 4 = A very big problem. Mean scores for each item showed little variation overall, ranging from 2.73 to 3.36, indicating relatively high problem severity across all items (Figure 7). The items reported as most problematic were Stress for Wave 1 (*M* = 3.36, SD = .673) and Anxiety for Wave 2 (*M* = 3.22, *SD* = .630). The items reported as least problematic were Anger Management for Wave 1 (*M* = 2.81, SD = .770) and Alcohol/Drug Use for Wave 2 (*M* = 2.73, *SD* =.769). Overall, respondents from both waves had very similar perceptions of the severity of problems related to mental health, and there were no major differences in which problems were worse at either time point.

Figure 7

SMHCI Supplement 1: Problem Severity Responses by Wave

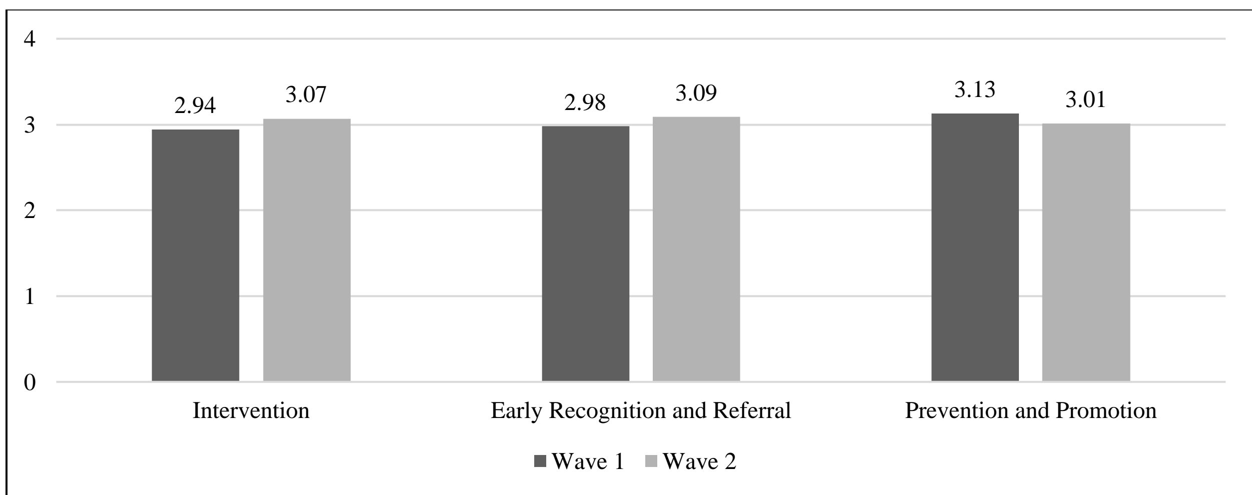


Note: The following scale was used: 1 = Not a problem at all, 2 = A little bit of a problem, 3 = A moderate problem, 4 = A very big problem

School Mental Health Capacity. The SMHCI is based on three subscales with a four-point response scale ranging from 1 = Not at all, 2 = A little bit, 3 = To some extent, and 4 = To a great extent. Higher scores represent higher capacity to address mental health needs at schools. Internal consistency of each subscale was assessed by calculating Cronbach's alpha. All three subscales had strong internal consistency with our sample ($\alpha > .90$, $p < .05$). All SMHCI variables and subscales demonstrated normality, falling within acceptable limits of ±2.0 for skewness and ±7.0 for kurtosis (Bryne, 2010; Curran et al., 1996; Hair et al., 2011) (see Appendix D for subscale descriptives). Mean responses for each subscale are provided by wave in Figure 8. Respondents at both waves rated each subscale relatively high overall, indicating adequate perceived capacity to provide mental health supports at the intervention, early recognition/referral, and prevention and promotion levels. There are minimal differences between each wave, with the largest difference being in the Intervention subscale (Wave 1 M = 2.94, SD = 6.55; Wave 2 M = 3.07, SD = .633). No differences were statistically significant.

Figure 8

SCMHI Subscale Responses by Wave



To understand whether implementation stage affected implementation capacity, an Analysis of Variance (ANOVA) was computed for all cases to assess differences in Primary Implementation Stage scores based on SMHCI subscales (Table 7). To account for lack of homogeneity of variance, Welch's

adjusted *F* ratio was used (Field, 2013; Tomarken & Serlin, 1986). Results suggest that the Intervention subscale scores differed significantly by implementation stage, *Welch's F* (3, 32.32) = 3.38, $p < .005$. The highest mean score for this subscale was observed from respondents in the Full Implementation stage, and therefore those who were the furthest along in implementation reported the highest capacity to address mental health problems, particularly at the intervention level, which largely relates to processes to connect students and families with services once a mental health problem is identified.

Table 7

Descriptive Statistics and ANOVA Results for SMHCI Subscale and Primary Implementation

SMHCI Subscale	Exploration		Installation		Initial Implementation		Full Implementation		*Welch's F*	*p*
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*		
Intervention	2.81	.790	2.74	.613	3.02	.599	3.25	.453	3.36	.031*
Early Recognition & Referral	2.77	.777	2.78	.685	3.07	.518	3.21	.467	2.68	.063
Prevention & Promotion	2.73	.748	2.74	.689	3.03	.552	3.14	.567	2.06	.125

*Denotes significant result at $p < .05$.

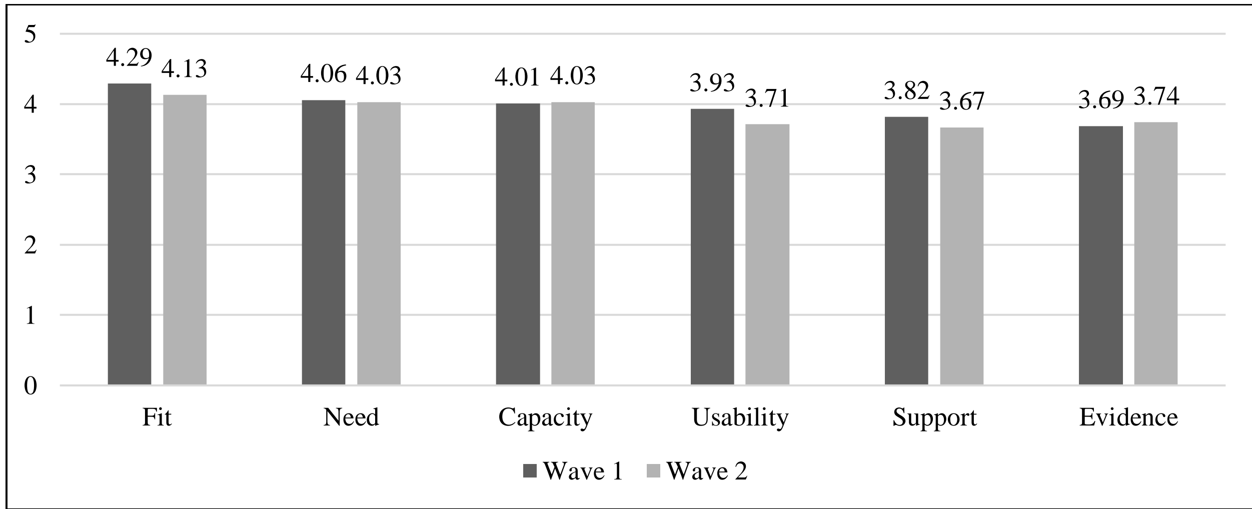
The three SMHCI subscales were further tested to determine whether there were meaningful differences between the two waves. Repeat responses were excluded to maintain the assumption of independence, resulting in 44 cases for Wave 1 and 21 cases for Wave 2. To account for the small sample size and to best fit scaled responses, the Mann-Whitney U Test was used. There was a significant difference in responses to the Early Recognition and Referral subscale between Wave 1 ($M = 2.92$, $SD = .609$) and Wave 2 ($M = 3.19$; $SD = .507$), $U = 681.5$, $z = 1.946$, $p = .052$. This may indicate that more of these early recognition and referral processes were in place during the second wave as a result of the STOP grants, thus effectively meeting schools' mental health needs. This also reflects the open feedback

respondents shared about efforts they were making to improve referral systems and train teachers and staff to identify signs of mental health problems.

Implementation Capacity. The NIRN Hexagon Tool was used to assess the capacity of STOP grantee agencies to carry out program implementation. This component is based on six subscales that are shown to improve implementation readiness and effectiveness, and each is rated on a five-point agreement scale where 1 = strongly disagree and 5 = strongly agree. Cronbach's alpha was calculated to assess internal consistency of the subscales. All subscales demonstrated acceptable internal consistency with our sample ($\alpha > .70$, $p < .05$), with the exception of Usability, which was slightly lower at $\alpha = .57$, $p < .05$. All 24 NIRN Implementation variables and subscales showed normal distributions according to skew and kurtosis values (see Appendix D). The means for each subscale are shown by survey wave in Figure 9. Overall, respondents at both waves rated their capacity for implementation high to very high, with Fit being rated the highest at both waves (Wave 1 $M = 4.29$, $SD = 5.97$; Wave 2 $M = 4.13$, $SD = .563$). For Wave 1, the component of implementation that was rated lowest was Evidence ($M = 3.69$, $SD = .799$) and for Wave 2, the lowest rated subscale was Support ($M = 3.67$, $SD = .762$). That all subscales were rated high is encouraging and demonstrates that agencies supporting school-based mental health and violence prevention initiatives are embracing evidence-informed strategies for preparing for and carrying out program implementation. The stagnancy at both waves is somewhat less encouraging, as more time into implementation activities should theoretically result in greater capacity for implementation. However, since the scores were already high in Wave 1, it may be unreasonable to expect subsequent waves to report higher scores just as a result of having more time to implement programs.

Figure 9

NIRN Implementation Subscale Responses by Wave



In order to understand whether population category contributed to differences in being able to successfully implement programs, a multivariate analysis of variance (MANOVA) using Pillai's Trace was conducted separately for each of the three SMHCI subscales and the six NIRN Implementation subscales at each wave (see Appendix E for complete MANOVA tables). For Wave 1, none of the tests yielded significant results ($p < .05$) for either measure, indicating that responses did not differ significantly across population categories. For Wave 2, only the Need subscale on the NIRN Implementation measure showed a significant result, F (16, 112) = .818, p = .040. Analysis of the ANOVAs for the items on this subscale reveals that three items had responses that differed significantly by population category (see Table 8). These items relate to defining the focus population, identifying specific needs of the population, and asking community stakeholders about their perception of need. While population category did not contribute to major differences overall to differences in school mental health or implementation capacity, the lower mean scores from the Need subscale from the higher population categories suggests that needs are more difficult to meet for large agencies such as states and large counties. This is supported by open feedback from respondents that indicated greater challenges serving a wide diversity of populations.

Table 8

ANOVA Results for Population Category Differences in the NIRN Implementation Need Subscale

Variable	Mean Score by Population Categories					ANOVA Statistics	
	1	2	3	4	5	*F*	*p*
Focus population for the STOP program is clearly defined.	3.66	4.50	4.25	4.63	4.33	2.855	.042*
Specific needs of the focus population have been identified.	2.50	3.50	3.87	4.27	4.16	6.866	<.001**
Community stakeholders were asked about their perception of the need.	2.83	4.00	3.87	3.90	4.16	2.651	.054
The expected impact of the STOP program is clearly defined	3.33	5.00	4.00	4.18	4.33	2.132	.103

* Denotes significant value at $p < .05$; ** Denotes significant value at $p < .01$

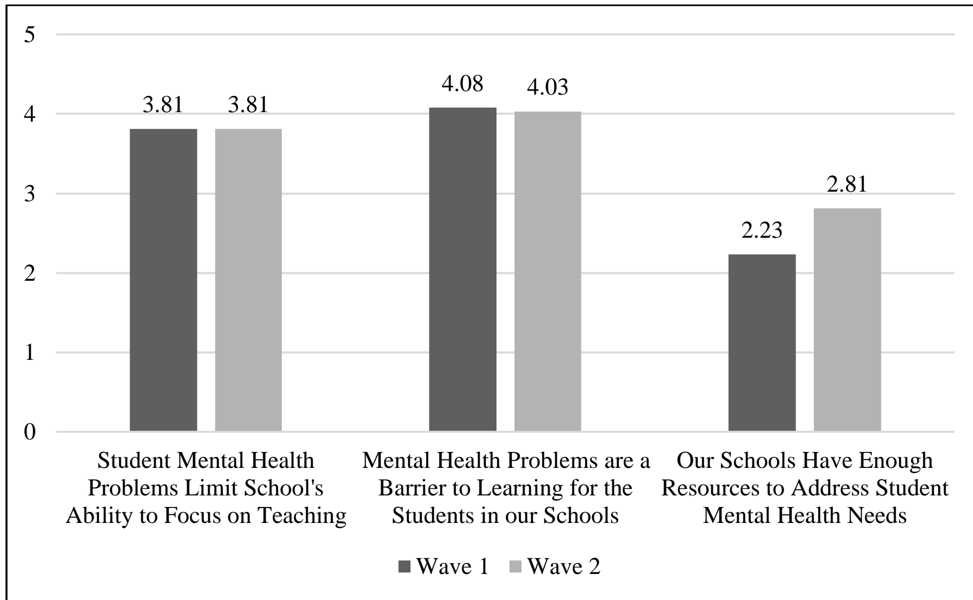
RQ3: Barriers and Facilitators to Implementation

Barriers to Mental Health in Schools. Responses to the Barriers to Mental Health in Schools supplementary questions from the SMHCI indicate that grantees at both survey waves were experiencing many barriers with insufficient resources to address them. Mean scores were calculated for each of the three items, using a 5-point Likert scale. Respondents from both waves had identical ratings for the first item on mental health problems interfering with teaching (Wave 1 M = 3.81, SD = 1.05; Wave 2 M = 1.13, SD = 1.13). There was also high agreement with the second item, that mental health problems are a barrier to learning in schools (Wave 1 M = 4.08, SD = .92; Wave 2 M = 4.03, SD = 1.1). The third item, that schools have enough resources to address students' mental health needs had lower scores and showed greater difference between waves (Wave 1 M = 2.23, SD = 1.1, Wave 2 M = 2.81, SD = 1.33), though this was not significant when repeat responses were accounted for. These findings suggest that respondents from both waves found mental health problems in schools to be highly disruptive to teaching and learning, even despite the implementation of mental health supports provided through STOP grants over a two-year period, though these efforts were likely mediated by the exacerbation of mental health problems during the pandemic and post-pandemic period. Furthermore, while there was a little to moderate agreement that schools had adequate resources to address mental health needs, the higher rating on this

item in Wave 2 may suggest that respondents saw improvements in resources, which may be related to the STOP grant funds and initiatives.

Figure 10

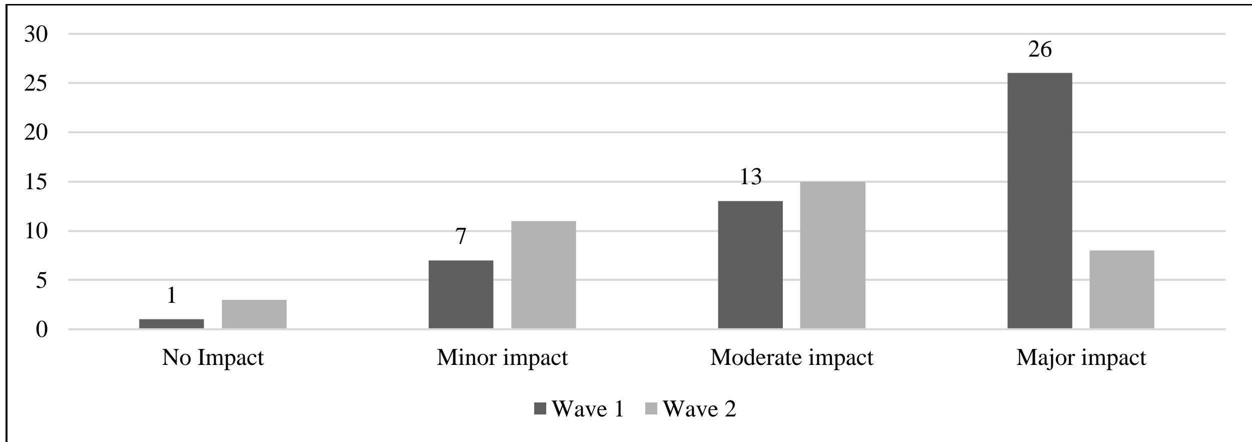
SMHCI Supplement 2: Barriers Responses by Wave



Because the grant activities of the funding years that were assessed (2018 and 2019) coincided with the COVID-19 pandemic, there was an obvious impact to program implementation given that schools were especially affected by closures and discrepancies in reopening policies. Most respondents from the first wave of the survey said that COVID had a major impact on their implementation efforts, while this number dropped substantially by the second wave, though many still reported a minor or moderate impact from the pandemic.

