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A Randomized Controlled Trial of a Comprehensive, Research-Based Framework for Implementing School-Based Law Enforcement Programs Federal Award #: 2016-CK-BX-0003

FINAL REPORT

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Major Project Goals and Objectives

The goal of this project was to evaluate a comprehensive, research-based framework of recommended practices for integrating police into the educational environment. This research rigorously tested use of a multi-faceted school-based law enforcement (SBLE) framework to determine how the framework contributes to multiple outcomes. Our broad objectives for the study were to: (1) implement a randomized controlled trial to test a comprehensive framework for SBLE involving 25 middle and high schools; (2) assess the impacts of this framework on student victimization and delinquency, use of exclusionary discipline practices (e.g., suspension, expulsion), school climate measures, and student-officer interactions; and (3) disseminate tangible findings that can immediately be translated into practice and further research in schools nationwide.

Research Questions

We operationalized our project objectives as research questions organized around project impact and implementation:

Impact research questions:

- 1. Does using the comprehensive research-based framework for implementing school-based law enforcement programs:
 - (a) Reduce student victimization and delinquency in treatment schools compared to control schools?
 - (b) Reduce the use of exclusionary school discipline in treatment schools compared to control schools?¹
 - (c) Enhance school climate in treatment schools compared to control schools?
 - (d) Improve student perceptions of police in treatment schools compared to control schools?

¹ The study originally proposed to examine referrals to law enforcement in addition to exclusionary discipline; however, such data was not made available to the research team.

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Implementation and counterfactual research questions:

- 1. To what extent were all framework elements implemented as designed in treatment schools?
- 2. To what extent did fidelity of implementation affect treatment impacts?
- 3. What did control schools implement during the study period?

Notably, the purpose of this study was not to address the efficacy of policing in schools. This study was undertaken with the recognition that, in the 2017-2018 school year, 61.4% of U.S. public schools have at least one security staff, and 46.7% have sworn law enforcement officers assigned to the school (National Center for Education Statistics, 2019). Despite the prevalence of school-based policing, there is little in the way of research, policy, or advocacy for structuring or implementing school policing. The National Association of School Resource Officers (NASRO) recommends specialized training for officers assigned to schools, and NASRO and others have promoted models of school policing, such as NASRO's triad model. The triad model conceptualizes SROs' responsibilities as law enforcement, education, and informal counseling (NASRO, 2012). However, those recommendations are broadly stated; and to our knowledge, few resources are available to guide operationalizing school policing in a way that facilitates systematic collaboration between SROs, school administrators, and staff' integration of the SRO into the school community; or designing specific SRO activities that align with the school's overall needs and goals for school safety and climate. Our intent of this study was to evaluate an operational framework for implementing school policing in a way that facilitates those goals while being responsive to the unique needs of each school.

This study was successful in answering our research questions and achieving the stated goals of the project. The following report begins with a description of the school policing framework – the intervention for this study, followed by the study design, measures and data

collection procedures, and findings as they relate to each of our research questions and the broader project's goals. To assist readers in understanding the components of this project, see Appendix A for descriptions of each partner's role, major project activities, and timelines.

Framework for Implementing School Policing

The school policing framework is a comprehensive, data-driven strategic planning process that is intended to assist schools with implementing and monitoring their school policing programs with the aim of enhancing a safe school climate. The framework is intended to be an iterative process, whereby program planning and implementation can be continuously adjusted to achieve desired outcomes. Because school needs and environments differ from campus to campus, the framework is not intended to be a one-size-fits-all program. Instead, the framework provides a flexible process that can be implemented to meet the local needs of a campus as they implement their policing program (see **Figure 1**).



Figure 1: Framework for implementing school-based law enforcement program.

Individual components of the framework are derived from previous research and policy recommendations and include: 1) Designating a program committee and program liaison; 2) Establishing tailored, specific program goals; 3) Training school police officers and school staff; 4) Monitoring progress toward goals; 5) Adjusting the program as needed. An overview of the components is described below.

Component 1 involves creating a committee of key stakeholders who are responsible for regularly meeting to plan and make decisions about their campus policing program. The committee should also include representation from various stakeholder groups (e.g., campus principal or assistant principal, assigned law enforcement officer, teacher, parent, student, community member, etc.) to ensure a comprehensive perspective when planning and making decisions. Further, each campus should designate a program liaison, who is responsible for overseeing the school policing program.

Component 2 involves establishing tailored, specific program goals. These goals are data driven and established by the committee at the beginning of each school year. The committee also identifies specific activities that will help to achieve the goals. For example, one of the treatment campuses in this study set a campus goal of improving student perceptions of the school police officer by 20% based on previous school climate data collected. The activities associated with this goal involved having the officer visit selected classrooms on a weekly basis to engage in classroom activities with students catered toward relationship building, as well as positively engaging with students during extra-curricular programming.

Component 3 involves training school police officers and school staff in areas that can assist with contributing to the success of the campus policing program goals and overall school climate. The traditional police academy does not provide specialized training to prepare officers

to work in an educational setting. Therefore, specialized training for school police officers is critical and should include an emphasis on areas such as the social and emotional needs of students, de-escalation techniques, and the implementation of positive behavioral intervention and supports. For this study, officers in the treatment campuses all received the Texas statemandated school-based law enforcement training course required of all officers working in schools.

In addition, training is also critical for school staff on classroom management techniques that equips staff with how to effectively handle student behavioral issues that should not involve law enforcement intervention. Training for staff should also include awareness about the appropriate roles, duties, and expectations associated with the school policing program. For this study, all staff in the treatment campuses received training on the history of law enforcement in schools, their roles and responsibilities, how to collaborate with school law enforcement, awareness about the school policing framework and the established campus goals and activities.

Component 4 focuses on the importance of monitoring progress toward established goals. Monitoring progress through the process of collecting and analyzing data provides for an unbiased, objective measure of how the policing program is performing and whether it is on track to meet its goals. Finally, *Component 5* focuses on adjusting the program as needed based on findings from data collection. The framework is a cyclical or iterative process, so the process may involve setting new goals or altering the activities or strategies to achieve existing goals.

Beyond implementing the framework components, campuses were also required to meet four additional deliverables: 1) a project planning meeting between June-August with key project staff and all key campus and district stakeholders to achieve a common understanding of the research project and framework processes; 2) a goal-setting meeting in September with key

implementation team staff and campus framework committee members to ensure goals were data-driven, relevant to school policing, realistic, and measurable, and to ensure campuses had a thorough plan for achieving their goal(s); 3) monthly check-in meetings from October through May with key implementation staff to provide updates on progress toward goals, review collected data, and discuss whether adjustments were needed at that time; and 4) a final debrief meeting to discuss whether goals were achieved, direction for moving into the next school year, and feedback on the framework manual and processes. Several campuses experienced substantial lag in beginning implementation in Year 1. Several campuses were unable to complete end of year deliverables in Year 2 due to COVID-19. See Appendix B for a breakdown of deliverables met.

The SBLE framework is informed by previous research and policy recommendations regarding school policing. However, many of these guidelines, to our knowledge, have not included a rigorous impact evaluation. The following section describes the study design implemented and measures used to test the impact of this comprehensive school policing framework.