Figure 11

Extent of COVID Impact by Wave



Respondents shared barriers they were facing in open feedback from the survey, both in terms of the pandemic and general implementation challenges (see Table 9). Responses were somewhat different for each group. Barriers from the Wave 1 of the survey ranged from challenges with meeting the needs of diverse schools or districts, especially in grantee agencies in higher population categories, to logistical challenges in implementing programs such as contracting processes. Wave 1 respondents were more likely to face barriers related to the immediate aftermath of the pandemic (i.e., determining how to adapt programs virtually or in alignment with public safety guidelines), and this was coupled with other competing priorities in schools, such as how to continue supporting social-emotional learning and violence prevention programs when there were widespread concerns about academic learning loss. One respondent noted,

> The pandemic and the related school closures have severely disrupted implementation. No trainings could be done between March 2020 to early fall 2020. In 2020-21, schools were so overwhelmed which negatively affected the training take-up rate. Many sites originally signed up for the trainings have requested that trainings be pushed back to next year.

Respondents from Wave 2 expressed more concerns about teacher and mental health specialist shortages and lack of adequate funding and short timeframes to fully implement programs. Both waves discussed lack of clear or consistent administrative support as a barrier to implementation, as well as ongoing

effects of the pandemic and other national crises (e.g., racial tensions and school shootings). For instance, many commented on how the pandemic exacerbated mental health problems and staffing problems well beyond the actual pandemic: "[We have] fewer staff than before COVID, but significantly more work to do to support students."

Table 9

Summary of Open Feedback on Barriers to Implementation

Wave 1	Wave 2
Meeting needs of diverse schools or school districts, especially for grantees from highly populated states and counties	Lack of adequate funding and short timeframe for implementation
Lack of a more collaborative response to mental health concerns – both within schools and as communities	Teacher shortages, increased resignation, and turnover
Post-COVID heightened stress and mental health problems for personnel and students	Inadequate community mental health professionals and services (long wait lists)
Logistical challenges implementing or adapting programming (transitioning to virtual or delaying) as a result of the pandemic	Heightened need for mental health training among personnel
Academics being prioritized over mental health/SEL	Inconsistent commitment from partner agencies
Lack of clear administrative support	Changes in administration/lack of clear leadership
Effects of local and national crises (racial and political unrest, natural disasters, school shootings)	Changing needs as a result of pandemic (increased mental health needs that were not accounted for)

Facilitators to Implementation. Respondents from both waves also provided insights on what factors facilitated effective implementation. This feedback was more consistent across waves and has been combined in Table 10. Several responses indicated that collaborations, memberships, and formal partnerships were instrumental in facilitating effective implementation. Other responses spoke of the importance of formal and informal supports, whether in the form of technical assistance and resources or

administrative buy-in and staffing supports. One respondent commented, “School level staff and administrators are key to success of all programs."

Table 10

Summary of Open Feedback on Facilitators of Implementation

Wave 1 and Wave 2
Increasing collaborations between official departments, law enforcement, community agencies, and research partners
Establishing memberships with professional associations (e.g., Association of Threat Assessment
Professionals; workgroup through National School Safety Alliance)
Having administrative buy-in
Partnering with other STOP grantees (e.g., offering YMHFA from one grant to crisis line and threat assessment teams from another)
Additional capacity, support, and funding at federal and states levels
Ensuring mechanisms for students to have safe staff member to reach out to
Using other funding streams to complement STOP-funded programs and training
Having informational resources for evidence-based programs
Utilizing virtual platforms and new technologies to increase capacity for training and family outreach
Engaging in technical assistance from National Center for School Safety
Conducting annual progress reviews
Having well trained staff

RQ4: Factors Associated with Satisfaction and RQ5: Opportunities for Informing Implementation

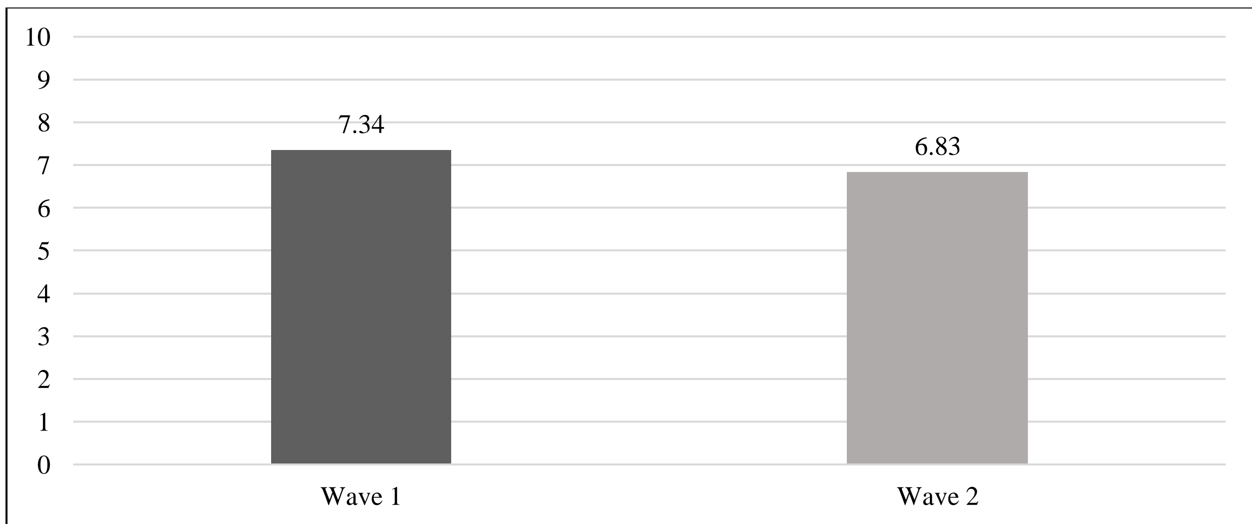
The last two research aims are interconnected, and analyses for these have been combined. Research Question 4 aimed to understand how various components of the implementation process contributed to satisfaction, and Research Question 5 aimed to understand what measures were in place to evaluate and inform continuous implementation processes, including where opportunities and needs still exist for incorporating feedback to strengthen overall implementation. Descriptives were used to explore level of satisfaction with overall implementation based on a variable asking respondents to rate their

satisfaction on a scale of 1-10. Additionally, a correlation analysis using Kendall's Tau-b was used to investigate the relationship between implementation capacity, school mental health capacity, and overall satisfaction at both waves. The analysis included all responses for both waves, and cases with missing data were excluded pairwise (see Table 11 for descriptive statistics and correlations).

Both groups of respondents reported moderately high satisfaction, though the mean for Wave 1 was slightly higher at 7.34 (*SD* = 1.848) compared to 6.83 for Wave 2 (*SD* = 2.398). When paired with open feedback from respondents, this small decrease might highlight the fact that more grantees in the first wave were still in the earlier implementation stages and in the process of adapting programs to the COVID environment, while by the second wave, grantees may not have met as many of their goals by the end of the grant period as they hoped, or may have been met with ongoing barriers, such as lack of appropriate personnel to implement programs or lack of consistent administrative support.

Figure 12

Mean Overall Satisfaction by Wave



Next, a correlation analysis was conducted using Kendall's Tau to determine whether there was a relationship between primary implementation stage and overall satisfaction with implementation (see Table 11 for descriptives and correlations). The mean satisfaction score for all respondents (n = 68) was

7.16 (*SD* = 1.20). There was a positive correlation between satisfaction ($n = 68$) and primary implementation stage ($n = 81$), suggesting that later stages of implementation were associated with higher satisfaction ($\tau_b = .19$, $p > .05$). The analysis also assessed the relationship between overall satisfaction and school mental health and implementation capacity. All of the SMHCI subscales and all of the NIRN Implementation subscales were significantly, positively correlated with overall satisfaction at $p < .05$. This suggests that satisfaction increased with higher capacity to implement programs and address school mental health needs.

The correlation analysis also examined whether mental health capacity was associated with implementation capacity during either wave. Significant, positive correlations were found between nearly all the SMHCI and NIRN Implementation subscale variables. The SMHCI Intervention and Prevention & Intervention subscales had a significant, positive correlation with all of the NIRN Implementation subscales at $p < .05$. The SMHCI Early Recognition subscale was significant for all NIRN Implementation subscales except Capacity ($\tau_b = .14$, $p > .05$). This indicates that those with higher responses to school mental health capacity questions also had higher responses to implementation capacity questions. This is important for informing ongoing efforts to implement violence prevention programs and mental health training, as it shows that capacity to address mental health problems and implementation readiness are associated.

Table 11

Descriptive Statistics and Correlations for Overall Satisfaction, Implementation Stage, and SMHCI and Implementation Subscales

Variable	*n*	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11
1. Overall Satisfaction	68	7.16	1.20	--										
2. Primary Implementation Stage	81	2.52	1.23	.19*	--									
3. SMHCI Intervention	70	3.01	.617	.39**	.20*	--								
4. SMHCI Early Recognition	70	3.00	.580	.39**	.20*	.67**	--							
5. SMHCI Prevention & Promotion	68	2.95	.578	.35**	.54**	.56**	.66**	--						
6. Implementation: Need	69	4.06	.605	.32**	.04	.27**	.33**	.36**	--					
7. Implementation: Evidence	67	3.72	.783	.17*	.04	.24**	.27**	.22**	.24**	--				
8. Implementation: Fit	70	4.25	.585	.32**	.13	.28**	.32**	.37**	.37**	.32**	--			
9. Implementation: Usability	68	3.86	.573	.32**	.15	.23**	.24**	.35**	.35**	.18*	.39**	--		
10. Implementation: Capacity	69	4.04	.713	.31**	.14	.26**	.28**	.36**	.36**	.14	.34**	.35**	--	
11. Implementation: Supports	68	3.78	.633	.30**	.10	.42**	.40**	.39**	.39**	.21*	.43**	.45**	.36**	--

*$p < .05$, **$p < .001$

Case Study Results

As previously described, the primary goal of the case study was to utilize interviews and observations to assess implementation efforts, adaptations to programs, and lessons learned. This qualitative data collection effort was analyzed, with a focus on stakeholder interviews, to identify recurring themes that arose in conversations. The qualitative analysis identified several major themes relevant for understanding the implementation process. These themes included vision, leadership drivers, organizational drivers, competency drivers, local environment/contextual variables, improvement cycles, and impacts or outcomes. Characteristics of the case study agencies are provided below, along with a discussion of findings organized by theme. For ease of interpretation, subthemes are described separately.

Characteristics

Grantee agencies that participated in the case study analysis represented multiple regions and population categories (Table 12). Two sites were from the East, two were from the Midwest, and two were from the South. Regarding population category, two sites were from the largest category, 1 (state with a population greater than one million), and one each were from categories 3 (urban area or large county with population greater than 500,000), 4 (suburban area or medium county with population between 100,000 and 500,000), and 5 (rural area or small county with population less than 100,000). Case study participants worked for a range of agencies, including law enforcement, health departments, school systems, and curriculum development organizations. Grantee program components also varied across sites. While some were more focused on violence prevention, others focused on mental health, and some included both. Additionally, some projects focused on threat assessment, anonymous reporting, and crisis response, with one agency incorporating all three. Finally, target audiences differed somewhat, with most sites including programs or education for students as well as training or education for school personnel, and one focusing only on training for school personnel. The number of program components also varied across sites. The sites participating in the case studies thus represent broad diversity in size, complexity, and program components, allowing us to better assess program implementation under multiple conditions.

Table 12

Case Study Site Characteristics and Program Components

Site	Region	Pop Cat	Evidence-based Violence Prevention Program for Students	Violence Prevention Education for Students (presentations)	Violence Prevention Training for School Personnel	Mental Health Training for School Personnel	Mental Health Education for Students	Development of Anon. Reporting System	Development of Threat Assessment System	Development of Crisis Response Team
1	East	3	X	X	X		X			
2	Midwest	1			X	X				
3	Midwest	1	X	X	X	X	X			X
4	East	5				X	X			
5	South	4		X	X				X	
6	South	3	X	X	X			X	X	X

Note. Population categories are as follows:
1 = state with population greater than 5 million
2 = state with population less than 5 million
3 = urban area or large county with population greater than 500,000
4 = suburban area or medium county with population between 100,000 and 500,000
5 = rural area or small county with population less than 100,000

Respondent Role

Respondent roles included, but were not limited to grant development, cross-agency coordination and team leadership, grant administration, teacher training and support/buy-in, school safety, risk and threat assessment, and behavioral health consultation. Participants' time in their role ranged from a minimum of one year to a maximum of four years. Coordination of grantee partners was most commonly mentioned. For example, one interviewee explained, "When our district partners have questions, or need access to resources or information, we're the go between. We customize professional development trainings to meet the needs of each school district." In terms of direct implementation and training of teachers, a respondent described, "I work closely with two members of the team to make sure that the teachers are on board with implementing the [redacted] program throughout the school." Additionally, those identified for interviews were often in a role of individual or joint decision making regarding their STOP grant, as seen in the following explanation: "In my role, I am responsible for decisions related to instruction, curriculum, and assessment."

Several SROs were interviewed as a part of the case studies. An example of their role from an interviewee's own words was, "Since the awarding of the STOP grant, one of the first things that we did institutionally was to put a large focus on identifying, or creating, the capacity to identify, mitigate, and manage threats at the SRO level." Other interviewees were developing training content for SROs, so were in more academic or behavioral health positions and coordinating with the firsthand experience of law enforcement.

Vision

The theme, Vision, includes discussion of how participants saw STOP programs being carried out and leading to change, how this aligned with their agency and other stakeholder goals, and what the rationale was for implementing programs in their specific agencies and regions. These insights address *RQ2: How have violence prevention and mental health training programs reflected community needs?*

Personal and Shared Vision. Interviewees were asked to provide insight into the vision and desired outcomes for implementing STOP grants. In addition to the underlying sentiment and desire to keep schools physically safe, interviewees noted the importance of ensuring the emotional safety and well-being of the children. Safety was seen as relevant not only to the physical entrances and exits of school buildings and classrooms, but moreover to instilling safe school environments for all school age children and not inflicting psychological harm. A common thread that was discussed in terms of school safety was identifying and addressing trauma that may evolve or manifest into acts of violence.

Interviewees expressed an interest in developing supportive schools that focus on the mental health of children as a component of violence prevention. Many stakeholders mentioned issues of anxiety and social isolation, and their potential to lead into either bullying or being bullied. The extreme of this would be missing cues on mental health issues with students in so far as a child or teen brings a weapon to school. Many stakeholders expressed that there is a decreased likelihood of school violence when school-aged children feel more socially and emotionally connected to their peers and school community. Several interviewees indicated they hoped that the project would help develop and provide training to law enforcement and other school safety personnel so they may gain tools to enrich their interactions with students. As one participant noted, "if I had one hope [it] is that it can shift law enforcement thinking and acting so that they're welcome in the school community and are valuable, productive, supportive members of that community." Another participant expressed a hope that there could be less youth arrested in the schools and instead "more involvement by the schools handling behavioral issues, like [how they] used to be handled in the past."

Other interviewees viewed the grants as an impetus to make changes in communication within their area to share best practices and establish processes to communicate with other parts of their school system, such as school safety personnel. "That's the big vision, is to create an infrastructure, a system around these ideas and then to actually try to get this content into the hands of those school personnel." Participants also saw the grant as providing an opportunity to establish communication and protocols amongst team members to discuss needs, resource capacity, and sustainability.

Program and STOP Goals. Interviewees were asked what the impetus was for pursuing the STOP grant to gauge the extent to which there was a shared goal for programs among grantee agencies and with local stakeholders. Several interviewees noted that the grants provided the opportunity to provide training to school personnel, which included teaching staff, support staff, administration, and SROs to recognize and respond to youth who are having a mental health crisis or behavioral issues. Interviewees noted the importance of responding to youth within the confines of the school and essentially building competence within the school to improve time to respond instead of relying on referrals to outside resources. In addition to pursuing the grants to provide education to improve responses to incidents that may be considered a 'red flag' for future violence, participants also reported using education to support all students as a general violence prevention strategy. Participants reported teaching mental health first aid, providing training on trauma-informed care, and teaching about protective factors that promote well-being. Other interviewees reported that their goal for the project was to purchase curricula to provide training directly to students to promote positive social-emotional growth, dating violence prevention, and general violence prevention. As one interviewee succinctly said: "The first goal is to prevent student violence and promote positive psychosocial growth with position-specific training for school personnel. And then the second goal is to prevent student violence and promote positive psychosocial growth through developmentally appropriate education for students."

Other interviewees reported that the goals of their specific programs were to develop, implement, monitor, and track threat assessment or risk assessment tools. These assessment tools typically include a set of questions to ask of a student who may be at risk of harm to self or others. Interviewees reported being in various stages of using an assessment tool, from development and implementation within a localized area, implementing across several schools, or pursing testing and validation of the tool with research partners. Interviewees noted that implementation of the assessment tool includes ongoing training to school staff on the use and value of the tool. As one interviewee noted: "The goals are that we want to identify threatening behavior, and hopefully to minimize it. But we also want to educate our staff as to basically what threats are and what they aren't, and what we can do to alleviate some of those

threats." Another interviewee reported that the STOP grant provided a way to further enhance school safety through the development of a resource center that would be available to guide local area schools in responding to threats that may be identified via assessment tools. "We needed to develop a resource center so that we could help the schools when in fact they did receive these threats. We needed to help the schools with best practices so that's how that kind of came together."