Study Design

The study utilized a true, cluster-randomized experiment design with repeated measures to estimate and understand the treatment impacts of the comprehensive framework on relevant outcomes in 25 schools from six separate school districts with 13 schools in the treatment group and 12 schools in the wait-listed control group. The Texas School Safety Center guided all treatment activities outlined in the comprehensive framework (above) over two full school years (referred to as Year 1 and Year 2). Schools in the control group did not use this framework and continued to run their school-based law enforcement program as they saw fit (i.e., "business as

usual" condition). It is important to note that, in the summer of 2017, prior to baseline data collection, a new law went into effect that mandated at least16 hours of training for all school resource officers. This training addressed topics relevant to school-based policing, including adolescent development and psychology, restorative practices, positive behavior interventions and supports, and de-escalation techniques. Thus, all officers in our project, including those assigned to control campuses, were required to receive this state-mandated training. Other than state-required training, no other special training or support was provided to the best of our knowledge to the control campuses. At the end of the final year, the intervention was delivered to seven schools in the control group who chose to participate. All data collection procedures and instruments were pilot tested during the pre-baseline period in a middle school and high school in an adjacent district not participating in the study.

Measures and Data Collection Procedures

Impact

All impact constructs measured are listed in Table 1 and explained below.

Table 1. Measurement n	atrix of impa	act variables.
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Construct	Items	Alpha reliability	Source
Student reported outcomes			
School Safety Climate			
Bullying and victimization	13	0.85	Hanson & Voight (2014)
Delinquency	7	0.83	Hanson & Voight (2014)
Adult-student relationships	6	0.84	Hanson & Voight (2014)
Rule clarity	4	0.76	Bear et al. (2014)
School bonding	8	0.76	Goodenow (1993), You et al. (2011)
Connectedness and safety	6	0.80	Hanson & Voight (2014)
Perceptions of police	8	0.93	Zullig et al. (2015)
Total	52		
Exclusionary discipline	n/a	n/a	Archival data
Student-police interactions	n/a	n/a	Scheuermann et al. (2021)

Student survey system. WestEd tracked student self-reported rates of victimization and delinquency, adult-student relationships, rule clarity, school bonding, feelings of connectedness and safety, perceptions of police, and satisfaction with police in all schools. Survey responses collected during the baseline year were compared to subsequent years to isolate the impacts of the treatment framework from school-specific confounding factors. Because of variability in students' ability to access online systems at their school, researchers prepared both an online survey captured through RedCAP (a data tracking platform initiated by Vanderbilt University and for which WestEd is a licensed user) and paper and pencil administration.

Student victimization (e.g., "... have you been pushed, shoved, slapped"), delinquency (e.g., "...have you been in a physical fight"), caring adult-student relationships (e.g., "...there is an adult who really cares about me"), and school connectedness and safety (e.g., "I feel safe in my school.") were measured using items from WestEd's California School Climate, Healthy, and Learning Survey (Hanson & Voight, 2014), each having high alpha reliabilities ($\alpha = .80$ or greater). Rule clarity items came from Bear et al.'s (2014) scale (e.g., "Students know what the rules are.") and school bonding items from Goodenow's (1993) scale (e.g., "I wish I were at a different school.") as tested by You et al. (2011). Each of these constructs also displayed high alpha reliability ($\alpha = .76$). The measurement of student perceptions of police used eight items (e.g., "The officer makes me feel safe.") from an internally consistent scale ($\alpha = .93$; Zullig et al., 2015). Inter-item correlations ranged from ($\mathbf{r} = 0.41$) to ($\mathbf{r} = 0.78$), and the scale demonstrates preliminary convergent validity with a 42-item school climate measure (Zullig et al., 2015).

Student disciplinary actions. Student incident data were collected directly from districts and contained information related to the nature of the incident, disciplinary action, and student

characteristics including race, age, grade, and disability status². Data related to incidents handled by the police (e.g., ticketing and arrest) were not made available to the research team. Any exclusionary discipline and out-of-school suspensions prevalence and counts were examined in Years 1 and 2 as an impact measure related to the school-to-prison pipeline.

Student-police interactions. Student-police interaction data were reported by officers over a two-week period during the baseline periods and each follow up period (years 1 and 2) using logs that described date, time, and location of the encounter, how the encounter was initiated (i.e., call for service or officer-initiated), the reason for the encounter, and how the officer responded (e.g., informally counseled, wrote ticket, arrested student, restrained student).³

Fidelity

Conclusions about effectiveness of any independent variable are only valid to the extent that the target intervention was implemented as designed and intended. Three facets of treatment fidelity (also known as implementation fidelity or treatment integrity) can affect outcomes (Hulleman & Cordray, 2009). First, was the intervention *delivered* as designed? In the current study, this related to all training and support activities provided for treatment schools. Second, did all participants receive the same amount of *exposure* to the intervention? In the current study, this variable was reflected in the amount of training provided to SROs and educators, and amount of support provided to each treatment campus. Third, was the intervention *implemented* as designed? This was reflected in the extent to which each treatment campus implemented the

² Districts did not consistently share demographic data, which limited its use in the impact study.

³ These data were used to examine consistency and variation in officer practices across schools as descriptive context for the study. Due to COVID-19 and resulting school closures, these data were collected from only one district in Year 2 follow up and were not used as a data source in the impact study.

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framework components according to the framework guidelines. See Appendix C for a summary of data sources for monitoring fidelity of treatment delivery and implementation.

Fidelity of Delivery of and Exposure to Intervention (Framework)

Multiple steps were taken to ensure equal and consistent treatment delivery and dose across treatment campuses. First, content of training provided to all SROs is determined by Texas law, and training is manualized, with trainer materials, presentation slides, and activities standardized for all training sessions. SROs from treatment campuses received the required 20 hours of training in Years 1 and 2. Three TxState team members simultaneously observed one of these training sessions to assess content and activities of the training session compared to the training curriculum.

Second, the TxSSC project staff conducted in-person trainings for education staff at treatment campuses using the same presentation materials and script notes for each training session. In Year 2, educator training included a condensed version of the in-person training, which was then supplemented with online modules which educators at each treatment school completed independently. Two TxState project staff simultaneously observed three educator training sessions at treatment campuses (25% of total sessions conducted) in Treatment Year 1. The TxSSC tracked number and percentage of each campus staff that completed the modules across both years. See Appendix D for a breakdown of module completion by campus.

Finally, the TxSSC team members conducted all check-in meetings using a standard check-in agenda and protocols. All treatment schools were *offered* the same number of check-ins (monthly during each treatment year); however, due to school-initiated cancellations, and unavoidable events such as severe weather, not all schools received the same number of check-ins.

Fidelity of Implementation of Framework

We assessed implementation fidelity through: (a) observations of samples of campus safety team meetings; (b) observations of samples of campus check-in meetings; (c) annual interviews with campus administrators; and (d) annual interviews with campus SROs; and (e) observations of annual project debriefing meetings held with each school.

Campus Safety Team Meetings and Campus Check-In Meetings. We developed,

piloted, and established inter-rater reliability on fidelity checklists that we used to guide observations of campus safety team meetings and project check-in meetings. All observation forms reflected the salient, critical elements of the activity, as communicated in the framework guide and training provided to each campus. The number and type of observations conducted across project years is shown in Table 2.

Table 2. Observations of campus implementation meetings across treatment years.

	Goal-Setting	Check-In Meetings	Campus Safety	Debriefing
	Meetings		Team Meetings	Meetings
Year 1	6	11	0^{4}	7
Year 2	7	3	18	12

Across treatment years, we also relied on interviews and debriefing meetings to help guide our assessments of the extent to which schools implemented the treatment framework with fidelity.