Participants noted several methods of identifying programs to implement. From a governor appointed task force, to state-led initiatives that included students within their stakeholder group, to assessing student needs at the district or school level. There were several goals identified by interviewees based on the project they were implementing to meet the needs of their community. One interviewee noted a desire to use grant funding to support staff positions for an online resource/tip line so they could have staff available at any time to respond to reports from students about what is occurring in the school. The grant-funded staff positions would be available 24 hours a day, every day of the year, to respond to the requests and concerns of students via a confidential tip line. Their goal is "to have that place for our kiddos, who are on the front lines all day, every day, and they know, hear, and see everything that's happening inside of that building that the adults may not be seeing."

Rationale. Participants were asked about the rationale for implementing a specific program or resource. Three primary reasons were cited by participants: feedback from student or youth surveys about violence and mental health problems, a need to scale up current initiatives, and following state legislature recommendations. One interviewee stated: "We recognized through some of the surveys and feedback from our kids and our community that this was a need for our district. So, we were excited to pursue the grant to help implement those programs in our district." Another participant stated:

> [The rationale was] really to address the mental health concerns that we were seeing in schools. One of my concerns was that a lot of the mental health issues were being looked at as problematic and dealing with the symptoms as opposed to trying to address the whole student or coming at it from a holistic approach. We wanted to develop something that would allow, specifically school safety staff, to have tools to promote positive psychosocial growth with students and also have

this awareness of mental health and what exactly that means, so the school safety and security staff could function effectively within that academic environment…

Leadership Drivers

Case study interviewees were asked several questions specific to involvement in strategic planning efforts, leadership involvement, meeting efficiency, and decision making. The involvement of leadership and the establishment of informed decision-making processes were generally seen as having an important impact on the implementation of STOP grant programs at each site. Feedback about leadership drivers helped to address *RQ1: How have stakeholders been involved in various stages of implementation?*

Strategic Planning. Interviewees were asked to discuss strategic planning as it related to development and revision of each STOP program's grant application and developing a plan forward. Interviewees spoke primarily about who was involved in strategic planning efforts, being strategic about STOP project conceptualization and roll out, and frequency and content of meetings. Many interviewees reported spending significant time on various workgroups and planning meetings for the STOP grant projects.

First, there was variability across projects in terms of whether or not there was a strategic planning effort specific to the STOP grant. In two of six sites there was limited strategic planning that occurred per some respondents. For those who did mention strategic planning, both leadership and those who would be implementing the curriculum were involved. One respondent stated, "The counselors, the lead teachers, they were looking at data from schools using [redacted] programs. So, basically, the counselors and principals were huge in getting the ball rolling with it."

Second, interviewees discussed being strategic in how the program was rolled out, establishing the necessary infrastructure, and staging roll outs to different age groups and schools. Regarding being strategic around what infrastructure was needed, offices and teams were established in advance of project roll out. In terms of staged rollouts, one of the sites started their program targeting curriculum delivered to K-5, and then expanded to 6th and then 7th and then 8th grades. And as the program rolled out it was also

interwoven into more comprehensive planning. An interviewee further explained: “This project and this focus on social and emotional learning has gone into our overall district goals. So, we continue to be very strategic about our rollout of the programming.” Interviewees also spoke in terms of looking at the big picture in advance, understanding project development from start to end, from the teams that needed to be formalized by a certain date, gauging input statewide from school leadership, determining how to gain buy-in, hiring trainers, scheduling training timing and locations, getting approvals from state leaders, and then figuring out what sustainability might look like moving forward.

Third, interviewees spoke about the frequency of meetings and types of topics covered. Frequency varied by project, as did topics, but an example that was typical is as follows:

> We meet several times a year as a district with [Agency] and the County office representatives to discuss each year, annually, what we are going to do. Who are we going to bring it to? What data are we going to collect? What’s our timeline? What training do we need? So, those meetings happen, I want to say, three times a year now to set the stage for how we proceed each year.

Interviewees stressed that strategic planning meetings made for good opportunities to avoid siloed efforts, or to continue to break down barriers that had previously reinforced siloed efforts. Another positive mentioned was that these meetings were used to discuss braided and blended funding to support larger efforts to bring best practices to school districts and other service systems. A final positive mentioned was the opportunity to forge alliances with different types of stakeholders who would normally be competitive with one another. An interviewee summarized:

> Sometimes when we work with nonprofits, they are competitive by nature. They look at this work as finite. They look at it as either I have the resources, or you have the resources. We have worked diligently with the concept that a rising tide raises all boats. And so, we always are careful to write in our partners into the grants. Because if someone has a piece of ownership for something, it's much more likely you're going to get their best.

In doing so, strategic planning meetings then materialize into plans for sustainability of funding across grants and into future collaborative grant applications.

Leadership Involvement and Decision Making. When asked who comprises the key leadership team, responses varied based on the office or organization responsible for executing the STOP grants. However, most interviewees reported that there were not any key members missing from the leadership teams. A couple of interviewees reported having advisory committees to inform and review grant activities.

Interviewees were also asked to discuss how decisions were made when changes were needed. Interviewees indicated varying levels of involvement and understanding of the processes that may be involved in decision making. One interviewee noted the process would be to initiate a meeting that would include bringing together student support staff and curriculum development staff to work together to make changes to curriculum or resources. While no interviewee outlined a specific change process within their system, several did note that there was a seemingly informal process of discussing changes through levels. Another interviewee indicated some level of autonomy in making changes and avoiding delays navigating a bureaucratic system. They indicated that collaboration with a university partner on curriculum leads to a recognition that the partner is an expert in that area.

> I feel that our section and I have been given the power to make decisions regarding the curriculum on behalf of our agency. That is, I think, an important thing. So much of the stuff that we do has to get approved by a chain of command and again it's the bureaucratic process. But with this I think that we've been given the power to make these decisions in real time with [University], so that's been a huge part of this process and being able to do that. I think we would be nine months behind where we are now if we had to take all these decisions through our chain of command.

Implementation Science. Interviewees were asked the extent to which implementation science had been utilized in developing and guiding implementation of their programs and initiatives. Most interviewees indicated little to no knowledge of implementation science. However, through the interviews it was apparent there were components of implementation science utilized, but no specific framework was utilized. Interviewees were also asked to rate on a scale of one to ten (with ten being most effective), how

effective their implementation processes have been. All interviewees rated implementation process at a six or higher, indicating they felt that the implementation processes at their sites were effective.

Barriers and Facilitators. To determine factors that contributed to effective implementation, interviewees were asked about any facilitators or barriers to implementing their programs or initiatives. These responses provided insight into *RQ3: What are the perceived barriers and facilitators to implementing violence prevention and mental health training programs across grantee agencies?* The most common facilitator reported was strong communication and having regularly scheduled meetings. One interviewee stated:

> Having the good, ongoing communication and strong relationships with our partners through those beginning, mid, and end of the year meetings, having email communications in between, if they ask for a resource we develop, and we make it available to all of our brand partners. Having our twice a month or monthly BJA grant team meetings. So, I think collaboration has been important too.

The most common barriers to implementation that were reported were "competing with instructional time" and the COVID-19 pandemic. Interviewees repeatedly reported that there were other district-level initiatives and mandates related to academic instruction that schools must incorporate. Violence prevention and mental health training initiatives were just another task that could be perceived as a burden. Some interviewees reported that academic instruction will always be priority over other initiatives.

There were some interviewees that reported mixed levels of satisfaction with implementation. One interviewee noted that there was a high level of satisfaction and buy-in at the district level and efforts were being made to engage parents through sharing information. They also noted that implementing additional curriculum has a significant impact on teachers, who may already feel overwhelmed, may not fully understand the importance of the material, or may not agree that the curriculum should be included as part of their teaching requirements. Similarly, another interviewee commented on how these additional demands impact fidelity and effectiveness, noting,

> You have other teachers who don't do it with fidelity, just do a lesson every day, as opposed to the lesson for the week, because it's a checkbox because they have so many other demands. So, I think a lot of time to do it efficiently and effectively is huge, and while balancing the other responsibilities that are coming from Admin.

In addition, some participants discussed varying levels of involvement with law enforcement, with one interviewee reporting higher levels of engagement and new opportunities to build relationships with SROs, and another reporting that law enforcement is not involved with communication or engagement happening with teachers or families.

Organizational Drivers

Interviewees were asked several questions specific to organizational factors that could impact implementation, such as coordination and communication efforts, system integration processes, program and training dosage, funding and turnover rates. It is well established in implementation research (NIRN, 2023) that these organizational-level factors could serve as potential barriers or facilitators to effective implementation, and therefore feedback on this domain also contributes to the study aim for RQ3, to understand perceived barriers and facilitators to implementing violence prevention and mental health training programs across grantee agencies.

Interagency Coordination and Communication. Interviewees reported across the board that the implementation of training and programs was a team effort and required people to work together across agencies and disciplines. A few examples noted were teams with school representatives, such as support staff, teachers, administration, social workers, mental health professionals, law enforcement, and school nurses. Two stakeholders that were notably missing from the interviewee responses were students and parents. A few interviewees noted that they were able to take advantage of existing collaborative relationships that were long-standing and had been working together within the community for up to 10 or more years. One interviewee noted: “I think we've been able to move the project forward because of our existing collaboration and relationships.” While another interviewee recognized the importance of engaging stakeholders early in the project:

> I think that that has to be a factor [in facilitating implementation], and maybe we could've started it a lot sooner, but involving all the stakeholders in regular meetings to discuss the implementation and what their roles would be. I mean, we've done that, but I think that from a factor standpoint, we could've maybe started that a lot earlier maybe, to streamline it a little easier.

While building a collaborative relationship across diverse teams can be beneficial, it was also noted that sometimes when various stakeholders are involved, it may not actually be a collaborative process. One interviewee indicated that, over the years, they have learned the importance of utilizing a framework that helps guide teams to work collaboratively. Another interviewee noted that a barrier that can impact implementation is the fact of working with different agencies that have their own sets of policies and procedures which hinders decision making. Several interviewees reported that the partners working with them on the STOP grant were supportive and communicated on a regular basis, using various methods of communication. Partners used email communication, participated in regularly scheduled meetings, and used different online technologies to share resources and documents. Others indicated using memos, monthly newsletters, and quarterly and annual reports to share information and progress on implementation goals.

System Integration. Interviewees were asked to discuss the extent to which their STOP grant program had been integrated into existing local school environments or service systems, as applicable. Most interviewees brought up examples of steps their project was taking that might lead to system integration, for example, building a STOP grant project team of diverse members that were from different backgrounds and agencies such as law enforcement, academia, and behavioral health. Several interviewees discussed ways their diverse professional backgrounds spanned sectors and agencies, giving them insight into how related systems could integrate efforts. Many had prior experience in law enforcement, teaching, or school administration, which helped them to “connect those worlds” as they moved into higher level administrative positions, and which contributed to their ability to carry out program implementation.

Additional efforts toward system integration had to do with soliciting buy-in from different stakeholders for the STOP program. One interviewee explained:

> I think a lot of what I started doing was reaching out to school districts in the state, the leaders of the school districts being superintendents, because I think that it's important that the school district leaders have the knowledge of what these teams will accomplish and what the benefits to allowing their particular school staff to be involved in these teams–what the benefits are not only for the individuals, but also for the schools, because if schools are participating in these teams that means that again their staff is fully trained in crisis response.

Finally, regarding integrative threat assessment systems, some interviewees spoke of the importance of developing technologies that alert stakeholders beyond law enforcement, such as teachers or anyone else signed up for alerts, of an identified threat and the corresponding coordinated response. Training a diverse array of individuals on curricula used for violence prevention and mental health training programs was also mentioned as important for system integration. Only one barrier was noted in terms of systems integration, which was that many agencies had their own approval process and timelines, which sometimes interfered with being able to effectively carry out implementation activities.

Program and Training Dosage. Regarding the number of training or program sessions, interviewees primarily reported a need to expand or deliver more than the allotted number of sessions. For example, one interviewee noted: "The national organization will not allow us to do [student mental health training] in more than two sessions. We would be able to have a much wider audience if we could break that into three or four sessions." This indicates a need for flexibility regarding the number of training or program sessions a school or agency can offer.

Funding. When asked about the impacts of funding on implementation, interviewees had mixed responses. It was reported that funding could serve as a barrier or facilitator. Funding was a facilitator in that the STOP funding allowed some sites to expand. One interviewee noted that the STOP funding allowed them to expand into different schools that they otherwise would not be able to serve. Another interviewee highlighted the challenges in not having enough funding:

> Not only does the school just not have the funding to support having somebody be available onsite to address a student when they're experiencing a mental health crisis in real time, but they also just don't have access to that. So, we're seeing that, while a lot of schools wanted to have somebody staffed, right, so personnel with benefits on staff in their buildings, they just cannot fund that.

All respondents also reported utilizing state-level funding to support implementation so that programs implemented under the grant did not abruptly end when the grant funding ended.

Turnover. Several interviewees reported turnover as a challenge. Turnover was discussed at both the program level and at the school level (e.g., teachers and administrators). Stakeholders expressed that turnover was just one example of why training needed to be continuous, so that if one staff member leaves, the new staff can also be trained in violence prevention and mental health awareness. One interviewee stated:

> I think the other factors that come into this as well are that you get school districts that are on board, and this is tied to COVID, we're getting administrators leaving and people changing [positions]. And so, when you have been working and going along this path and kind of building this platform, and then an administrator who has bought into it leaves, the risk of the new administrator coming in might not see that as a priority to implementation and as a need for continuous training and support.

Competency Drivers

Responses related to competency drivers help to respond to *RQ5: What measures are in place to evaluate and inform continuous implementation processes, and where do opportunities and needs exist for incorporating feedback to strengthen overall implementation?* For this domain, interviewees were asked about the extent to which the implementation of the STOP programs has led to increased competencies in stakeholders, such as support and buy-in, and increased skills for teachers, SROs, or other stakeholders.

Staff Support and Buy-In. Interviewees were asked questions to help assess the extent to which staff or other stakeholders embraced the program or training initiative supported by the STOP grant. These discussions help to understand the level of satisfaction with the implementation of the activities for the grant. Most of the interviewees agree that their initiative was embraced by school staff as well as parents and other community stakeholders. One interviewee stated, "I hear the building principals talking about it telling me that they've read the morning announcements. Teachers are reporting that they're using it and seeing an impact on their students. So, I've heard a lot of positivity." Another participant reported that schools initially were hesitant to learn a new system but were later pleased when they found that it was easy to navigate and use. Finally, some stakeholders reported that the implementation has led to an increase in relationship building across roles within their system with the common goal of ensuring student safety and preventing violence. One interviewee indicated their efforts to encourage buy-in and support by incorporating the voice of the audience into their training development, "we're using a lot of input from those that'll be taking these trainings. So, I think it's really important to be thinking about the audience and bringing their voice into our ideas." Others reported that there is a general interest within the community to find out what is being done within the schools to address threats to student safety.

Skills Development. Interviewees reported that they are seeing teachers and students using a common language, and that students are learning how to manage emotions and become effective learners. These responses indicate that the programs implemented are reaching saturation within schools and districts. Interviewees also reported continuing on-site instructional coaching to ensure programs are implemented with fidelity and skills are retained.

Local Environment/Contextual Variables

Interviewees were asked about any local or contextual variables that may have impacted implementation. The questions were more exploratory and not based on a specific implementation framework, but they were important for understanding how STOP programs and training reflected community needs (RQ2) as well as what unique barriers and facilitators participants experienced based on their community make-up (RQ3). Some key contextual factors that varying across sites included

differences in student mental health patterns, distinct population needs, varying responses to the pandemic, and local and national politics.

Student Mental Health. Interviewees were asked to share their thoughts about student mental and behavioral health, in terms of what problems were prevalent in their school communities. Interviewees expressed concerns about the current state of student and staff mental health and wellbeing and the ongoing effects of the pandemic. Many responses highlighted concerns about the effects of students' isolation after significant interruptions to social interactions, as well as concerns with their well-being in the face of so many stressors to daily life. A lack of social interaction with peers was reported to have produced strained social interactions amongst students, their peers, and teachers upon returning to the classroom. In some cases, the pandemic exacerbated preexisting student mental health issues. A school safety representative explained that the mental health needs that typically exist, "really center around anxiety, depression, suicidal thoughts and ideation. Most issues stem from these and then the lack of support and understanding from the schools." Several respondents indicated that the pandemic had increased stress, anxiety, and depression among both teachers and students.

Along with the rise in mental health concerns, respondents reported that they lacked qualified professionals and supports to meet the needs of students and staff. There were existing struggles, prior to the pandemic, to provide supports to youth facing mental health issues, such as shortages of mental health workers, waitlists for services, and lengthy time lapses before services could be received. The pandemic compounded these problems. As one state level representative elucidated, "We have seen a large increase in student and staff suicides, depression, trauma, stress, and anxiety and yet do not have supports for schools to effectively deal with them." In many other cases, among both staff and students, new social, behavioral, and mental health issues presented themselves that were not previously observed regarding disruptive behavior even at the elementary school level. For some students, school served as their primary source of social-emotional support, in addition to meeting other concrete needs such as supervision and meals. Without day-to-day in-person contact, the benefits of these supports were largely absent, and impacts that ranged from loneliness and stress to significant distress and anxiety were observed.