Interviews. TxState team members conducted interviews in Baseline, Year 1, and Year 2 with our partner school administrators and SROs. The main purposes for these interviews were to solicit treatment campus administrators' and SROs' perceptions of the framework components as implemented on their campus, and to assess any treatment effects in control schools. Both interview protocols followed a structured set of questions with follow-up probes as needed for

⁴ Due to delays in starting project activities, schools did not hold regular project safety team meetings in Year 1.

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clarification. During baseline, interviews focused on roles of the SRO, communication and collaboration between the SRO and administrator, and application of concepts covered in the new state HB 2684 training. During treatment years, treatment school interviews also included questions pertaining to framework implementation, impact, and social validity. Structured interview formats were developed by the TxState team, with input and feedback from the TSSC team. Draft interview protocols were piloted with one SRO and one former member of law enforcement who is now an educator. Dr. Scheuermann trained TxState team members in interview protocols and procedures, and how to record responses.

All interviews in Baseline and Year 1 were conducted at project schools, in the interviewee's office or a meeting room. In Year 2, we completed six interviews in person before schools closed due to COVID-19. Dr Scheuermann conducted all remaining interviews of treatment school administrators and SROs by phone. Most project SROs had returned to active-duty patrol, and the preferred contact method for many of these SROs was to call Dr. Scheuermann when they were available for the interview. Often, they were on patrol during the interview, under significant time constraints. When we were unable to complete all interview questions, only questions that most directly reflected framework implementation were asked.

We conducted a total of 135 interviews (see Table 3). Total interview numbers vary across years for different reasons (see footnotes).

	Administrator	Officer	Total
Baseline ⁵	22	21	43
Year 1 ⁶	23	24	47
Year 2 ⁷	24	21	45
Total	69	66	135

Table 3. Summary of interviews conducted across project years.

Data Analyses

Impact

Multiple data sources were used to address the impact research questions. A student survey which included self-reported student victimization and delinquency, school climate measures and student perceptions of police was used to address impact research questions 1, 3 and 4. Archival discipline data from each of the participating school districts in Texas were used to address research question 2 (see Table 1 above).

Student Survey. Though this was a randomized control trial study design, all students were not required to complete the student survey. Student survey participation varied within and across years. Thus, statistical tests for the baseline equivalency of student demographic and outcome variables were employed to ensure that the treatment and control groups were statistically similar at baseline. We examined baseline equivalence by computing Hedges G – the standardized difference in means for the treatment and comparison groups – for demographic and outcome variables. Standardized differences above .05 indicated that there was baseline

⁵ Baseline: Three project schools were not yet open; one SRO served two schools

⁶ Year 1: Two administrators were not available to interview; two SROs overlapped at one school – both were interviewed; two SROs shared two campuses – both were interviewed together and the interview covered their work at both schools

⁷ Year 2: One administrator was not available to interview; two SROs were not available for interview; three SROs shared three schools, but only two SROs were available for interview – they were interviewed together and the interviewed covered their work at all schools

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inequivalence between study groups for variables (Appendix E.). These variables were included in regression models to control for this inequivalence.

Linear regression models controlling for inequivalent baseline variables were employed to estimate the differences in self-reported student victimization and delinquency, school climate, and student perceptions of police. The following regression model equation in reduced form serves as an example.

StudentOutcome_i =
$$\beta_0 + \beta_1 T x_i + \sum B_I I_i + \varepsilon_i$$

where subscripts *i* denotes student; *Student Outcome* represents the self-reported student victimization or delinquency measure, school climate measures, or student perceptions of police; *Tx* is a dichotomous variable indicating that a student is enrolled in a school at baseline that was assigned to the treatment condition; and I is a vector of other control variables for students (which may include a baseline measure of the outcome) found inequivalent at baseline, measured prior to exposure to the intervention. Lastly, ε is an error term. In this model, the intervention effect is represented by β_1 , which captures treatment/control school differences in changes in the outcome variable between pretest and posttest. B₀ (intercepts) capture the adjusted average of the outcome of interest for all students within the analytic sample.

As described above, survey participation was voluntary and thus total responses varied from baseline through Year 2 follow up. Furthermore, Spring 2020 (Year 2) data collection activities were disrupted by the COVID-19 pandemic and resulting school closures. Year 2 data collection was postponed until Fall 2021 and took place was 9th and 12th grade students only. Student responses by study group are presented in Table 4 below.

	Baseline	Year 1	Year 2
Control	5036	4178	869
Treatment	5671	5742	2486
Total	10707	9920	3355

Table 4. Student Survey Response Counts

Discipline Data. The archival data acquired to explore disciplinary outcomes provided no loss to follow-up within our study sample. Because of the administrative nature of the data, there was no attrition or differential attrition at follow up. This minimized the threats to internal validity, which allowed for a straightforward analysis of the intervention impact (research question 2). Thus, to compute the effects of the intervention a simple measure of mean differences was computed for count variables and odds ratio for prevalence variables. The magnitude of effect was then computed using Hedge's G for the count variable and the Cox index for prevalence variables.

Fidelity

Two TxState team members rated overall fidelity of implementation at each treatment school by independently assigning a level of implementation fidelity, arrived at by each person separately reviewing all sources of fidelity indicators for each campus (in order of priority, these were campus safety team meeting observations, interviews, check-in meeting observations, and debriefing meetings), and then assigning a rating of strong, moderate, or limited fidelity, operationalized across measures. If ratings differed, a third team member independently reviewed materials and assigned a rating. Finally, team members discussed all ratings to ensure consensus on final ratings.

To monitor for treatment effects in control campuses, we conducted annual interviews with an administrator and the SRO for each control school, during each project year (baseline,

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Treatment Year 1, Treatment Year 2). We reviewed each interview report for indicators of treatment components and to gauge change from baseline to treatment years. Each set of interviews (3 years of interviews) for each control campus administrator and SRO were reviewed separately by at least two TxState team members. A third team member reviewed 10 of the 12 sets of interviews but was unable to review the two remaining sets due to a family emergency. Each reviewer independently assigned a rating of low, moderate, or high to indicate strength of evidence of framework components on these campuses. The reviewers discussed any ratings that differed until rating agreement was reached.

Results

Impact Research Questions

Research Question 1. Does using the comprehensive research-based framework for implementing school-based law enforcement programs reduce student victimization and delinquency in treatment schools compared to control schools?

School-level analysis of student self-reported victimization and delinquency indicated that treatment schools realized small reductions in both victimization and delinquency in the first follow-up period and for victimization in the second follow-up period relative to the comparison schools (see Table 5); however, the statistically adjusted differences were trivial and not statistically significant. As noted in above and in the limitation section to follow, we encountered considerable challenges in the field during the process of administering the student survey. Challenges encountered were both internal (e.g., reliability of student survey IDs) and external (e.g., COVID-19 pandemic, survey postponements) that limit the confidence in the findings of the student self-reported outcomes.

	Ba	seline	Post-test 1		Post-test 2			
		Mean	Mean	Adjusted Difference	CI	Mean	Adjusted Difference	CI
Vietimizetien	C ¹	1.54	1.57			1.39		
Victimization	Т	1.57	1.56	.05	(-0.12, 0.01)	1.37	.03	(-0.09, 0.04)
	С	1.19	1.18			1.10		
Delinquency	Т	1.19	1.17	.03	(-0.07, 0.01)	1.10	.02	(-0.04, 0.01)

Table 5. Student Self-Reported Victimization and Delinquency.

 ${}^{1}C = Control; T = Treatment$

Research Question 2. Does using the comprehensive research-based framework for implementing school-based law enforcement programs reduce the use of exclusionary school discipline in treatment schools compared to control schools?

Student-level analysis of administrative data on discipline records collected from the school districts show that exclusionary discipline practices (in-school or out-of-school suspension) for treatment schools decreased in count but increased in prevalence over the course of the study (see Table 6). In practical terms, the difference in percent of student experiencing an exclusionary discipline over the course of the study dropped from 10% to 7% for treatment campuses and from 9% to 5% for control campuses. Regarding out-of-school suspensions, treatment campuses experience a decline from 4% to 2% of students experience at least one out of school suspension whereas control campuses experience a decline from 2% to 1% of students. The magnitude of effects between study groups in each of the follow up periods is statistically trivial.

		Baseline	Baseline Post-test 1		1 Post-te	
		Prevalence / Mean	Prevalence / Mean	O.R./Mean Difference	Prevalence / Mean	O.R./Mean Difference
Any	С	.09 / .27	.07 / .18		.05 / .11	
Exclusionary Discipline	Т	.10 / .33	.09 / .25	1.25 / .07	.07 /.17	1.38 / .06
Out-of-	С	.02 / .03	.01 / .02		.01 / .01	
School Suspensions	Т	.04 / .07	.02 / .04	1.47 / .02	0.02 / .02	1.49 / .01

Table 6. Exclusionary Discipline Data.

Research Question 3. Does using the comprehensive research-based framework for implementing school-based law enforcement programs enhance school climate in treatment schools compared to control schools?

Overall, both groups experienced small increases in rule clarity and school bonding, and slight decreases in school connectedness, over the course of the study (see Table 7). Though not statistically significant, school-level analysis of student self-reported school climate measures indicated that treatment schools realized small increases in rule clarity and school bonding from baseline to the second follow up period relative to the comparison schools; adult-student relationships varied year-to-year; and treatment group perceptions of school connectedness and safety decreased from year-to-year compared to control group.

Table 7. Student Self-Reported Perceptions of Relationships, Rule Clarity, and School Bonding, and Connectedness.

		Baseline	Post-test 1				Post-tes	t 2
		Mean	Mean	Adjusted Difference	CI	Mean	Adjusted Difference	CI
Adult-Student	С	3.01	3.00	0.2		3.09		
Relationships	Т	3.06	3.02	.03 (-0.12,0.05)	3.06	.04	(-0.18,0.10)	
Dulo Clouity	С	2.79	2.80	.03	(007014)	3.05	.07	(0.12, 0.001)
Rule Clarity	Т	2.79	2.83	.05	(-0.07,0.14)	2.95	.07	(-0.13,-0.001)
School Bonding	С	3.40	3.38	.02	(-0.07,0.12)	3.55	.02	(0.120.00)
School Bollung	Т	3.42	3.40	.02	(-0.07,0.12)	3.53	.02	(-0.12,0.09)
Connectedness	C	3.30	3.27	.01	(-0.05,0.08)	3.24	.04	(-0.14,0.06)
and Safety	Т	3.32	3.28	.01	(-0.03,0.08)	3.18	.04	(-0.14,0.00)

Research Question 4. Does using the comprehensive research-based framework for implementing school-based law enforcement programs improve student perceptions of police in treatment schools compared to control schools?

Though not statistically significant, school-level analysis of student perceptions of police officers indicated that both groups had varied perceptions of police officers from year-to-year (see Table 8). In practical terms, at baseline, the treatment schools averaged a 3.39 on the SRO perceptions scale. Comparison schools averaged a 3.32 on the SRO perceptions scale. This

suggests that students had neutral perceptions of their school-based police officers during the 2017-2018 school year (which is prior to the intervention). During the 2018-2019 survey administration, treatment schools averaged a 3.44 on the SRO perceptions scale. Comparison schools averaged a 3.34 on the SRO perceptions scale. The difference here is trivial but suggests that students from both treatment and comparison schools had neutral perceptions of their school-based police officers after one year of implementing the intervention. After controlling for baseline scale score and covariates, the adjusted difference between treatment and comparison schools was .12 (95% CI: -0.06, 0.31) or approximately 3.5 percent. During the 2019-20 survey administration, treatment schools averaged a 3.36 on the SRO perceptions scale. Comparison schools averaged a 3.52 on the SRO perceptions scale. The difference here is trivial but suggests that students from both treatment and comparison had neutral perceptions of their school-based police officers after two years of implementing the intervention. After controlling for baseline scale score and covariates, the adjusted difference between treatment and comparison schools was .14 (95% CI: -0.35, 0.07), or about 4% difference between groups. Table 8. Student Perceptions of Police.

		Baseline	Post-test 1			Post-test 1 Post-test 2		
		Mean	Mean	Adjusted Difference	CI	Mean	Adjusted Difference	CI
Student	С	3.32	3.34			3.52		
Perceptions of	Т	3.39	3.44	.12	(-0.06,0.31)	3.36	.14	(-0.35,0.07)
Police								

Implementation and Counterfactual Research Questions

We monitored fidelity of treatment delivery as well as implementation fidelity. To gauge amount and consistency of treatment delivery, we observed SRO training, education staff training, and campus check-in meetings. Using the SRO training curriculum as our guide, we determined that the trainer followed the training content, that delivery was engaging and

interesting, as indicated by the majority of participants attending to the speaker, asking and answering questions, participating in application activities, and by unsolicited comments from participants about the value and applicability of the training. All educator training sessions observed were consistent in content and delivery across sessions and presenters. Furthermore, educators appeared engaged in the training, as indicated by the majority of participants looking at the speaker, and participant questions about the project.

Research Question 1. To what extent were all framework elements implemented as designed in treatment schools?

The majority of schools were rated as showing strong indications of implementation fidelity in both treatment years (see Table 9); that number increased from 5 schools in Year 1 to 7 schools in Year 2. Only one school was rated as low implementation fidelity in Year 2, compared to 4 schools that were rated low in Year 1.

Table 9. Summary of Implementation Fidelity Ratings Across Treatment Years.

Year	Strong	Moderate	Limited
Year 1	5 (41.66%)	5 (41.66%)	2 (16.66%)
Year 2	6 (50%)	6 (50%)	0

Fidelity ratings varied across years. Four schools improved in fidelity indicators from Year 1 to Year 2, two schools declined, and six schools showed no change in fidelity across years. See Appendix F for individual school ratings and changes over time. The metrics used to gauge implementation fidelity were not designed to capture subtle improvements (e.g., improvements within each rating category). Three of the "no change" schools remained at a strong level of implementation fidelity across both treatment years, and three remained at a moderate level of implementation fidelity. Both schools rated as limited implementation fidelity in Year 1 improved in Year 2 (one to a moderate level, one to strong).

Research Question 2. To what extent did fidelity of implementation affect treatment impacts?

To examine the effect of implementation fidelity on treatment impact, the research team employed a two-stage treatment on treated analysis. First, the implementation team and implementation research partners triangulated findings from engagement and implementation fidelity ratings to assign overall fidelity rating of 'Limited', 'Moderate', and 'Strong' overall implementation fidelity. Next, the impact study team ran a series of subgroup analyses to examine differential treatment effects for treatment campuses based on their implementation fidelity ratings for the at the conclusion of the implementation period. The analyses included a series of analysis of variance models for discipline records and multivariate linear regression models for school-level survey data, and then post estimation marginal effect estimates to determine the contrast in treatment effects based on fidelity ratings.