Many agency representatives indicated that balancing academic and mental health concerns was a significant challenge facing schools in the post-lockdown phase of the pandemic. One immediate issue school administrators faced during this period was prioritizing challenges and deficits in learning caused by children being in the lockdown phase of the pandemic and the virtual/hybrid learning environments where there were not robust learning platforms. Educational leaders felt that discussion on how to teach during this transitionary time replaced most time spent on identifying or addressing student mental health needs. While virtual platforms were in use, the expectation that students achieve the same educational benchmarks within a quickly changing learning environment led to some academic goals not being met across the country. As a result, the emphasis that was placed on closing the educational gap seemed to supersede concern for addressing social emotional learning and mental health issues. A different perspective voiced by one agency representative, was that helping children catch up academically might be the best or easiest way of addressing their mental health issues.

Politics. Interviewees were asked about whether there were aspects of local or state level politics that had helped or hindered STOP grant implementation. Not surprisingly, interviewees more often identified political barriers such as negative sentiments toward SEL programming (or confusion with programs teaching critical race theory), anti-law enforcement sentiments, and general bureaucratic red tape across state run agencies. First, since there have been state level initiatives by governors to eliminate critical race theory from curricula, adoption of new curricula for classes in general was coming under greater scrutiny. Further, there was additionally some confusion amongst school board members, the general public, and politicians about the differences between social emotional learning programming and programs focusing on critical race theory. This has led to an overall political climate that was not as SEL friendly as in years past. One interviewee explained:

> So, there's been kind of a push in our district as there is in so many, that believes that the instruction of social and emotional learning is a coverup for the instruction of critical race theory. And so, that's been a little bit of a challenge to kind of clarify what is being taught in an SEL program. So, we chose to take the stance of not honoring the focus on critical race theory

> but rather sharing the SEL–sharing what the program is. Why is it important? How can this benefit? And, you know, what the program is, and the grant is that we got. So, that's been a little bit of a political hurdle.

Another grantee explained that their curriculum had already been looked at “a couple of times” for evidence of critical race theory recounting that politics were definitely a hot button in their school district when it came to curriculum.

Second, the case study interviews took place during another troubling year of school and campus shootings. There was discussion in interviews about anti-law enforcement sentiments, both in terms of violence prevention efforts and the general public’s comfort level with or without police in schools. An interviewee explained, “we’re creating all this [STOP grant program curriculum development for threat assessment/SROs], but, you know, there's a lot of school districts pulling SROs out of the classrooms.”

Third, long standing bureaucratic red tape or natural siloing of information between different state organizations was raised by interviewees as somewhat of a barrier to STOP grant project implementation. This was often seen as something that could be worked through, but added time to initiatives, not necessarily derailed initiatives. More efforts were put into place to build relationships and establish the appropriate permissions to talk across agencies. An interviewee explained, “there have been a lot of stop signs to make this project happen. But thankfully everyone persisted, and we were able to get that relationship in place.”

Finally, one facilitator was noted regarding politics and STOP program implementation. This had to do with the hope based on previous experiences that it was important to update individual legislators on STOP grant initiatives and accomplishments, as it might lead to political support, buy-in, and future funding allocations down the road. An interviewee explained, “Well, our hope is to kind of always update the legislators on what we're doing. And so, you know, every once in a while, you get somebody that latches onto something and wants to turn it into more.”

Population. Some interviewees spoke about ways the COVID pandemic compounded existing issues with population differences. Problems experienced by rural agencies such as needing to drive

further to access resources and issues of rural poverty were mentioned across several agencies. “These needs have set us up for receiving the grant funds in the first place. And then when you couple the pandemic with that, it gets pretty tough.” As with student mental health issues, these pre-existing challenges were seen as being exacerbated by the pandemic. Several agencies were large enough to serve regions (i.e., states, counties, or districts) with a mix of population levels, and many interviewees expressed challenges providing programs and training across the board that would meet the unique needs of diverse populations.

COVID-19 Pandemic[6]. Given that STOP grant activities occurred in the midst of the COVID-19 pandemic, interviewees were asked specifically about the impact of the pandemic on implementation of the STOP grant projects. Many respondents described their implementation efforts as being substantially impacted by the COVID-19 pandemic as they had to adjust, delay, or request extensions to their STOP grants. Pivoting to virtual schooling and service provision in response to the pandemic was commonly mentioned as interrupting implementation processes, necessitating adaptations, and impacting program budgets.

For many agencies, school closures and the shift to online instruction significantly limited their ability to carry out components of their STOP programs due to professional development and staffing concerns. Numerous agency representatives, for example, reported that school shutdowns resulted in cancelling or significantly postponing trainings and other supplemental activities. One state representative commented,

> [We were] unable to provide trainings for 16 months due to remote work, spaces [being] closed for use, and restrictions on number of people to gather. [We were] unable to provide instructor trainings as planned and budgeted, and fear impacted participants wanting to engage and administrators from wanting to hold sessions.

---

[6] Some findings from this theme have also been included in a manuscript submitted by the authors to *Educational Evaluation and Policy Analysis* which is currently under review.

There were likewise fears of spreading infection with staff coming back to work in person and concerns about how to keep employees safe. One technical assistance representative shared the challenge of avoiding co-location, "We are not going to be able to put a bunch of people in one office, and that's what we had planned prior to the pandemic." Thus, agencies had to re-work implementation plans to adjust to new pandemic safety requirements, such as social distancing.

While incorporating remote work and use of virtual technology was a common response to implementation barriers brought on by the pandemic, another concern was that the "personal factor" was perceived to be lacking with virtual implementation efforts. Others noted that it was challenging when meeting virtually to integrate across different sub teams such as counselors, emergency response teams, and school resource officers. Some agency representatives simply saw the schools shutting down as basically shutting down the grant because of the cascading challenges of adapting or being unable to implement program components.

Maintaining fidelity in program implementation was another barrier many agency representatives encountered. Some STOP funded agencies had to change vendors or material purchases to adapt to online delivery, and some agency representatives reported significant adjustment time needed to transition both instructional coaching and assessment of program fidelity to fit with the impromptu adaptation to online rather than in-person service delivery.

Resilience Factors. While the pandemic introduced a variety of new challenges and barriers for agencies to overcome, respondents also recognized opportunities for innovation and constructive responses that contributed to the resilience of mental health and violence prevention programs. To address the challenges created by the COVID-19 pandemic, interviewees reported transitioning from in-person to remote meetings, adapting professional development activities to virtual platforms when possible and holding STOP team and other stakeholder meetings over Zoom. Interviewees also commented on utilizing other technologies more consistently or in new ways, including shared electronic drives, forms, and slide decks. While some interviewees reported difficulties coping with virtual interactions, others felt that virtual meetings were a more comfortable, more expedient, and more cost-efficient way of bringing

together different levels of people from different places geographically. A school safety office representative explained, "I might reside in [location], but it's easy to schedule a meeting virtually with a group of people in a day versus having to travel to meet with a number of school districts, groups, or organizations, so I think that aspect is good." Agencies were better able to connect experts in the field to a wider audience of STOP grant stakeholders than they were previously able to afford before the pandemic.

Resilience was also seen in the way program implementation team members collaborated around meeting immediate community needs. In contrast to those who stopped implementation as schools closed their doors, others expressed that while they felt the loss of time to implement the goals of their project, they chose to work on relationship building and maintaining connections with schools by offering to help and assist with whatever urgent needs the school and communities had while facing the first year of the pandemic. One interviewee explained, "Our school partners believe this work is important, but they were dealing with the urgent. And when you are constantly living in the world of the urgent, important just continually falls down the list. So, we had to, for lack of a better term, show grace." This agency, hearing of a volunteer shortage for food delivery to families, tasked their school resource officers (SROs) with this job, so as to simultaneously help the larger community with an urgent need but to also creatively find a vehicle during COVID shutdowns for SROs to still connect with families and students who might be at risk. An interviewee from this agency explained, "SROs, gratefully, were willing to adjust and get out and make sure people got their food deliveries. That's one example of us tweaking what our initial hopes were and making sure we were responding to the urgent and not just [what we considered from an agency perspective] to be important."

Improvement Cycles

To assess the extent to which case study sites evaluated and monitored their implementation efforts (RQ5), interviewees were asked questions relating to data collection, fidelity assessment, oversight, monitoring, and quality improvement, and program adaptations. These processes all contribute to the Plan Do Study Act change process that is part of the NIRN framework 5: Improvement Cycles (NIRN, n.d.) Interviewees primarily reported some form of data collection or fidelity monitoring.

Data. Interviewees reported utilizing various methods to track outcomes of STOP programs. For programs providing an educational component, to either students or staff, a variety of data is collected. Several interviewees reported capturing data pertaining to the number of training hours completed per person (from administrator to school staff member to student) and capturing data to measure knowledge gained through pre- and post-assessments. In some instances, interviewees reported that the training evaluation surveys were not mandatory and so were not being completed. Another interviewee reported that, through the development and use of an on-line learning platform, they are working on building learning activities, knowledge checks and surveys to capture feedback on the level of satisfaction and appropriateness of the training within the on-line modules.

Interviewees whose STOP programs utilize risk or other assessment tools reported there are reporting forms available electronically to collect various types of data such as number, type and severity of incidents, and any disciplinary response to incident. Some data is manually entered into a spreadsheet and other areas report using proprietary software or their own web-based platforms to collect and store data.

Fidelity Assessment . Interviewees were asked to provide information regarding how they measured fidelity of implementation. Two of the respondents indicated that they have a university partnership to assist with measuring fidelity of their assessment tool. However, due to the pandemic there was no in-person instruction and therefore limited access to observe instruction once school resumed in-person learning. The interviewee reported there were two years of fidelity monitoring not completed. Currently they can review teacher self-report on instruction mostly resulting in quantitative data pertaining to number of lessons taught. Two other interviewees indicated that they are responsible for monitoring fidelity but did not provide details on how fidelity was measured. Lastly, one interviewee indicated that they have opened their assessment process to observation by district security staff to elicit their input on the process.

Oversight, Monitoring, and Quality Improvement. All interviewees reported some form of oversight and monitoring, either through partnering with researchers or evaluators, tracking outcomes

from threat assessments, looking at pre- and post-implementation competencies, and/or having staff analysts examine data related to implementation. One participant described some of their agency's assessment processes: "Pre-implementation involves a training evaluation, so after the training, evaluating the training that you've had. Teacher readiness survey asks how ready do you feel? Do you understand the goals and objectives?" Another interviewee indicated that they will be sending a survey to stakeholders as an important part of data collection to help identify what is and what is not working and what improvements can be made. In many cases those interviewed had plans for oversight and monitoring but due to setbacks from the pandemic, were just beginning this aspect of their projects.

Program Adaptation. The most commonly reported program adaptation was conversion to online formats. Interviewees reported transitioning training sessions from in-person to online formats or providing program materials through online links. One example provided included converting Social Emotional Learning materials to a digital format so that teachers did not have to attempt to hold large flash cards on a video meeting format, they could simply pull up the material digitally. Another adaptation mentioned was recognizing a need to expand a resource center to all grade levels rather than middle and high school only. Stakeholders at this site recognized that students in all grade-levels were struggling and could benefit from the resource center.

Impact/Outcomes

Also relating to RQ5, which asks about measures in place to evaluate and inform continuous implementation processes, participants from case study sites were asked about the impact and outcomes that have resulted from implementation of their STOP grants.

Child Well-Being. First, interviewees were asked to provide information on the impact they have seen so far on children's well-being and what other outcomes they would hope to see as a result of project implementation. All the comments from interviewees regarding well-being outcomes were positive. Several noted that the trainings they have provided to students through their grant have decreased the number of incidents of behavior issues and increased positive interactions among students. Students are learning empathy and using improved problem-solving skills while interacting with one another. "We

definitely see that the students really enjoy the program that we received through this grant. K-8, it's very age appropriate on all levels. We're noticing that there's a common language of empathy and conflict resolution …" Additionally, the trainings provided to the adults within the school setting has resulted in an increase in the use of common language and response to mental health issues among students.

> I'd say one of the biggest impacts is the change in common language, the reduction of stigma for mental health needs, the acceptance of health. It was not long ago when if, as a school administrator, I suggested that someone's son or daughter received mental health support I was met with either a rolling of the eyes or anger. We've worked really hard to make it part of a health response just like if we called you and said your child didn't do well on the eye exam today, they need glasses... So, I think we've normalized mental health in the region. I think we have created more common language as a result of mental health. And we've reduced obstacles and stigma.

Another interviewee discussed the positive reactions to the implementation of a student tip line for concerns of potential violence or self-harm: "We've gotten lots of positive feedback from the kids, too, like, thank you so much for your quick response. Thank you for helping my friend. Thank you for believing me. Those kinds of things are really things that we love to see."

School Safety. In addition to children's well-being, interviewees also commented on the impact the STOP grant programs and initiatives have had on school safety. Responses indicated that because of the implementation, stakeholders have come together and built collaborative relationships that have had a positive impact on school safety. One interviewee stated, "I'm going to say the biggest [impact] is the collaboration and relationship building that wasn't there before because I think when you talk about school safety, you can't have those conversations without the key players who are enforcing community safety."

SRO Perspectives. While this section of the protocol was originally intended to ask about impact on SRO skills, what emerged were sentiments from school resource officers on the perceived positive outcomes of the projects. Sentiments expressed by SROs included a feeling of increased collaboration across grantee partnering organizations, more information sharing around risk and threat assessments,

increased buy-in across law enforcement stakeholders, a decrease in anti-police sentiments SROs had previously felt were impactful to their day-to-day work, and more infrastructure development specifically targeted toward violence prevention efforts.

Lessons. Interviewees were asked to share what they would change about the implementation, based on their own experiences. According to one interviewee,

> We used to go into grants with a pretty detailed and specific three-year plan if it is a three-year grant. But we also have what I refer to as checkpoints. And, you know, okay, it's been two months. Where are we at? What do we have to adjust? What has to be moved?

Their implementation team realized the importance of establishing a process to assess the progress of the implementation and addressing any barriers as they are identified. Others reported that relationship building and collaboration were crucial to program implementation and sustainability. As one interviewee noted, "when you have relationships with people, there's a shared buy-in and investment, and then there's a commitment to say, 'all right, we're going to keep up. We're going to keep on doing this work.'" For another interviewee, their relationships with other agencies had existed prior to the STOP program implementation and indicated they worked together as a 'consortium.' As the interviewee stated, "we've been able to skip some of the preliminary steps to get right to the meat of the work."

Sustainability. When discussing the sustainability of the initiatives, interviewees primarily reported a desire to expand their current initiatives and to fully integrate them into academic scheduling. To foster sustainability, one interviewee mentioned a need for a district mandate, and another interviewee mentioned the need for more funding.

Recommendations. Interviewees were asked about any specific recommendations they had pertaining to implementation. One participant indicated that it would be beneficial for their project if they increased input from SROs, stating, "Even if it was, you know, not every time but maybe [they] just had check-ins with us. 'Hey, this is kind of the direction we're going. Does it seem like it would fit in your situation?'" Another reported that more family engagement would be helpful, adding that their area is

sharing information with families to some extent, but it is not “authentic family engagement.” Both recognized the value of including the target audience’s voice in collaborative projects.

Another interviewee recognized the importance of face-to-face collaboration in being able to maintain a level of stakeholder involvement in their project, noting that initially there was a lot of school involvement, but that it has lessened with the decrease in face-to face contact. This is presumably due to the pandemic and the now common reliance on virtual meetings whether or not there is a physical distance requires it. Others indicated an interest in expanding their programs after observing benefits of the program and having the desire to see it continue and flourish. One participant hoped to continue to develop their program to be able to further support students who may need more intensive instruction. Others wished to see their program expand from a classroom focus to a school-wide focus, creating a school-wide community of understanding.

Summary

Stakeholders interviewed as part of the case study component spanned a variety of different roles and agencies, inclusive of law enforcement, school personnel and administration, practice model experts, behavioral health providers, and curriculum design experts. Interviewees shared a unique implementation experience through the COVID pandemic, forcing them to adapt or delay implementation efforts. For this reason, some aspects of fidelity and outcome monitoring were understandably slower to be put into practice. However, interviewees all reported believing their project had made a difference in their schools and communities and shared with us positive feedback from those their project served.

Discussion

This study sought to understand factors that influence the successful implementation of violence prevention and mental health training programs in schools, with a particular focus on implementation readiness and school mental health capacity. Several promising results were found that may contribute to ongoing efforts to improve school safety, though a discussion of some study limitations is warranted to better understand the applicability of these findings.

Limitations

A primary limitation to the study was the small sample size, particularly for the cross-site survey, which makes interpretation difficult and leads to lack of generalizability of findings. While the responses were representative of multiple regions and population categories, the overall number of responses was low, much of which may have been due to the higher priority of agencies to facilitate a return to schools in a pandemic environment. Additionally, it was not possible to compare survey responses among the same group of respondents given the smaller sample sizes. Instead, comparisons were made between groups that responded at different waves in order to highlighted general patterns of different groups over different time points. Similarly, participation in the case study analysis was somewhat lower than anticipated, in terms of number of sites, number of stakeholder interviews, and representation across regions and population categories. However, the diversity of the sample was strong, as participant surveys included a broad population of professionals from diverse regions of the country. More sites may have led to a better sense of whether there were regional, population, or other environmental patterns that were shared across like agencies, or whether other types of agencies that were not included may have offered additional insights. Finally, some potential participants may have been concerned about revealing the scope of their challenges in the event it impacted their current or future awards, and those who saw their implementation as more successful may have been more willing to participant, particularly in the more in-depth case studies.