The findings were mixed, varied by outcome, and did not unequivocally support the notion that treatment effects were enhanced with strong implementation fidelity. There are several associated factors that the study team plan to explore within future studies and articles. For example, implementation fidelity was related to school type in that most schools with strong fidelity were high schools and all but one middle school reached only moderate fidelity. In a subgroup analysis of high schools in the treatment group, self-reported victimization varied by less than a percentage point between moderate and strong fidelity schools suggesting implementation fidelity had little effect on this outcome. What are the mechanisms within high schools that promote strong implementation fidelity and how might that relate to treatment impacts? This is a question to be further unpacked in future analyses. Furthermore, as noted in the discussion to follow, legislative policy was enacted within the grant period that mandated exclusionary discipline for certain types of student offenses. How do these student offenses vary

across schools and according to implementation fidelity? These and other factors will be explored to further determine whether implementation fidelity is correlated with student and school outcomes.

Research Question 3. What did control schools implement during the study period?

All control schools showed low or moderate indication of treatment components across project years (see Table 10). See Appendix G for individual school ratings across years. Table 10. Indicators of Treatment in Control Schools Across Project Years

Year	High	Moderate	Low
Baseline	0	2 (17%)	8 ⁸ (67%)
Year 1	0	3 (25%)	9 (75%)
Year 2	0	1 (8%)	11 (92%)

Discussion

In our final (Year 2) debrief meetings, and in Year 1 and Year 2 administrator and SRO interviews, participants expressed overall positive feedback regarding the utility of the framework. Participants noted that the framework provided them guidance, created focus, and established a common language for working toward safety goals. They noted that the goal-setting component of the manual and the accompanying resource/template for setting goals were the most beneficial components for their campus and the most used aspects of the framework to inform decisions.

Limitations

A study of this size and scope has limitations that must be considered. The nature of the framework allows for campuses to set goals around the specific needs of their campus.

⁸ Two project schools were not open during Baseline year

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Final Report: Framework for Implementing SBLE

Therefore, even though all campuses implemented the same framework processes, not all campuses were engaging in the same activities or working toward the same goals. The nature of some goals (e.g., building positive student-officer relationships) would be expected to relate positively to the study outcomes of perceived positive school climate and positive perceptions of police. Alternatively, other goals (e.g., reducing drug, alcohol, and e-cigarette use on campus) may not necessarily relate positively to perceptions of police, or even discernable to students (e.g., reducing unauthorized visitors on campus). In future work, it will be important to emphasize actual campus-level outcomes based on the goals and activities they implement to address their specific safety needs, as a more direct measure of the utility of the framework.

In the present study, several campuses experienced substantial lag time in establishing their plan and beginning to implement activities in Year 1. Despite that, seven of the 12 campuses achieved the goals they set. Additionally, campus committee members learned through Year 1 experiences, more realistic ways of establishing goals, more effective activities toward achieving those goals, and more streamlined methods of tracking progress to determine if they met their goal for Year 2. Although COVID-19 prevented campuses from completing their activities and acquiring actual data to verify whether they met goals, all 12 campuses reported in the debrief meeting that they made substantial progress in Year 2 and experienced the change they were working to produce.

There were notable nuances to data collected from the student survey and archival data that limited the impact data analysis and interpretation of findings. The design of the student survey was completely self-report. This proved to be a challenge in respect to linking student records across years. The linking variable (Student ID) was an open data entry field that showed many inconsistencies within and across years. Thus, all outcomes computed using the student

surveys were first aggregated up to the school level and merged across years. In addition, Year 2 data collection was postponed from Spring 2020 to Fall 2021 due to the COVID-19 pandemic and resulting school closures. The survey was administered to 9th and 12th grade students who were asked to reflect on their experiences during the 2019-2020 school year. The sample did not include students who were in 12th grade in during the 2019-2020 school year due to those students graduating and dropping from the survey sample. While the internal validity threats should balance out between study groups based on the experimental design, it is important to note that many students completed the follow up survey at home and was not necessarily representative of the baseline sample for the study.

Participating districts in Texas provided student enrollment data for the baseline study year. These enrollment data were used to link discipline records for the baseline and follow-up study years. Discipline records only exist for students that received disciplinary actions. All students enrolled at baseline that did not have discipline records were categorized as having zero disciplinary actions at baseline. For Years 1 and 2, respectively, enrolled students at baseline who did not have disciplinary records were still considered enrolled but categorized as having zero disciplinary actions for follow-up years. Additionally, the archival discipline data acquired from the participating districts in Texas did not include referrals to law enforcement. Thus, this component of the research question was not addressed in analysis.

Furthermore, in addition to survey administration challenges, there were additional internal and external factors that present potential limitations within the study. First, as indicated above, while implementation was strong overall, implementation lagged in Year 1 and was more varied in strength relative to Year 2. Given this, Year 1 findings are early indicators of potential treatment effects. Also, while the study design is meant to control for potential differences in

campus-level factors that impact school climate and safety, it is possible that the COVID-19 pandemic and resulting school closure impacts these measures in Year 2. It is possible that students felt less connected and less safe during pandemic times due to circumstances beyond the scope of the current study and intervention.

The officer encounter log data discussed in the data sources above was truncated in Year 2 due to school closures. Only one district was able to submit encounter logs during the baseline, Year 1, and Year 2 data collection periods. Given that the data were both incomplete and intended for descriptive context only, the data was therefore not used as part of the impact study or presented in this report.

Finally, the present study was designed in 2016 and was, at the time, in line with current research and outcomes commonly examined for potential associations with school policing. Since then, research in this area has advanced and new legislation also passed in Texas in 2019. Use of exclusionary discipline (e.g., suspensions, expulsions) is a commonly measured outcome in school policing research and was, in fact, measured in this study. Although an officer may refer a student to school administrators for behaviors with potential to lead to exclusionary discipline, Texas law specifies that it is the administrator's decision whether those behaviors result in exclusionary discipline. In fact, some districts in Texas have policies around certain behaviors that result in automatic placement in a disciplinary alternative education program (DAEP).

Thus, use of exclusionary discipline, while an important metric for monitoring school discipline and even school climate, is an indirect measure of school policing, at best. A more direct alternative is to examine the behaviors that may lead to this type of discipline, wherein the officer has more potential to proactively intervene, ideally working toward more positive

outcomes for students. The TxSSC is currently conducting a content analysis of school districtlaw enforcement agency MOUs across Texas, to identify trends and discrepancies in the assigned duties and expectations for SROs, as no legal standard for these agreements exists. Through this process we will cross-reference commonly assigned duties with outcomes commonly measured in research, to identify outcomes with the most potential to be directly affected by school policing.

Implications for Policy and Practice

Impact and fidelity results reflect the difficulty of establishing new practices in the complex environments of secondary schools. Our experiences in conducting this project, and subsequent results suggest the following implications for policy and practice.

Establish policies for systematic action planning related to school safety and climate that includes representatives of all stakeholders in the school and school community. During debriefing sessions and interviews, one of the most frequently cited benefits of this project was that the framework provided structure, focus, or intentionality for activities that previously had not been done or had been done informally. The framework steps of identifying needs, planning goals and related activities, and monitoring progress through regular data review are likely to lead to more successful school discipline, climate, and safety outcomes if conducted in a systematic, regular way rather than left to chance. As one participant put it, without the project framework component of regular team meetings, they likely would not have followed through on many of the goals they developed.