Implications

In spite of these limitations, findings from the cross-site survey highlighted several factors that may contribute to different outcomes with implementation. First, assessment of the stages of implementation across two different waves—both of which contended with uncertainties and the aftermath of the COVID pandemic—showed that even though activities fluctuated at different stages, there was general movement towards later stages of implementation throughout the grant periods, despite the significant barriers that were faced. Many agencies made adjustments to curricula, trainings, and programs in order to continue to provide programming to school communities at a crucial moment, and in the process, many turned to partnerships and collaborations for support and sustainment. Findings also suggested that agencies in later stages of implementation during Wave 2 had better capacity to address school mental health problems at the Intervention level. There was also a significant difference in Early Recognition and Referral scores between the two waves, indicating that more of these processes were in place during the second wave. These findings suggest that continuous implementation of STOP programs and/or moving to later stages of implementation generally led to improved ability to coordinate and provide needed mental health supports to students.

Additionally, survey analyses showed that implementation capacity and school mental health capacity are important factors in successfully carrying out implementation activities. Grantee agencies with greater implementation capacity, greater school mental health capacity, and those who were in later stages of implementation had higher satisfaction with implementation overall. While these findings are not surprising, they underscore the importance of ensuring that agencies have the readiness, capacity, and supports they need to successfully carry out activities and meet their goals. Lack of readiness and staff uncertainty about their ability to carry out programs are common problems with mental health and violence prevention program implementation (Chioldo & Kolpin, 2018; Ozer, 2006; Reinke, et al., 2011), yet components of implementation science can help to address these factors up front. The implementation capacity measure was derived from implementation science research, which is sometimes not well

considered or understood by agencies prior to committing to programs, yet there are significant benefits to integrating these frameworks and principles into the development of programs.

Barriers that were faced in implementation included high levels of mental health problems among students, adapting programs in the midst of a pandemic, and challenges meeting the needs of diverse school communities. Survey respondents rated nearly all mental health symptoms or conditions as "A very big problem" at both waves, and most agreed that student mental health problems interfered with teaching and learning. Responses showed that many agencies felt they lacked the resources they needed to address mental health in schools, though this was less of a problem in the second wave. Respondents also widely agreed that the pandemic presented significant challenges to their efforts to implement programs, not only from a logistical standpoint, but in terms of worsening many of the issues they were already trying to address – mental health and school safety. An added barrier for agencies at the highest population categories was trying to implement programs across a wide array of communities and population levels; these agencies had significantly lower scores in the NIRN Implementation – Need subscale, suggesting they had a harder time meeting diverse needs.

Some of these barriers were unique given the abnormal and unexpected implementation environment agencies had to contend with. However, there was also evidence from the case study findings that agencies from this study faced more common implementation challenges that are reflected in other research. For instance, problems with adhering to fidelity, gaining buy-in, receiving adequate support, and working with limited timeframes were all discussed by case study participants, echoing more general challenges with implementation, not related to the pandemic environment (Bloomquist, et al., 2013; Durlak & DuPre, 2008; Fixsen, et al., 2005; Han & Weiss, 2005). Concerns about structural constraints, such as funding, lack of staff, and turnover, are also well studied in the literature (Connors, et al., 2019; Massey, et al., 2020) and were frequently discussed by study participants. STOP grant funding was described extremely valuable to grantees in most cases, particularly in helping to build robust systems of support that incorporated multiple components to address school safety. However, the short timeline of the funding was a challenge for many agencies, and some participants spoke to the difficulties

with having enough funding to hire or retain mental health specialists and sustain programs and services long term. Turnover was seen as greatly impacting implementation due to the need to re-train staff. There were many reports of administrators leaving or changing positions, which led to lack of consistency in implementation efforts and an increased risk that new administrators may not value initiative. These concerns have been especially poignant in the face of "the great resignation," a phenomenon which has had a tremendous impact on the education and mental health professions (Jiskrova, 2022).

Research is still emerging on what the longer-term impacts from the pandemic will be on student mental health and academic learning. Many interviewees from the case study analysis highlighted concerns about social and emotional learning taking a "back seat" to academics in order to address ongoing learning loss. This was also tied to concerns about policies that may influence what gets prioritized, such as efforts by some policymakers to identify SEL programs as incorporating critical race theory and to narrowly focus on academics only. These efforts would likely severely undercut the success and expansion of mental health and violence prevention programs, which are sorely needed given the unprecedented rates of mental health problems youth and schools are facing (Chadi, et al., 2021; de Miranda, et al., 2020; Kieling et al., 2011; Merikangas, et al., 2010; Samji, et al., 2022). Both components of study highlighted significant problems with anxiety, stress, depression among students, and to an extent, school personnel. There is a crucial need to ensure teachers and other school personnel are equipped to understand these issues and have systems in place for referral and adequate service provision.

Artifacts

Products

Several products have been developed from this study in order to share findings with relevant research, practitioner, and policymaker communities (listed below). These products have been made available through the following website: https://www.usf.edu/cbcs/cfs/cfbh/usf-school-safety-study.aspx

- Manuscript: Resilience of School Safety Initiatives During COVID-19: Insights from a Nationwide Cross-Site Study, submitted to *Educational Evaluation and Policy Analysis* (under review)
- Conference presentation/webinar: Applying Implementation Science to School Mental Health and Violence Prevention Programs, presented 4/18/23 at the 10th Annual Research in Adolescent Substance Use Conference at the University of South Florida
- Conference poster: Implementing School Safety and Mental Health Initiatives During Covid 19: Insights on Trauma and Perseverance, presented 6/14/23 at the 17th European Society for Traumatic Stress Studies Conference in Belfast
- Final Report Video Presentation: Summary of Findings from the Cross-Site Analysis and Case Study of STOP Program Grantee Perspectives on Violence Prevention and Mental Health Training Program Implementation
- Research Brief: STOP School Violence Prevention & Mental Health Training Program Implementation Research Brief

Additional products that are developed as a result of this study will be added to the website as available (e.g., policy brief, additional peer-reviewed papers, conference presentations).

Data Sets

Two data sets have been generated as a result of this study: 1) a quantitative database including grantee responses to the cross-site survey for both waves, and 2) a set of 22 interview transcripts from the case study analysis. Both data sets have been archived with the National Archive of Criminal Justice Data

(NACJD) data repository along with associated study and analysis documents, listed below. All materials have had identifying information removed to protect participant confidentiality.

- Cross-Site Survey Data: SPSS Data File (including codes and labels)
- Cross-Site Survey Documentation: Quantitative Data User Guide
- Cross-Site Survey Documentation: Survey Instrument
- Cross-Site Survey Documentation: SPSS Syntax
- Cross-Site Survey Documentation: SPSS Analysis Output
- Cross-Site Survey Documentation: Recruitment Email
- Case Study Analysis Data: Interview Transcripts
- Case Study Analysis Documentation: Qualitative Data User Guide
- Case Study Analysis Documentation: Interview Roster
- Case Study Analysis Documentation: Interview Codebook
- Case Study Analysis Documentation: Verbal Consent Form
- Case Study Analysis Documentation: Recruitment Email

Dissemination Activities

The study team has disseminated findings through several grantee, academic, and practitioner channels. Two presentations, Study Overview and Year 1 Survey Results, have been shared with BJA STOP grantees through collaboration with the National Center for School Safety (NCSS) during recurring grantee meetings. The study team plans to continue collaborating with NCSS to share the Final Report Video Presentation during an upcoming grantee meeting. One manuscript has been submitted for publication to the journal, *Educational Evaluation and Policy Analysis*, entitled, “Resilience of School Safety Initiatives During COVID-19: Insights from a Nationwide Cross-Site Study.” A second manuscript is currently under development, considering the role of law enforcement and school resource officers in the work of youth mental health and violence prevention. A presentation entitled, “Applying Implementation Science to School Mental Health and Violence Prevention Programs” was given during

the 10th Annual Research in Adolescent Substance Use Conference at the University of South Florida. A poster presentation on “Implementing School Safety and Mental Health Initiatives During Covid 19: Insights on Trauma and Perseverance” was included as part of the the 17th European Society for Traumatic Stress Studies Conference in Belfast, Northern Ireland.

References

Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and policy in mental health and mental health services research*, *38*, 4-23.

Bertram, R. M., Blase, K. A., & Fixsen, D. L. (2015). Improving programs and outcomes: Implementation frameworks and organization change. *Research on Social Work Practice*, 25(4), 477-487.

Bloomquist, M. L., August, G. J., Lee, S. S., Lee, C. Y. S., Realmuto, G. M., & Klimes-Dougan, B. (2013). Going-to-scale with the Early Risers conduct problems prevention program: Use of a comprehensive implementation support (CIS) system to optimize fidelity, participation and child outcomes. *Evaluation and program planning*, *38*, 19-27.

Chadi, N., Spinoso-Di Piano, C., Osmanlliu, E., Gravel, J., & Drouin, O. (2021). Mental Health–related emergency department visits in adolescents before and during the COVID-19 pandemic: a multicentric retrospective study. *Journal of adolescent health*, *69*(5), 847-850.

Chioldo, D., & Kolpin, H. (2018). Both promising and problematic: Reviewing the evidence for implementation science. In A. W. Leschied, D. H. Saklofske, and G. L. Flett (Eds.), *Handbook of school-based mental health promotion: An evidence-informed framework for implementation*, 11-31. Springer.

Connors, E. H., Schiffman, J., Stein, K., LeDoux, S., Landsverk, J., & Hoover, S. (2019). Factors associated with community-partnered school behavioral health clinicians' adoption and implementation of evidence-based practices. *Administration and Policy in Mental Health and Mental Health Services Research*, *46*, 91-104.

Curran, J. P., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods, 1*, 16–29.

de Miranda, D. M., da Silva Athanasio, B., Oliveira, A. C. S., & Simoes-e-Silva, A. C. (2020). How is COVID-19 pandemic impacting mental health of children and adolescents?. *International journal of disaster risk reduction*, *51*, 101845.

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American journal of community psychology*, *41*, 327-350.

Feigenberg L, Watts C, Buckner J. (2010). The School Mental Health Capacity Instrument: Development of an Assessment and Consultation Tool. *School Mental Health,* 2(3):142-154.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. sage.

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). Implementation research: a synthesis of the literature. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication# 231), 2005.

Fixsen, D. L., Blase, K. A., Naoom, S. F., & Wallace, F. (2009). Core implementation components. *Research on social work practice*, *19*(5), 531-540.

Han, S. S., & Weiss, B. (2005). Sustainability of teacher implementation of school-based mental health programs. *Journal of abnormal child psychology*, *33*, 665-679.

Hair, J. F. (2011). Multivariate data analysis: An overview. *International encyclopedia of statistical science*, 904-907.Higgins, M.C., Weiner, J., & Young, L. (2012). Implementation teams: A new lever for organizational change. *Journal of Organizational Behavior*, 366-388. https://doi.org/10.1002/job.1773

Jiskrova, G. K. (2022). Impact of COVID-19 pandemic on the workforce: from psychological distress to the Great Resignation. *J Epidemiol Community Health*, *76*(6), 525-526.

Kieling, C., Baker-Henningham, H., Belfer, M., Conti, G., Ertem, I., Omigbodun, O., ... & Rahman, A. (2011). Child and adolescent mental health worldwide: evidence for action. *The Lancet*, *378*(9801), 1515-1525.

Lyon, A. R., & Bruns, E. J. (2019). From evidence to impact: Joining our best school mental health practices with our best implementation strategies. *School mental health*, *11*, 106-114.

Merikangas, K. R., He, J. P., Brody, D., Fisher, P. W., Bourdon, K., & Koretz, D. S. (2010). Prevalence and treatment of mental disorders among US children in the 2001–2004 NHANES. *Pediatrics*, *125*(1), 75-81.

Metz, A., & Louison, L. (2019). The Hexagon: An Exploration Tool. Hexagon Discussion & Analysis Tool Instructions. *National Implementation Research Network*.

National Center for School Mental Health. (2019). The SHAPE System, School Mental Health Profile – District Version. https://www.theshapesystem.com/

National Implementation Research Network (NIRN). (n. d.). Active Implementation Hub, Framework 3: Implementation Drivers. https://nirn.fpg.unc.edu/module-1/implementation-drivers.

National Implementation Research Network (NIRN). (n. d.). Active Implementation Hub, Framework 5: Improvement Cycles. https://nirn.fpg.unc.edu/module-1/improvement-cycles.

National Implementation Research Network (NIRN). (n. d.). Active Implementation Hub, Framework 3: Organization Drivers. https://nirn.fpg.unc.edu/module-1/implementation-drivers/organizational.

Ozer, E. J. (2006). Contextual effects in school-based violence prevention programs: A conceptual framework and empirical review. *The Journal of Primary Prevention*, 27(3), 315–340.

Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School psychology quarterly*, *26*(1), 1.

Samji, H., Wu, J., Ladak, A., Vossen, C., Stewart, E., Dove, N., ... & Snell, G. (2022). Mental health impacts of the COVID-19 pandemic on children and youth–a systematic review. *Child and adolescent mental health*, *27*(2), 173-189.

Tomarken, A. J., & Serlin, R. C. (1986). Comparison of ANOVA alternatives under variance heterogeneity and specific noncentrality structures. *Psychological Bulletin*, *99*(1), 90.

Western and Pacific Implementation Center (WPIC). Key elements for implementing sustainable systems change. 2009. https://ncwwi.org/files/Framework_For_Implementing_Systems_Change.pdf.

Appendix A: Cross-Site Survey

Introduction

You are being requested to participate in a research study by completing a survey about your experiences implementing mental health training and violence prevention programming through the Bureau of Justice Administration's STOP School Violence program (see https://www.ojp.gov/funding/apply/ojp-grant-application-resource-guide#potential-evaluation for the Office of Justice Programs' expectation for grantees to take part in evaluations on previously funded grants). We think the survey will take approximately 20 minutes to complete. Participation in this research study is voluntary and you may stop the survey at any point. You may also leave the survey and come back to it to complete it. Your responses will be anonymous in any reports produced or in any data that is shared. You will receive a $10 electronic gift card of your choice after completing the survey by entering your email when prompted at the end of the survey. By proceeding with the following survey, you are agreeing to take part in this research.

If you have questions regarding this study, you may contact Dr. Anna Davidson Abella or Dr. Amy Vargo (the principal investigators) at 813-974-3739 or email them at aldavids@usf.edu or avargo@usf.edu.

I. Site Characteristics

Please select your STOP violence prevention program site below.

**Grantee agencies have been removed for de-identification purposes. Information about STOP awards may be found at the following sites: https://bja.ojp.gov/funding/opportunities/bja-2018-14480 and https://bja.ojp.gov/funding/opportunities/bja-2019-15117*

1. Which of the following best describes your role?
    - State or local government administrator
    - State or local government personnel
    - Member of a Federally Recognized Indian Tribe
    - School district administrator
    - School district personnel
    - School administrator
    - School personnel
    - Law enforcement agency administrator
    - Law enforcement agency personnel
    - Mental health professional
    - Educational or Nonprofit Agency Representative
    - Other

    Please provide any additional information about your specific role or job title: ______________________________

2. How many years have you been in this role?
    - Less than 1
    - 1-5
    - 6-10

11-15
16-20
More than 20

3. How familiar are you with the Bureau of Justice Administration's (BJA) STOP violence prevention program in your school system (site)?
   Not at all familiar
   Slightly familiar
   Somewhat familiar
   Moderately familiar
   Extremely familiar

4. What components are being implemented at your site to address school violence prevention and mental health training? (select all that apply)
   Evidence-based violence prevention program for students
   Violence prevention education for students (e.g., presentations)
   Violence prevention training for school personnel
   Mental health training for school personnel
   Mental health education for students
   Development or operation of an anonymous reporting system for school violence
   Development or operation of a threat assessment system or protocols
   Development or implementation of a crisis response team in coordination with law enforcement
   Other: __________________________

5. Are any other services or programs, besides the Bureau of Justice Administration STOP programs, being implemented at your site to address school violence prevention and mental health programming?
   Yes
   No
   Don't know

   (Skip logic) If yes, what other services or programs are being offered?
   Evidence-based violence prevention program for students
   Violence prevention education for students (e.g., presentations)
   Violence prevention training for school personnel
   Mental health training for school personnel
   Mental health education for students
   Development or operation of an anonymous reporting system for school violence
   Development or operation of a threat assessment system or protocols
   Development or implementation of a crisis response team in coordination with law enforcement
   Other: __________________________

6. How have the Bureau of Justice Administration funds enhanced or contributed to your efforts to address school violence and mental health issues at your site?

7. Implementation Team

Implementation Teams consist of a small group of people who are accountable for guiding the overall implementation of a program or practice from exploration to sustainability. Which of the following professionals or stakeholders have been involved in implementing the STOP violence prevention or mental health training program? (select all that apply)

Behavior Specialist
Case Manager / Care Coordinator
Community Mental Health Supervisor / Director
Cultural Liaison / Promotor
Family Support Partner (Family Member)
Nurse Practitioner
Occupational Therapist
Parent Liaison or Parent Engagement Coordinator
Peer Mediator
Physician
Physician Assistant
Professional Counselor
Psychiatrist
Psychologist
School Administrator (e.g., Principal, Assistant Principal)
School Counselor
School Guidance Counselor
School Nurse
School Physician
School Psychologist
School Resource Officer
School Social Worker
Social Worker
Substance Abuse Specialist
Teacher
Youth/Family Advocate
Other ______________________

II. **Implementation Stage** (Adapted from NIRN's Implementation Stages Planning Tool: https://nirn.fpg.unc.edu/resources/stages-implementation-analysis-where-are-we)

Using the following definitions, please indicate the extent to which your site has engaged in each stage of implementation using the sliders. Placing the slider at 0 indicates engagement in no activities for that stage, and placing it at 10 indicates engagement in the full range of activities for that stage.

8. Exploration Stage

Identifying the need for change, learning about possible innovations that may provide solutions, learning about what it takes to implement the innovation effectively, developing a team to support the work as it progresses through the stages, growing stakeholders and champions, assessing program fit and creating readiness for change, developing communication processes to support the work.

[slider scale 1-10]

9. Installation

   Ensuring the program is clearly defined, securing and developing the support needed to put a new approach or practice into place as intended, ensuring the implementation team has the appropriate knowledge, skills, and training to effectively implement a practice, developing feedback loops between the practice and leadership level in order to streamline communication, assessing policies and procedures to ensure they support successful program implementation, and gathering feedback on how new practices are being implemented.

   [slider scale 1-10]

10. Initial Implementation

    Gathering data to assess implementation progress, developing improvement strategies based on the data, and refining implementation supports (e.g., coaching, training, data systems, leadership supports, and resources) based on data. Convening implementation team regularly to assess outcomes and ensure program is being implemented the way it was intended.

    [slider scale 1-10]

11. Full Implementation

    Skillfully using a program or practice that is well-integrated into the repertoire of practitioners and routinely and effectively supported by ongoing implementation. Continuous use of data collection and analysis to assess outcomes, regular use of feedback loops to provide oversight and monitoring, and continuous training and coaching for new staff and as needed.

    [slider scale 1-10]

III. **Mental Health Capacity** (adapted from the School Mental Health Capacity Instrument)

12. Supplement 1: Problem Severity

    Please review the list of mental health issues below and rate how much of a problem you think each one is for the schools in your site.

    - Disruptive behavior
    - Depression
    - Anxiety
    - Trauma/Exposure to Violence
    - Alcohol/Drug Use
    - Anger Management
    - Social Skills
    - Stress
    - Family/Home Life Concerns

    Response Scale: Strongly Disagree, Disagree, Unsure, Agree, Strongly Agree

13. Supplement 2: Barriers to Mental Health in Schools

Please rate the extent to which you agree with the following statements with regard to your site.

- Student mental health problems limit schools ability to focus on teaching.
- Mental health problems are a barrier to learning for the students in our schools.
- Our schools have enough resources to address student mental health needs.

Response Scale: Strongly Disagree, Disagree, Unsure, Agree, Strongly Agree

SMHCI Scale

The following questions are about the systems, protocols, policies, and structures present in your school to address mental health. Please rate the extent to which the schools in your site (district, county, state, tribe, or jurisdiction) currently do or have each of the following.

	Not at all	A little bit	To some extent	To a great extent
14. There is a clear and consistent understanding about what kinds of situations are defined as mental health emergencies.	1	2	3	4
15. Staff has been trained in ways to appropriately respond to students who experience urgent mental health problems.	1	2	3	4
16. The people responsible for specific tasks or duties in a mental health emergency are clearly defined.	1	2	3	4
17. A professional is available to perform an evaluation when a student experiences a mental health emergency.	1	2	3	4
18. There are channels of communication to share information about mental health emergencies with staff.	1	2	3	4
19. Information about mental health emergencies is shared with families.	1	2	3	4
20. There are follow-up services available for students who experience mental health emergencies.	1	2	3	4
21. Information about students who experience mental health emergencies is shared with staff.	1	2	3	4
22. When a mental health emergency arises, it causes minimal interruption to overall operations of schools.	1	2	3	4
23. When there is a concern about a student's mental health, there are efforts to communicate with the family.	1	2	3	4
24. There is a system in place to take action on referrals for students with mental health concerns.	1	2	3	4
25. A professional is available to perform an assessment for students who have been referred for mental health concerns.	1	2	3	4
26. There is a clearly designated person for families to contact when they have a concern about a student's mental health.	1	2	3	4
27. The staff makes an effort to understand how the stressors students experience outside of school are related to specific problems they may experience in school.	1	2	3	4
28. There is a group of staff that meets regularly to discuss students with mental health concerns.	1	2	3	4
29. There are programs or structures in place (e.g., advisories) that enable staff to proactively identify students who may have difficulties.	1	2	3	4
30. There are regular opportunities set aside for staff to discuss the social, emotional, and mental health needs of students.	1	2	3	4
31. Follow-up information is provided to staff about the status or outcome of student mental health referrals.	1	2	3	4
32. Students are given regular opportunities to be aware of their own and other's talents and accomplishments.	1	2	3	4

	Not at all	A little bit	To some extent	To a great extent
33. Schools' missions and philosophies reflect an explicit focus on the social and emotional development of students.	1	2	3	4
34. There are activities or programs that focus on building students' strengths and resilience.	1	2	3	4
35. When a group of students begins exhibiting similar problems, staff intervenes to try to stop the root causes.	1	2	3	4
36. There are resources or services available for students who may be experiencing the negative consequences of specific problems, such as depression or loss.	1	2	3	4
37. Families are part of efforts to prevent future mental health problems.	1	2	3	4
38. There are activities or programs that provide students with information about "normative" development, such as friendship, puberty, or career possibilities.	1	2	3	4
39. Staff is knowledgeable about how to talk about students' emotional and psychological well-being.	1	2	3	4
40. There is professional development offered to staff that is specifically about mental health.	1	2	3	4

If you have any additional comments or information you would like to share regarding the mental health issues you've observed and your site's capacity to address them, please do so here:

IV. **NIRN Implementation** (adapted from the NIRN Hexagon Tool: https://nirn.fpg.unc.edu/sites/nirn.fpg.unc.edu/files/imce/documents/NIRN%20Hexagon%20Discussion%20Analysis%20Tool_September2020_1.pdf)

Using the scale provided, please indicate the extent to which each of the following facilitators or barriers to implementation of the STOP program related to population need are present at your site.

Need	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree	N/A
41. The focus population for your site's STOP program or training is clearly defined.	5	4	3	2	1	0
42. Specific needs of the population have been identified, such as race, ethnicity, culture, and language.	5	4	3	2	1	0

43. Community members (e.g., students, families, school personnel) were asked about their perception of need.	5	4	3	2	1	0
44. The expected impact of your site's STOP program is clearly defined.	5	4	3	2	1	0
Evidence	**Strongly Agree**	**Agree**	**Unsure**	**Disagree**	**Strongly Disagree**	**N/A**
45. Research studies have demonstrated the effectiveness of your site's STOP program.	5	4	3	2	1	0
46. There is a theory of change or logic model that shows how the program is expected to contribute to short- and long-term outcomes.	5	4	3	2	1	0
47. Studies supporting effectiveness of the program or model have been evaluated in a similar context as yours.	5	4	3	2	1	0
Fit	**Strongly Agree**	**Agree**	**Unsure**	**Disagree**	**Strongly Disagree**	**N/A**
48. The program or practice fits with priorities of the implementing site.	5	4	3	2	1	0
49. The program fits with family and community values (including cultural values of different racial and ethnic populations) at your site.	5	4	3	2	1	0
50. Emphasis is placed on cultural sensitivity of staff at all levels.	5	4	3	2	1	0
Usability	**Strongly Agree**	**Agree**	**Unsure**	**Disagree**	**Strongly Disagree**	**N/A**
51. The core components of the program that are required to make it effective have been identified.	5	4	3	2	1	0
52. A fidelity protocol that measures whether staff use the program as intended is available.	5	4	3	2	1	0
53. There is a recommended process for gathering input from the focus population and community on culturally specific enhancements	5	4	3	2	1	0

54. School leaders are willing to reach out to mature sites with successful histories of implementing the program for guidance.	5	4	3	2	1	0
Capacity	**Strongly Agree**	**Agree**	**Unsure**	**Disagree**	**Strongly Disagree**	**N/A**
55. The budget can support continued implementation after BJA STOP funding ends.	5	4	3	2	1	0
56. There is an adequate number of staff in place to meet the requirements for the program.	5	4	3	2	1	0
57. Staff who are implementing the program or training have a cultural and language match with the population they serve.	5	4	3	2	1	0
58. Administrative practices, policies, and procedures that must be developed or adjusted to support your site's STOP program have been identified.	5	4	3	2	1	0
59. Appropriate staff are able to collect and use data to inform ongoing monitoring and program improvement.	5	4	3	2	1	0
60. Available technologies (electronic devices, internet capabilities) are sufficient for your site's STOP program.	5	4	3	2	1	0
61. Data monitoring systems to support your site's STOP program are in place.	5	4	3	2	1	0
Supports	**Strongly Agree**	**Agree**	**Unsure**	**Disagree**	**Strongly Disagree**	**N/A**
62. Curricula and/or resources for the program or practice are readily available.	5	4	3	2	1	0
63. Training, professional development, or coaching for your site's STOP program is readily available.	5	4	3	2	1	0
64. Policies and procedures address issues of racial equity.	5	4	3	2	1	0

65. What other challenges or barriers have interfered or may interfere with successful implementation of the program or practice?

66. What steps have been taken to address any of the identified challenges or barriers?

67. What other supports or facilitators have helped with or may help with effective implementation of the program or practice?

V. Impact of COVID-19

68. Were schools in your area held in-person during 2020?

Yes, entirely in-person
No, entirely virtual
Combination of in-person and virtual

69. How has COVID-19 impacted mental health in schools in your area?

70. To what extent has the COVID-19 pandemic impacted your site's ability to implement the STOP program as planned?

No impact
Minor impact
Moderate impact
Major impact

71. How has the COVID-19 pandemic affected your site's ability to implement the STOP program and/or training as planned?

72. What positive aspects or opportunities have arisen out of adaptations to COVID-19, in relation to efforts to address school violence and mental health?

VI. Satisfaction

73. On a scale of 1-10, please rate your satisfaction with the overall implementation efforts for the STOP program or training at your site. 0 = least satisfied, 5 = somewhat satisfied, and 10 = most satisfied.

74. Has your site has received Technical Assistance (TA) or guidance from the Bureau of Justice Administration (BJA) to assist with this grant? (skip logic to #4 if no)

Yes
No

75. On a scale of 1-10, please rate your satisfaction with the TA or guidance you have received from the BJA. 0 = least satisfied, 5 = somewhat satisfied, 10 = most satisfied

76. What was helpful about the TA or guidance?

77. In what ways did the TA or guidance not meet your needs?
78. What technical assistance needs does your site have to assist with implementation?
79. What other feedback would you like to share regarding the planning or implementation of the STOP violence prevention and mental health training programs?

Other Contacts

If there are other stakeholders from your site who would be important for us to hear from, please share this survey link with them or provide them with the following email address to request to take part in the NIJ STOP survey: areanac@usf.edu.

Name: ____

Role in Implementation: __________________________

Email Address: _________________________________

Thank You

Thank you for your time completing this survey! Your feedback on this national initiative to prevent school violence and improve mental health training in schools is extremely valuable.

Please enter the email address you'd like to receive your $10 Amazon electronic gift card:

Appendix B: Case Study Interview Protocol

[Read verbal informed consent script and obtain consent prior to beginning interview]

1. What has your role been in the project and how long have you been involved with it?

2. What was the impetus for pursuing the STOP grant?

3. What are the goals and objectives of the project?

    a. How were the goals and objectives selected?

    b. How are the goals and objectives being measured?

4. In your opinion, what are the biggest mental health issues impacting students in your school/district/jurisdiction?

    a. To what extent are these issues related to (or contribute to) school violence?

    b. How does your STOP Program respond to these particular issues?

5. What has the strategic planning process for the project been like?

    a. To what extent were/are you involved in the strategic planning process?

6. Who comprises the key leadership team for this project? How was the team selected? Are there any key leaders missing from this group? Please explain.

7. Has implementation science been utilized to enhance the effectiveness of the development and implementation process? If so, please explain and share examples.

8. What stage of implementation is this site currently in? Please describe the current status of the implementation project.

9. In your opinion, on a scale of one to ten, with ten being most effective and one being not effective at all, how effective has the implementation process been thus far? Please explain.

10. How has the site measured fidelity of implementation (or how well the intervention follows the intended structure of implementation based on research)?

11. To what extent have various stakeholder groups (e.g., teachers, law enforcement, students and families, and any key community leaders/advocates) embraced the program?

12. How have these stakeholders been engaged in the planning and implementation process?

13. What factors have facilitated effective implementation?

14. What factors have presented challenges or barriers to implementation?

15. What regional or population-specific factors impact the implementation of this project? Please explain.

16. Are there any other contextual or mitigating circumstances (e.g., funding, politics, COVID Pandemic, etc.) that impact this project? Please explain.

17. What changes has the site made to the implementation plan in response to their implementation experiences to date?

18. What capacities need to be built to implement the project effectively, and how does the site plan to build those capacities?

19. How are decisions made when changes are called for?

20. What impact or outcomes, if any, has the site seen from the project thus far?

21. How are outcomes being measured?

22. How are outcomes being communicated to stakeholders?

23. What other outcomes do you hope or expect the site to achieve?

24. What would you change about the planning or implementation process, based on your own experiences?

25. Is there anything about the site or project implementation you'd like to share with us?

Thank you for your time.

Appendix C: Case Study Interview Code Book

Code	Definition
Competency Drivers - Saturation	discussion of steps that have been taken to reach saturation (e.g., full implementation) within a local area.
Competency Drivers - School Administration Skills	discussion of the extent to which school administration staff have the necessary knowledge and skills to successfully implement their STOP grant program, and skill-building that is still needed
Competency Drivers - SRO Skills	discussion of the extent to which SRO's have the necessary knowledge and skills to implement their STOP grant program, and skill-building that is still needed
Competency Drivers - Staff Support/Buy-in	Extent to which staff have embraced and bought into each STOP grant program or training initiative, as well as any strategies that have been used to build staff support for implementation of each STOP grant program.
Competency Drivers - TA Needs	technical assistance needs specific to each STOP grant
Competency Drivers - TA Provided	discussion specific to what TA has been provided to each STOP grant site and any related strengths or challenges
Competency Drivers - Teacher Skills	discussion of the extent to which teachers have the necessary knowledge and skills to implement their STOP grant program, and skill-building that is still needed
Competency Drivers - Technical Assistance	discussion of technical assistance that has been provided to implement
Competency Drivers - Training	discussion of training and ongoing support for localized STOP grant implementation efforts.
Impact/Outcomes - Child Well-Being	perceived impact of STOP grant program implementation on child well-being and mental health; any discussion specific to child well-being and mental health outcome data
Impact/Outcomes - Child/School Safety	perceived impact of STOP grant program implementation on threat assessment and violence prevention and discussion specific to any relevant school safety outcome data
Impact/Outcomes - Lessons	any discussion of lessons learned about STOP grant implementation
Impact/Outcomes - Recommendations	any specific recommendations that are made about how to improve implementation of each STOP grant
Impact/Outcomes - SRO Skills	perceived impact of each EBP on SRO skills and discussion specific to any relevant SRO specific outcome data.
Impact/Outcomes - Sustainability	discussion of ways that the STOP program/services/training will continue to be offered (beyond the period of current STOP grant funding), and to what extent, over time.
Improvement Cycles - Adaptation	intended or unintended non-COVID related adaptations to each STOP grant program implementation effort in each local area, why adaptations have been made, and any next steps.