School policing programs are often formalized through a memorandum of understanding (MOUs) between the school district and the relevant law enforcement agency. However, our experience and research of Texas MOUs indicate that these documents are often focused on

agreement logistics, such as the number of officers contracted, length of term, or cost-sharing, rather than the officer's roles and responsibilities and ultimate goals of the policing program. In interviews and debriefing meetings, many administrators and SROs reported that they were unclear, and had little guidance, about what the SRO should be doing in their day-to-day activities. We recommend that school policing agreements include language that encourages or requires collaborative planning and goal-oriented school policing activities.

Provide training and support. Through our experiences across both years of treatment campus implementation, as well as our work assisting the wait-listed control campuses, we believe additional assistance in implementing this strategic planning framework would benefit schools more than a resource manual alone. To that end, the TxSSC is working to create a selfpaced, online module that guides viewers through the concepts and processes involved in implementing the framework. The online course will be free and available to all our stakeholders, namely K-12 school personnel and school police officers, through the TxSSC website. Additionally, the TxSSC is also incorporating a 4-hour framework training into a larger school-based law enforcement master's course. In this hands-on course, officers will identify a safety need on the campus they serve prior to attending. After an introduction to the concepts and processes involved in the framework, instructors will work with individuals or small groups to create a plan to address those needs. Officers will finish this course with a full plan that they can take back to their campus team to continue refining. At the conclusion of both training options, the TxSSC will emphasize that we are available to assist campuses or districts in any way needed to be successful in implementing the framework (e.g., refining goals, identifying activities to address the goal, creating tracking systems to monitor activities, ensuring campuses have adequate systems and schedules for checking progress toward goals).

Further, another lesson learned through this study is the need for cross-training or awareness training for school personnel on the roles, duties, expectations, and legal and contractual parameters of school police. As of 2019, all school police in Texas are required to complete state-mandated training on topics such as social and emotional learning, de-escalation techniques, and student mental health. However, school personnel do not currently have available training on how to appropriately interact with officers within the parameters listed above. Thus, beyond introducing the framework, the framework training courses also serve to cross-train school personnel on the parameters of officers in school settings.

Provide support for implementation fidelity. Implementation science offers guidance for practices to improve implementation fidelity of new practices. All phases of new initiatives (planning, development, implementation, evaluation) and all components of new initiatives (training and support materials and activities, implementation materials, evaluation, etc.) should include practices designed to increase fidelity. Such practices include self-assessments, external assessments focused on fidelity, self-reporting of fidelity, and action plans tied to fidelity assessments. Furthermore, institutionalizing procedures for setting goals for fidelity, and communicating procedures for monitoring and reporting fidelity can increase implementation fidelity.

Establish policies that encourage communication between school administrators, SROs, and school staff for collaborating about issues and plans related to school safety and climate. This recommendation is consistent with research across school-focused disciplines, including school policing, school administration, school discipline, and school climate and safety. The most common concern expressed during interviews, particularly from SROs, was about lack of communication. Likewise, one of the most common positive aspects of the framework cited

during interviews, campus meetings, and debriefings was that the framework provided structure for regular communication and collaboration. Administrators and SROs alike commented on the value of communication and collaboration and expressed appreciation for strengthening that facet of their work. Institutionalizing a formal structure for communication and collaboration between school administrators and SROs would also facilitate the integration of new SROs to campus, allowing for SROs and administrators to share policies, practices, philosophies, and needs. During our study, we encountered a number of situations where a new SRO was assigned to a campus, and during our interviews, the SRO indicated little or no understanding of the project because the officer apparently had not been oriented to the campus goals, activities, and needs. Personnel changes in schools can disrupt any programs and practices, but that disruption can be mitigated through transition planning that includes establishing procedures for sharing information with new personnel. Systematic attention to planning for personnel changes can also facilitate sustainability of school climate, discipline, and safety initiatives.

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Project Partn	er Responsibilities
The Texas School Safety Center (TSSC)	The TSSC project staff were responsible for
	all intervention components, including
	implementation materials, training, and
	support.
Texas State University (TxState)	The TxState project staff were responsible for
	conducting activities to assess fidelity of
	treatment delivery and treatment
	implementation.
WestEd	WestEd staff were responsible for all impact
	data collection instruments, activities, and
	analyses.

Appendix A. De	escriptions of Project Pε	artner Responsibilities,	Major Project Activities, and
Ti	imelines		

	Major Project Activities
Development	Develop all project training and implementation materials and procedures
	Develop all evaluation instruments and procedures
	Formalize all partnerships with treatment and control districts and schools
Implementation	Conduct all educator and SRO trainings
	Provide implementation support for all treatment campuses
Evaluation	Conduct activities to monitor fidelity of treatment delivery and
	implementation
	Conduct student surveys to measure student perceptions of school safety
	and climate
	Collect discipline data reported by districts to our state education agency
	Collect data related to SRO interactions with students

	Project Timeline
January – July, 2017	Develop and finalize all instruments, obtain IRB approval, finalize
	contracts/MOUs with partner districts
September, 2018 –	All baseline data collection activities
June, 2019	Develop all training and implementation materials
June – August, 2018	Random assignment to treatment and control groups
	Project meetings with all schools
August, 2018 – June,	Conduct implementation activities (treatment year 1)
2019	Conduct all data collection activities (treatment year 2)
August, 2019 – June,	Conduct implementation activities (treatment year 2)
2020	Conduct all data collection activities (treatment year 2)

Appendix B. Deliverables Met for Each Participating Campus

Project Deliverables

Treatment campuses were required to meet the following deliverables during each year of implementation:

- 1. Project liaison and committee selection (June August)
- 2. Initial project planning meeting (June August)
- 3. Goal planning meeting (August September)
- 4. Seven check-in meetings (October May)
- 5. Final project debrief meeting (May June)

A checklist of FY19 and FY20 treatment campus deliverables with dates is listed in the table below. All treatment campuses were expected to attend project planning, goal planning, debrief, and 7 check-in meetings. Missed meetings are noted in red text, while cancelations due to COVID-19 are indicated in purple text.

Legend											
✓ Black check and text	Occurred on time										
✓ Orange check and text	Occurred late										
Red text with no check	Did not occur										
Purple text with no check	Canceled due to COVID-19										