Improvement Cycles - Data	discussion of data systems (or lack thereof) being used to track outcomes of STOP grant programs, including strengths and challenges related to entry and use of outcomes data.
Improvement Cycles - Fidelity Assessment Tools	extent to which any STOP grant programs included an assessment of fidelity, and the extent to which any fidelity monitoring was put into place, and strengths and challenges related to the fidelity assessment process or decision to implement or include an EBP within a STOP grant program.
Improvement Cycles - Oversight & Monitoring	discussion of processes for the collection and review of data that is targeted to improving services offered through the STOP grant program
Improvement Cycles - Quality Improvement Processes	discussion of the use of data to inform decision-making and identify areas for improvement, and processes for the development of improvement plans based on the data
Introduction - Role	position/job description and role relevant to grantee site program implementation
Introduction - Time	length of time involved with STOP grant
Leadership Drivers - Decision Making	how decisions are made when needed by stakeholders specific to STOP grant program implementation
Leadership Drivers - Implementation Science	knowledge and use of implementation science by those implementing each STOP grant program, inclusive of discussions specific to stages of implementation and ratings of effectiveness of implementation efforts
Leadership Drivers - Leadership Involvement	discussion of ways leaders at various levels have been included in the strategic planning efforts and STOP grant implementation processes and if relevant, discussion of commitment, support, buy-in, etc. among leadership
Leadership Drivers - Meeting Efficiency	discussions around whether or not all key entities are included and how to enhance productivity/efficiency of meetings
Leadership Drivers - Strategic Planning	discussion of development and revision of each STOP program's grant application, and developing a plan forward and/or leadership knowledge/understanding of how to implement effectively
Local Environment/Contextual Variables - Cultural	Discussion around factors that need to be considered and addressed regarding language, culture, ethnicity, religion, diverse family structures and backgrounds, etc. that are relevant to STOP grant implementation.
Local Environment/Contextual Variables - Economic Issues	Recession, inflation, poverty, housing, job loss, etc.
Local Environment/Contextual Variables - Family/Student Engagement	discussion of issues pertaining to how or what extent or what problems exist in terms of engaging families and students in each of the STOP grant programs.
Local Environment/Cont	Issues related to COVID Pandemic or aftereffects that may help or hinder local areas in their implementation efforts specific to each STOP grant.

extual Variables - Pandemic Response	
Local Environment/Contextual Variables - Politics	Local or state level politics that may help or hinder STOP grant implementation
Local Environment/Contextual Variables - Rural/Urban	Discussion around factors that affect STOP grant implementation specific to unique challenges of rural versus urban geographic areas (e.g., travel distance, availability of resources or services).
Local Environment/Contextual Variables - Student Mental/Behavioral Health	Discussion around issues students are dealing with specific to anxiety, bullying, depression, substance abuse, suicide, hospitalization etc.
Local Environment/Contextual Variables - Student Trauma	Any discussion around types of trauma students have experienced and impact.
Local Environment/Contextual Variables - Teacher Mental/Behavioral Health	Discussion around issues teachers are dealing with specific to anxiety, depression, substance abuse, suicide, hospitalization etc.
Local Environment/Contextual Variables - Teacher Trauma	Any discussion around types of trauma teachers have experienced and impact.
Organization Drivers - Coinciding Implementation Efforts	any factors to be considered when a local area is implementing more than one new school safety or student mental health program at one time.
Organization Drivers - Dosage of Training/Services	discussion around what type, how long a student/family typically receives training or services from a STOP grant program where applicable
Organization Drivers -Funding	any discussion of how each STOP grant related programming is funded (if braided or blended funding is used); strategies being used to find new/different ways to fund needed services, how positions are funded, etc.
Organization Drivers - Interagency Coordination & Communication	how the different agencies involved in each STOP grant (e.g., law enforcement, schools, mental health providers, etc.) work together to coordinate successful STOP grant implementation and use of related services/training; and the extent to which the necessary communication processes are in place between relevant stakeholders for each project
Organization Drivers - Policies & Procedures	discussion of the extent to which adequate policies and procedures are in place to support STOP grant implementation, changes/revisions that have been made to

	align policies and procedures, or changes that are still needed in order to align them.
Organization Drivers -Referral Processes	discussion of processes in place for referring students or families to STOP grant programs where applicable
Organization Drivers - System Integration	Discussion around integrating the STOP grant program into the existing local school environment or service system, as applicable.
Organization Drivers - Turnover	discussion of turnover in leaders, teachers, or SROs; challenges with keeping staff employed long-term as it related to ongoing implementation of each STOP grant program.
Vision/Desired Outcomes - BJA	discussion around standards set by and any reviews conducted by funder
Vision/Desired Outcomes - Personal Vision	discussion of things the individual personally wants to see change as a result of their local STOP grant being implemented
Vision/Desired Outcomes - Program Goals	specific goals of each grantee site and program selected
Vision/Desired Outcomes - Rationale	discussion of reasons why each grantee site selected the programs that they did for implementation in their local system or state
Vision/Desired Outcomes - Shared Vision	discussion of the extent to which there is a shared vision for change among BJA, grantee sites, and/or within the group of stakeholders involved in each local implementation site
Vision/Desired Outcomes - STOP Goals	specific goals of the STOP Program

Appendix D: Descriptives for SMHCI Subscales

Table D1

Wave 1 Descriptives for NIRN Implementation and SMHCI Subscales

Subscale	*N*	Min	Max	Mean	*SD*	Skew	Kurtosis
NIRN Implementation - Need	48	2.75	5.00	4.06	.639	-.296	-.621
NIRN Implementation - Evidence	46	1.00	5.00	3.69	.799	-.848	1.73
NIRN Implementation - Fit	49	2.33	5.00	4.29	.597	-.752	.845
NIRN Implementation - Usability	46	3.00	5.00	3.93	.551	.350	-.557
NIRN Implementation - Capacity	48	2.00	5.00	4.01	.766	-.460	-.085
NIRN Implementation - Support	47	2.43	5.00	3.82	.675	.026	-.540
SMHCI Intervention	48	1.78	4.00	2.94	.646	-.094	-1.170
SMHCI Early Recognition and Referral	48	1.89	4.00	2.92	.596	.184	-.821
SMHCI Prevention and Promotion	46	1.78	4.00	2.88	.598	.231	-.695

Table D2

Wave 2 Descriptives for NIRN Implementation and SMHCI Subscales

Subscale	*N*	Min	Max	Mean	*SD*	Skew	Kurtosis
NIRN Implementation - Need	37	2.00	5.00	4.03	.710	-.768	1.223
NIRN Implementation - Evidence	37	1.00	5.00	3.74	1.016	-.784	1.098
NIRN Implementation - Fit	37	3.00	5.00	4.13	.563	-.125	-.645
NIRN Implementation - Usability	38	2.50	5.00	3.71	.656	.437	-.227
NIRN Implementation - Capacity	37	1.00	5.00	4.03	.862	-1.368	2.968
NIRN Implementation - Support	37	1.00	5.00	3.67	.763	-.997	3.269
SMHCI Intervention	38	1.11	4.00	3.04	.624	-.910	1.700
SMHCI Early Recognition and Referral	38	1.00	4.00	3.09	.686	-1.197	2.082
SMHCI Prevention and Promotion	38	1.00	4.00	3.01	.738	-1.007	1.127

Appendix E: MANOVA Tables for SMHCI and NIRN Implementation by Population Category

Table E1

Wave 1 Means and Results for SMHCI Subscale MANOVAs by Population Category

Variable	Mean Score by Population Categories					MANOVA Statistics		
	1	2	3	4	5	*n*	*F*	*p*
SMHCI Intervention Subscale						45	.956	.546
There is a clear understanding about what situations are defined as mental health emergencies.	3.00	3.00	3.54	3.27	3.14			
Staff has been trained in ways to appropriately respond to students who experience urgent mental health problems.	2.83	2.75	3.15.	3.00	3.00			
Roles are clear for who responds when there is a mental health emergencies.	3.00	2.75	3.46	3.09	3.14			
A professional is available to perform an evaluation when a student experiences a mental health emergency.	3.17	2.25	3.62	2.91	3.00			
There are channels of communication to share information about mental health emergencies with staff	2.83	2.75	3.38	2.91	3.29			
Information about mental health emergencies is shared with families.	2.83	2.50	3.46	2.55	2.57			
There are follow-up services available for students who experience	2.83	2.38	3.31	2.91	3.14			
Information about students who experience mental health emergencies is shared with school staff.	2.67	2.25	2.77	2.64	2.43			
When a mental health emergency arises, it causes minimal interruption to operations of schools.	2.83	2.50	2.69	2.73	2.43			
SMHCI Early Recognition & Referral Subscale						43	1.029	.437
When there is a concern for students' mental health, there are efforts to communicate with family.	3.43	2.71	3.42	3.20	3.71			
There is a system in place to take action on referrals for students with mental health concerns.	3.00	2.29	3.42	3.10	3.57			
There is a clearly designated person for families to contact when they have a concern about a student's mental health.	2.71	2.57	3.25	2.80	2.86			
The staff makes an effort to understand how the stressors students experience outside of school are related to specific problems they may experience in school.	3.29	2.71	3.25	3.00	3.00			
There is a group of staff that meets regularly to discuss students with mental health concerns.	3.00	2.43	3.25	2.70	3.14			

A professional is available to perform an assessment for students who have been referred for mental health concerns.	2.86	2.14	3.42	2.90	2.86			
There are programs or structures in place (e.g., advisories) that enable staff to proactively identify students who may have difficulties.	2.86	2.43	3.08	2.70	3.00			
There are regular opportunities set aside for staff to discuss the social, emotional, and mental health needs of students.	3.00	2.43	2.75	2.70	2.71			
Follow-up information is provided to staff on the status or outcome of mental health referrals.	2.57	1.86	2.83	2.50	2.29			
SMHCI Prevention & Promotion Subscale						43	1.076	.372
Students are given regular opportunities to be aware of their own and other's talents and accomplishments.	3.00	2.86	3.08	2.90	3.14			
There are activities or programs that focus on building students' strengths and resilience.	3.00	2.43	3.25	2.80	3.43			
Schools' missions and philosophies reflect an explicit focus on the social and emotional development of students.	2.71	2.57	3.33	2.90	3.00			
When a group of students begins exhibiting similar problems, staff intervenes to try to stop the root causes.	2.71	2.14	2.92	2.80	3.00			
There are resources or services available for students who may be experiencing the negative consequences of specific problems, such as depression or loss.	3.14	2.57	3.25	2.90	3.00			
Families are part of efforts to prevent future mental health problems.	2.43	2.71	3.08	2.40	2.86			
There are activities or programs that provide students with information about "normative" development, such as friendship, puberty, or career possibilities.	2.86	2.29	3.08	2.50	3.00			
Staff is knowledgeable about how to talk about students' emotional and psychological well-being.	2.57	2.57	3.08	2.60	2.71			
There is professional development offered to staff that is specifically about mental health.	2.86	2.71	2.08	3.10	3.57			

Table E2

Wave 1 Means and Results for NIRN Implementation Subscale MANOVAs by Population Category

Variable	Mean Score by Population Categories					MANOVA Statistics		
	1	2	3	4	5	*n*	*F*	*p*
NIRN Implementation: Need						43	.913	.56
Focus population for the STOP program is clearly defined.	4.62	4.13	4.64	4.42	4.50			
Specific needs of the focus population have been identified.	3.63	3.57	4.15	3.50	3.60			
Community stakeholders were asked about their perception of the need.	3.29	3.29	4.08	3.58	3.60			
The expected impact of the STOP program is clearly defined	4.00	4.13	4.43	4.33	4.33			
NIRN Implementation: Evidence						41	.809	.64
Research studies have demonstrated the effectiveness of the selected STOP program.	3.50	3.67	3.92	3.20	3.33			
There is a theory of change or logic model that shows how the program is expected to contribute to short and long-term outcomes.	3.71	3.57	3.62	3.75	3.20			
Studies supporting the effectiveness of the program model have been evaluated in a similar context as yours.	4.25	3.57	3.85	4.00	3.60			
NIRN Implementation: Fit						49	1.416	.17
The selected program or practice fits with the priorities of the implementation site.	4.50	4.38	4.93	4.50	4.71			
The program fits with local family and community values, including cultural values of different racial and ethnic populations within the community.	3.75	3.88	4.50	4.33	4.57			
Emphasis is placed on cultural sensitivity of staff at all levels.	3.50	3.50	4.50	4.00	4.00			
NIRN Implementation: Usability						34	.704	.79
The core components of the program that are required to make it effective have been identified.	4.25	4.00	4.54	4.42	4.67			
A fidelity protocol that measures whether staff use the program as intended is available.	3.63	3.86	3.80	3.50	4.20			
There is a recommended process for gathering input from the focus population on culturally specific enhancements.	3.00	3.50	3.82	3.10	4.00			
School leaders are willing to reach out to mature sites with successful histories of implementing the program for guidance.	4.00	3.40	4.00	3.73	4.50			
NIRN Implementation: Capacity						41	.617	.93
The budget can support continued implementation after BJA STOP funding ends.	3.29	3.71	3.23	3.33	3.57			
There is an adequate number of staff in place to meet the requirements for the program.	3.25	3.14	3.85	3.42	4.00			

Staff who are implementing the program or training have a cultural and language match with the population they serve.	3.25	3.86	4.25	3.55	4.50			
Administrative practices, policies, and procedures that must be developed or adjusted to support the STOP program have been identified.	3.63	3.86	4.23	3.83	4.20			
Appropriate staff are able to collect and use data to inform ongoing monitoring and program improvement.	4.38	3.43	4.23	4.08	4.67			
Available technologies are sufficient to support the STOP program.	4.00	4.00	4.23	4.00	4.67			
Data monitoring systems to support the STOP program are in place.	3.75	3.57	3.77	3.67	4.33			
NIRN Implementation: Supports						45	1.555	.11
Curricula and/or resources for the program or practice are readily available.	4.37	3.50	4.62	3.92	4.57			
Training, professional development, or coaching for the STOP program is readily available.	4.13	3.71	4.38	4.25	4.67			
Policies and procedures address issues of racial equity.	3.50	3.00	4.08	3.27	3.71			

*Denotes statistically significant result at $p < .05$.

Table E3

Wave 2 Means and Results for SMHCI Subscale MANOVAs by Population Category

Variable	Mean Score by Population Categories					MANOVA Statistics		
	1	2	3	4	5	*n*	*F*	*p*
SMHCI Intervention Subscale						38	.944	.539
There is a clear understanding about what situations are defined as mental health emergencies.	2.85	3.00	3.25	3.00	3.42			
Staff has been trained in ways to appropriately respond to students who experience urgent mental health problems.	2.71	3.25	3.12	3.16	3.57			
Roles are clear for who responds when there is a mental health emergencies.	2.85	3.50	3.25	3.00	3.57			
A professional is available to perform an evaluation when a student experiences a mental health emergency.	2.85	3.00	3.12	2.91	4.00			
There are channels of communication to share information about mental health emergencies with staff	2.57	3.00	3.37	3.25	3.57			
Information about mental health emergencies is shared with families.	2.42	2.75	3.12	2.72	3.71			
There are follow-up services available for students who experience	2.85	3.00	3.00	3.16	3.71			

Information about students who experience mental health emergencies is shared with school staff.	2.42	2.25	2.87	2.91	3.42			
When a mental health emergency arises, it causes minimal interruption to operations of schools.	2.14	2.75	2.87	2.50	3.14			
SMHCI Early Recognition & Referral Subscale						37	1.118	.227
When there is a concern for students' mental health, there are efforts to communicate with family.	2.71	3.50	3.62	3.25	3.71			
There is a system in place to take action on referrals for students with mental health concerns.	3.00	3.50	3.37	3.25	3.71			
There is a clearly designated person for families to contact when they have a concern about a student's mental health.	2.71	3.25	3.12	3.08	3.42			
The staff makes an effort to understand how the stressors students experience outside of school are related to specific problems they may experience in school.	2.28	3.25	3.37	3.08	3.71			
There is a group of staff that meets regularly to discuss students with mental health concerns.	2.14	2.75	3.25	3.33	3.42			
A professional is available to perform an assessment for students who have been referred for mental health concerns.	2.42	2.75	3.82	3.16	3.42			
There are programs or structures in place (e.g., advisories) that enable staff to proactively identify students who may have difficulties.	2.14	2.75	3.50	3.08	3.14			
There are regular opportunities set aside for staff to discuss the social, emotional, and mental health needs of students.	2.28	2.50	3.37	3.08	3.14			
Follow-up information is provided to staff on the status or outcome of mental health referrals.	2.14	2.75	3.12	2.75	3.28			
SMHCI Prevention & Promotion Subscale						37	1.150	.185
Students are given regular opportunities to be aware of their own and other's talents and accomplishments.	3.00	3.00	2.75	2.72	2.85			
There are activities or programs that focus on building students' strengths and resilience.	2.42	3.00	3.25	3.09	3.14			
Schools' missions and philosophies reflect an explicit focus on the social and emotional development of students.	2.28	3.25	3.25	3.00	3.14			
When a group of students begins exhibiting similar problems, staff intervenes to try to stop the root causes.	2.00	2.500	3.50	3.00	3.71			
There are resources or services available for students who may be experiencing the negative consequences of specific problems, such as depression or loss.	2.57	3.25	3.37	2.91	3.42			
Families are part of efforts to prevent future mental health problems.	2.00	3.00	3.00	2.58	3.42			

There are activities or programs that provide students with information about "normative" development, such as friendship, puberty, or career possibilities.	2.85	3.50	3.37	3.16	3.57			
Staff is knowledgeable about how to talk about students' emotional and psychological well-being.	2.28	2.75	3.25	3.00	3.00			
There is professional development offered to staff that is specifically about mental health.	2.42	3.25	3.50	3.16	3.71			

Table E4

Wave 2 Means and Results for NIRN Implementation Subscale MANOVAs by Population Category