NIJ Treatment Campuses

Campus	Initial Project Planning Meeting	Goal Planning Meeting	October Check-in Meeting	Nov. /Dec. Check-in Meeting	January Check-in Meeting	Februar y Check- in Meeting	March Check-in Meeting	April Check-in Meeting	May Check-in meeting	Debrief Meeting	Initial Project Planning Meeting	Goal Planning Meeting	October Check-in Meeting	Nov. /Dec. Check-in Meeting	January Check-in Meeting	February Check-in Meeting	March Check-in Meeting	April Check-in Meeting	May Check-in meeting	Debrief Meeting
					FY19						FY20									
Expected Dates	Dates Aug. Sep. Oct. Dec. Jan. Feb. March April May June								May- June	June- Aug.	Aug Sep.	Oct.	Nov Dec.	Jan.	Feb.	March	April	May	May- June	
19 (Middle School)	10:00 AM 8/10	10:00 AM 10/19	N/A, they had their goal planning meeting in Oct.	8:30 AM 11/28	11:00 AM 1/28	11:00 AM 2/25	11:00 AM 3/25	9:30 AM 4/22	2:00 PM 5/24	2:30 PM 5/24	11:30 AM 7/31	1:00 PM 09/18	9:00 AM 10/28	10:30 AM 12/6	10:00 AM 1/22	10:00 AM 2/26	Scheduled for 10:00 AM 3/25 CANCELE D	Schedule d for 10:00 AM 4/29 CANCEL ED	Scheduled for 3:45 PM 5/19 CANCELE D	5/19 3:45 PM Virtual
17 (Middle School)	2:00 PM 8/23	9/19 and 1:25 PM 10/19	N/A, they had their 2 nd goal planning meeting in Oct.	12:30 PM 12/11	12:30 PM 1/25	12:30 PM 2/22	12:30 PM 3/14	12:30 PM 4/17	12:30 PM 5/24	2:00 PM 6/5	11:30 AM 7/31	12:30 PM 8/28	12:30 PM 10/23	12:30 PM 11/20	12:30 PM 1/22	12:30 PM 2/19	12:30 PM 3/11	Schedule d for 12:30 PM 4/15 CANCEL ED	Scheduled for 12:30 PM 5/13 CANCELE D	5/13 12:30 PM Virtual
08 (High School)	10:00 AM 8/27	4:30 PM 9/19	4:00 PM 10/24	4:00 PM 11/27	10:00 AM 1/23	10:00 AM 2/20	10:00 AM 3/20	10:00 AM 4/24	10:00 AM 5/15	4:30 PM 5/22	1:00 PM 8/12	4:30 PM 9/18	10:15 AM 10/17	10:15 AM 12/10	10:15 AM 1/16	10:15 AM 2/20	Scheduled for 10:15 AM 3/19 CANCELE D	Schedule d for 10:15 AM 4/16 CANCEL ED	Scheduled for 8:00 AM 5/21 CANCELE D	5/21 8:00 AM Virtual
05 (Middle School)	1:00 PM 8/15	8:00 AM 10/15 and 8:00 AM 11/5	N/A. They had part 1 goal planning meeting in Oct.	8:00 AM 12/3	9:00 AM 1/7	8:15 AM 2/4	8:15 AM 3/4	8:15 AM 4/1	8:15 AM 5/6	9:30 AM 5/29	11:30 AM 8/12	9:30AM 09/17	9:30AM 10/01	9:30AM 11/12	9:30 AM 1/08	9:30 AM 2/04	9:30 AM 3/03	Schedule d for 9:30 AM 4/01 CANCEL ED	Scheduled for 9:30 AM 5/01 CANCELE D	6/02 8:30 AM Virtual

Campus	Initial Project Planning Meeting	Goal Planning Meeting	October Check-in Meeting	Nov. /Dec. Check-in Meeting	January Check-in Meeting	Februar y Check- in Meeting	March Check-in Meeting	April Check-in Meeting	May Check-in meeting	Debrief Meeting	Initial Project Planning Meeting	Goal Planning Meeting	October Check-in Meeting	Nov. /Dec. Check-in Meeting	January Check-in Meeting	February Check-in Meeting	March Check-in Meeting	April Check-in Meeting	May Check-in meeting	Debrief Meeting
07 (High School)	8:00 AM 8/27	8:00 AM 9/17 and 8:00 AM 9/26	8:00 AM 10/24	1:45 PM 11/28	8:00 AM 1/30	8:00 AM 2/27	8:00 AM 3/27	8:00 AM 4/24	8:00 AM 5/29	8:30 AM 6/3	3:00 PM 8/6	8:00 AM 9/18	8:00 AM 10/23	8:00 AM 11/20	8:00 AM 1/15	8:00 AM 2/19	Scheduled for 8:00 AM 3/18 CANCELE D	Schedule d for 8:00 AM 4/15 CANCEL ED	Scheduled for 8:00 AM 5/20 CANCELE D	5/20 8:00 AM Virtual
11 (High School)	1:00 PM 8/16	9/19 and 8:00 AM 10/9	N/A, they had their 2 nd goal planning meeting in Oct.	3:00 PM 12/11	2:00 PM 1/30	2:00 PM 2/27	2:00 PM 3/27	Initially schedule d for 2:00 PM 4/24 *Cancell ed 1:30 PM 5/2	2:00 PM 5/22	2:30 PM 5/22	12:00 PM 8/8	8:15 AM 9/20	8:15 AM 10/18	8:15 AM 11/15	8:15 AM 1/24	8:15 AM 2/21	Scheduled for 8:15 AM 3/27 CANCELE D	Schedule d for 8:15 AM 4/17 CANCEL ED	Scheduled for 8:15 AM 5/22 CANCELE D	5/22 3:00 PM Virtual
09, 10 (both Middle <u>Schools</u> (2:00 PM 8/17	10/10	N/A, they had their goal planning meeting in Oct.	N/A, not schedule d	3:00 PM 1/23	3:15 PM 2/22	3:00 PM 3/27	Initially schedule d for 3:00 PM 4/24 *Cancell ed 3:30 PM 5/2	9:00 AM 6/5	9:00 AM 6/5	12:00 PM 8/8	9:30AM 09/17	8:30 AM 10/16	9:15 AM 11/13 At DSMS 9:10 AM 11/15 At SSMS	9:15 AM 1/21 At DSMS 9:10 AM 1/22 At SSMS	9:15 AM 2/12 At DSMS 9:15 AM 2/13 At SSMS	9:15 AM 3/11 At DSMS 9:15 AM 3/4 At SSMS	Schedule d for 9:15 AM 4/15 At DSMS Schedule d for 9:15 AM 4/6 At SSMS CANCEL ED	Scheduled for 9:15 AM 5/6 At DSMS Scheduled for 9:15 AM 5/7 At SSMS CANCELE D	6/4 10:00 AM 3:00 PM Virtual