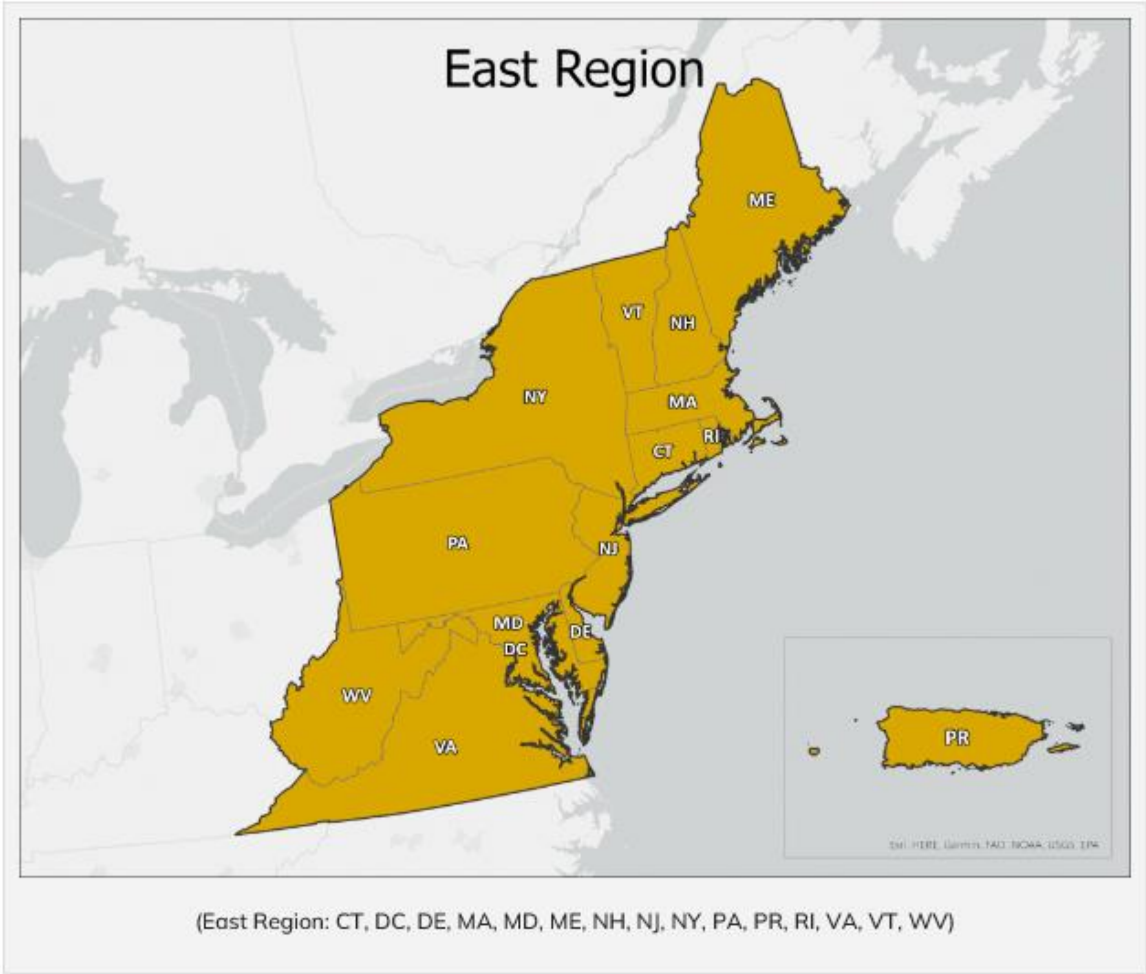
Variable	Mean Score by Population Categories					MANOVA Statistics		
	1	2	3	4	5	*n*	*F*	*p*
NIRN Implementation: Need						33	.818	.040*
Focus population for the STOP program is clearly defined.	3.66	4.50	4.25	4.63	4.33			
Specific needs of the focus population have been identified.	2.50	3.50	3.87	4.27	4.16			
Community stakeholders were asked about their perception of the need.	2.83	4.00	3.87	3.90	4.16			
The expected impact of the STOP program is clearly defined	3.33	5.00	4.00	4.18	4.33			
NIRN Implementation: Evidence						35	.207	.87
Research studies have demonstrated the effectiveness of the selected STOP program.	3.49	3.33	3.50	3.80	4.00			
There is a theory of change or logic model that shows how the program is expected to contribute to short and long-term outcomes.	3.00	3.33	3.87	3.90	3.85			
Studies supporting the effectiveness of the program model have been evaluated in a similar context as yours.	3.14	3.33	3.87	3.90	3.85			
NIRN Implementation: Fit						37	.358	.38
The selected program or practice fits with the priorities of the implementation site.	3.85	4.25	4.37	4.45	4.57			
The program fits with local family and community values, including cultural values of different racial and ethnic populations within the community.	3.71	4.50	4.37	4.09	4.57			
Emphasis is placed on cultural sensitivity of staff at all levels.	3.28	4.00	4.00	3.90	4.00			
NIRN Implementation: Usability						37	.257	.43
The core components of the program that are required to make it effective have been identified.	4.00	4.00	4.12	4.08	4.13			

A fidelity protocol that measures whether staff use the program as intended is available.	3.00	3.66	4.00	3.33	3.71			
There is a recommended process for gathering input from the focus population on culturally specific enhancements.	2.71	4.00	3.87	3.00	3.71			
School leaders are willing to reach out to mature sites with successful histories of implementing the program for guidance.	3.14	3.66	3.62	4.00	4.14			
NIRN Implementation: Capacity						34	.952	.29
The budget can support continued implementation after BJA STOP funding ends.	2.85	3.00	3.00	2.70	3.57			
There is an adequate number of staff in place to meet the requirements for the program.	2.42	2.50	3.62	3.70	3.85			
Staff who are implementing the program or training have a cultural and language match with the population they serve.	2.85	4.00	4.25	3.80	4.13			
Administrative practices, policies, and procedures that must be developed or adjusted to support the STOP program have been identified.	2.57	3.00	4.25	4.30	4.00			
Appropriate staff are able to collect and use data to inform ongoing monitoring and program improvement.	3.57	3.00	4.25	4.30	4.00			
Available technologies are sufficient to support the STOP program.	3.57	3.00	4.37	4.10	4.28			
Data monitoring systems to support the STOP program are in place.	3.28	4.00	4.00	3.60	4.00			
NIRN Implementation: Supports						35	.368	.41
Curricula and/or resources for the program or practice are readily available.	4.14	4.33	4.14	4.54	3.85			
Training, professional development, or coaching for the STOP program is readily available.	3.85	4.00	4.28	4.45	3.57			
Policies and procedures address issues of racial equity.	3.28	3.00	4.42	3.72	3.14			

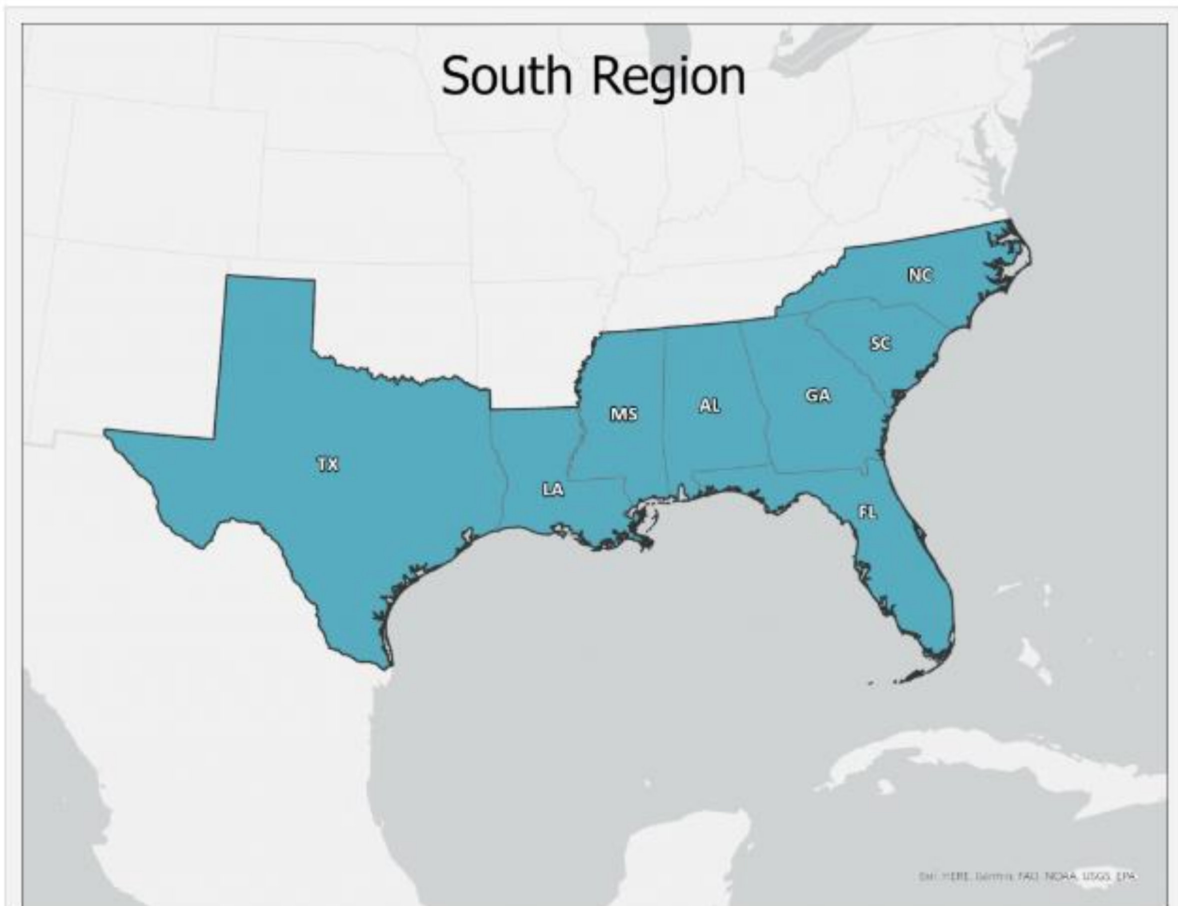
*Denotes statistically significant result at $p < .05$.

Appendix F: BJA Regional Demarcations

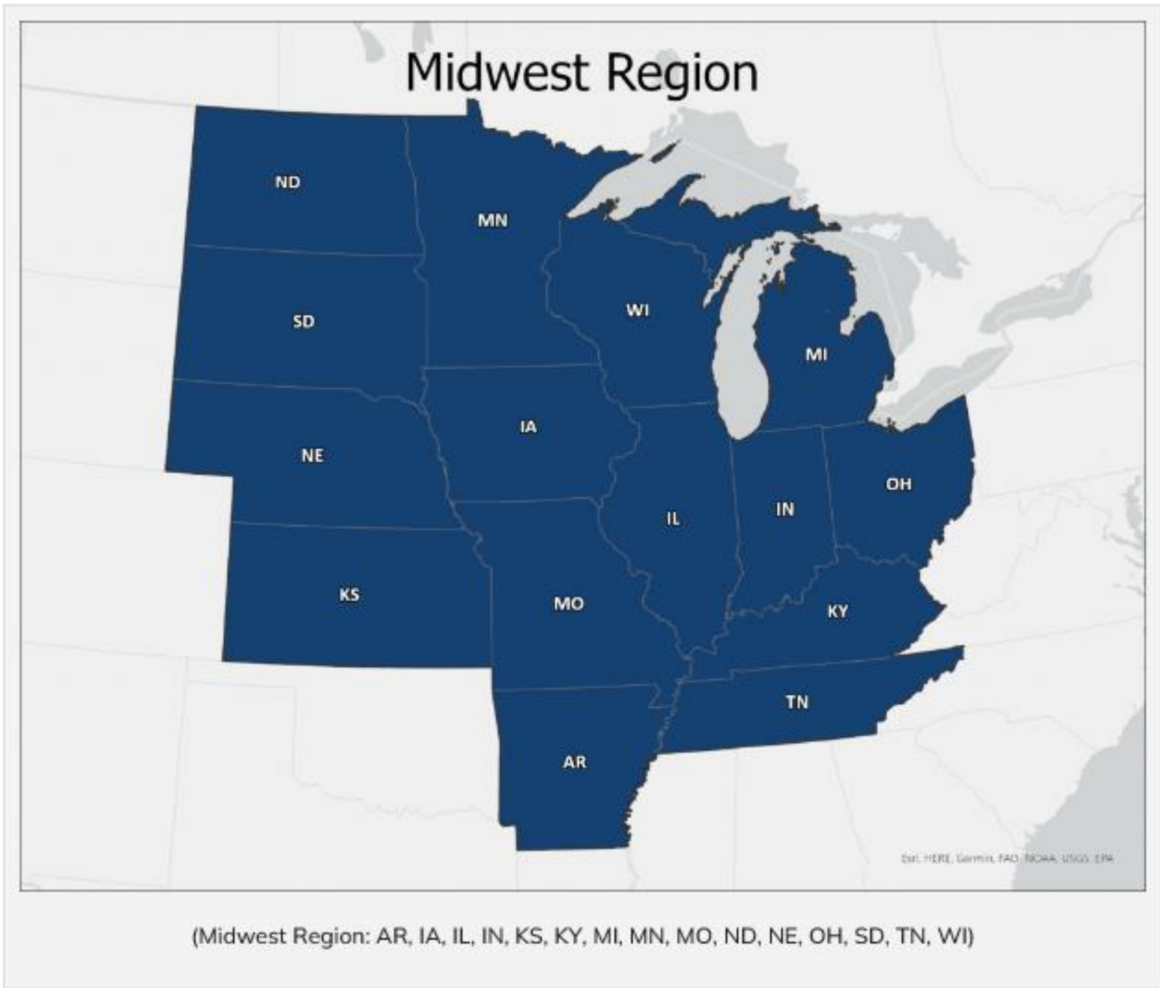
Source: National Center for School Safety STOP TTA Quarterly Meeting website



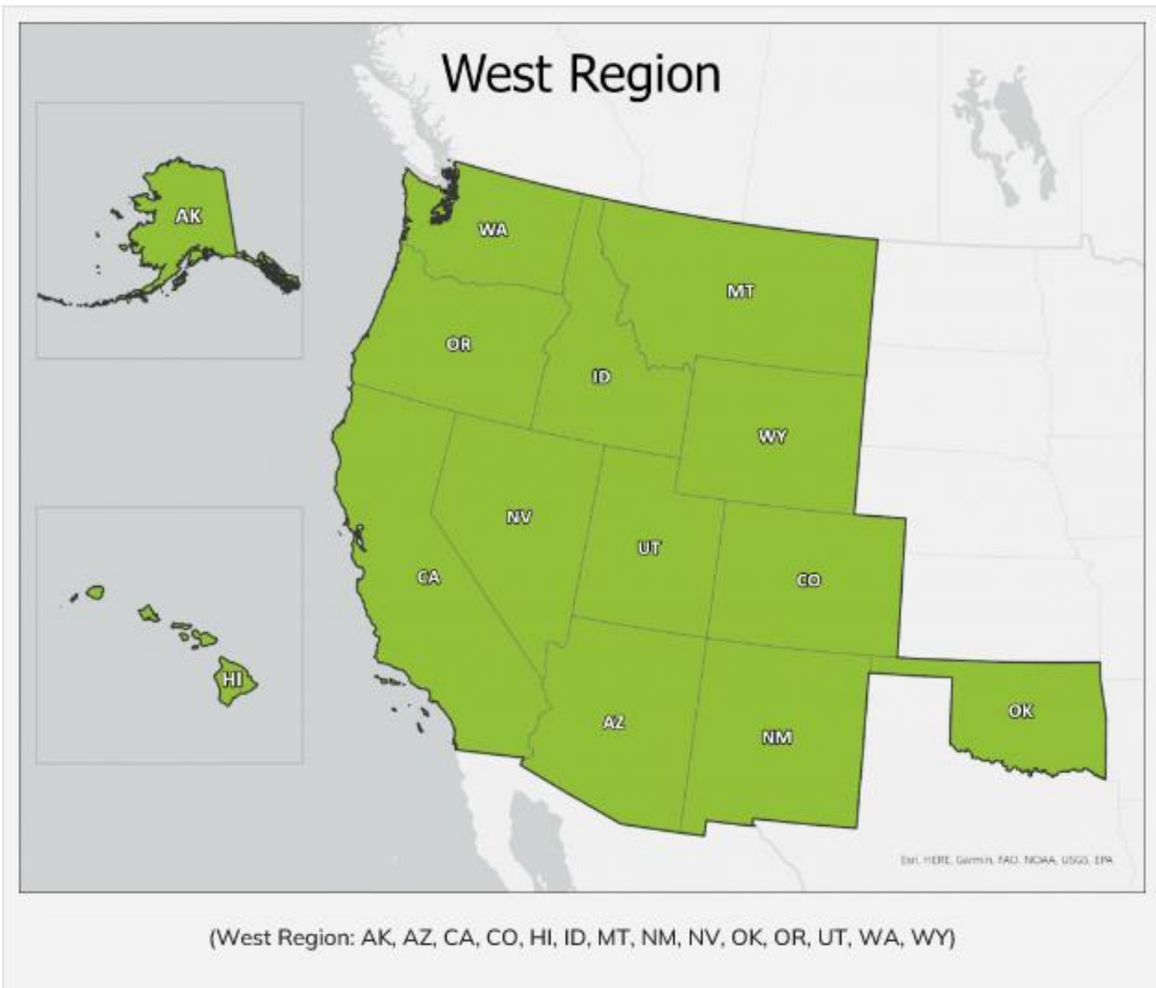
(East Region: CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, PR, RI, VA, VT, WV)



(South Region: AL, FL, GA, LA, MS, NC, SC, TX)



(Midwest Region: AR, IA, IL, IN, KS, KY, MI, MN, MO, ND, NE, OH, SD, TN, WI)



(West Region: AK, AZ, CA, CO, HI, ID, MT, NM, NV, OK, OR, UT, WA, WY)