Campus	Initial Project Planning Meeting	Goal Planning Meeting	October Check-in Meeting	Nov. /Dec. Check-in Meeting	January Check-in Meeting	Februar y Check- in Meeting	March Check-in Meeting	April Check-in Meeting	May Check-in meeting	Debrief Meeting	Initial Project Planning Meeting	Goal Planning Meeting	October Check-in Meeting	Nov. /Dec. Check-in Meeting	January Check-in Meeting	February Check-in Meeting	March Check-in Meeting	April Check-in Meeting	May Check-in meeting	Debrief Meeting
23 (Middle School)	2:00 PM 8/9	4:00 PM 9/20	Initially schedule d for 10/17 but was resched uled for Nov. 9:00 AM 11/2	9:20 AM 12/11	9:20 AM 1/22	9:20 AM 2/25	9:20 AM 3/26	9:20 AM 4/23	9:20 AM 5/28	11:00 AM 6/3	11:30 AM 8/13	9:20 AM 09/20	9:20 AM 10/01	9:20 AM 11/5	9:20 AM 1/7	9:20 AM 2/10	9:20 AM 3/3	Schedule d for 9:20 AM 4/7 CANCEL ED	Scheduled for 9:20 AM 5/5 CANCELE D	5/26 2:30 PM Virtual
20 (Middle School)	9:30 AM 8/20	10/18 Goals establish ed via phone	N/A, not schedule d	8:00 AM 12/20	8:00 AM 1/14	8:00 AM 2/11	8:00 AM 3/4	8:30 AM 4/1	8:30 AM 5/1	9:00 AM 5/1	12:00 PM 8/9	12:00 PM 9/16	9:00 AM 10/15	9:00 AM 11/19	10:00 AM 1/14	10:00 AM 2/13	10:00 AM 3/10	Schedule d for 9:00 AM 4/15 CANCEL ED	Scheduled for 9:00 AM 5/18 CANCELE D	5/18 9:00 AM Virtual
28 (Middle School)	9:00 AM 8/17 and 1:45 PM 11/12	4:00 PM 9/25 and 11/29	N/A they had not set their goals.	N/A they had not set their goals.	3:45 PM 1/17	3:45 PM 2/21	3:45 PM 3/25	3:45 PM 4/22	3:45 PM 5/20	3:45 PM 6/3	8:00 AM 8/5	3:15 PM 9/16	1:30 PM 10/30	1:30 PM 11/21	1:30 PM 1/30	1:30 PM 2/26	Scheduled for 1:30 PM 3/30 CANCELE D	Schedule d for 1:30 PM 4/29 CANCEL ED	Scheduled for 1:30 PM 5/8 CANCELE D	5/19 11:00 AM Virtual
24 (High School)	2:00 PM 9/21	4:00 PM 11/28 and 2:30 PM 12/19	N/A, they had not yet set their goals	N/A, they had not yet set their goals	Initially schedule d for 3:00 PM 1/30 *Cancell ed	9:00 AM 2/12	3:00 PM 3/12	3:00 PM 4/9	3:00 PM 5/14	2:30 PM 5/30	11:30 AM 8/13	3:15 PM 9/17	3:15 PM 10/10	3:15 PM 11/12	3:15 PM 1/14	3:15 PM 2/11	3:15 PM 3/10	Schedule d for 3:15 PM 4/14 CANCEL ED	Scheduled for 3:15 PM 5/12 CANCELE D	5/18 2:00 PM Virtual
06 (High School)	10:00 AM 8/16	4:00 PM 10/3 and 4:15 PM 10/22	N/A, they had part 2 goal planning meeting in Oct.	4:15 PM 11/26	4:15 PM 1/22	4:15 PM 2/26	4:15 PM 3/19	4:15 PM 4/30	4:15 PM 5/13	10:00A M 6/4	11:30 AM 8/13	3:15 PM 9/17	3:15 PM 10/10	3:15 PM 11/12	3:15 PM 1/14	3:15 PM 2/11	3:15 PM 3/10	Schedule d for 3:15 PM 4/14 CANCEL ED	Scheduled for 3:15 PM 5/12 CANCELE D	5/18 2:00 PM Virtual

Appendix C. Sources of Fidelity Data

			Delive	ery of Treatment	ţ		
Data Source	Bas	seline	Treatm	ent Year 1	Treat	ment Year 2	Notes
	Frequency	Fidelity Data	Frequency	Fidelity Data	Frequency	Fidelity Data	
School Resource Officer training	N/A	N/A	Multiple training sessions for SROs throughout Texas	Observation of one training session	N/A	N/A	The majority of SROs assigned to project schools received their required training in Year 1
Educator training	N/A	N/A	Once per year for each campus	Observations of a sample of training sessions 25%	Once per year for each campus	N/	Educator trainings in Year 1 were delivered in person at each campus. These trainings in Year 2 were delivered via online modules, which educators completed independently.
Goal-planning meetings	N/A	N/A	Once per year for each campus	6	Once per year for each campus	7	
Check-in meetings	N/A	N/A	Monthly	11	Monthly	3	As campuses began holding safety team meetings more regularly in Year 2, and with the standardization of the check-in procedure, it was not necessary to continue to attend

			these meetings in Year
			2.

	Implementation of Framework													
Data Source	Bas	seline	Treatm	ent Year 1	Treati	nent Year 2	Notes							
	Frequency	Fidelity Data	Frequency	Fidelity Data	Frequency	Fidelity Data								
Campus safety team meetings	N/A	N/A	Intended to occur monthly	6	Intended to occur monthly	25	Some schools, particularly in Year 1, did not hold meetings, held them virtually through internal online platforms, did not communicate with the TxState team regarding meeting schedules, and/or changed meeting times and did not alert the TxState team							
Campus administrator interviews	Once per year	22	Once per year	23	Once per year	24								
Campus SRO interviews	Once per year	21	Once per year	24	Once per year	21								
Debriefing meetings	N/A	N/A	Once per year	7	Once per year	12								

Appendix D. Educator Training Module Completion

Training Module Completion

Treatment campuses were expected meet a training completion threshold of 50%. All treatment campuses met the 50% threshold during year one and year two.

	FY19 Treatment Campus Module Completion													
Status	19 (MS)	17 (MS)	08 (HS)	05 (MS)	07 (HS)	11 (HS)	09 (MS)	10 (MS)	23 (MS)	20 (MS)	28 (MS)	24 (HS)	06 (HS)	Total
Completed	62	69	194	77	95	96	54	49	75	94	78	138	141	1222
Did Not Complete	23	0	18	0	25	33	27	22	32	14	0	116	34	344
Total Staff	85	69	212	77	120	129	81	71	107	108	78	254	175	1566
% complete	72.94%	100.00%	91.51%	100.00%	79.17%	74.42%	66.67%	69.01%	70.09%	87.04%	100.00%	54.33%	80.57%	78.03%
					FY20 Tre	atment Ca	impus Mo	dule Com	pletion					
Status	19 (MS)	17 (MS)	08 (HS)	(05) MS	07 (HS)	11 (HS)	09 (MS)	10 (MS)	23 (MS)	20 (MS)	28 (MS)	24 (HS)	06 (HS)	Total
Completed	62	58	221	61	114	112	55	64	57	92	78	135	136	1245
Did Not Complete	17	11	24	28	7	33	2	5	16	3	13	63	57	279
Total Staff	79	69	245	89	121	145	57	69	73	95	91	198	193	1524
% complete	78.48%	84.06%	90.20%	68.54%	94.21%	77.24%	96.49%	92.75%	78.08%	96.84%	85.71%	68.18%	70.47%	81.69%

Treatment (n = Comparison (n = Total (n = 10,707) 5,671) 5,036) Meas SD SD Standard n n Meas n Raw Pool Differe ed ized ure ure SD Differen nce ce Grade 6 5,5 0.37 0.4 4,9 0.42 0.4 10,5 -0.05 0.48 -0.09 60 83 93 56 8 96 10,5 Grade 7 5,5 0.00 0.0 4,9 0.00 0.0 0.00 0.03 -0.02 60 30 96 40 56 5 Grade 8 5,5 0.00 0.0 4,9 0.00 0.0 10,5 0.00 0.03 0.03 60 42 96 28 56 6 Grade 9 5,5 0.4 4,9 0.28 0.4 10,5 0.03 0.45 0.07 0.31 60 56 8 64 96 51 10,5 0.45 Garde 10 5,5 0.30 0.4 4,9 0.27 0.4 0.03 0.07 44 56 2 60 59 96 Grade 11 5,5 0.01 0.0 4,9 0.02 0.1 10,5 -0.02 0.11 -0.13 83 47 56 9 60 96 Grade 12 0.0 4,9 0.00 10,5 0.00 0.04 -0.04 5,5 0.00 0.0 60 38 96 58 56 9 Grade - Other 5,5 0.00 0.0 4,9 0.00 0.0 10,5 0.00 0.02 0.00 9 60 30 96 28 56 Grade -5,5 0.0 4,9 0.00 0.0 10,5 0.00 0.02 0.00 0.00 Ungraded 56 9 60 30 96 28 Female 5,4 0.5 10,2 0.50 0.5 4,8 0.51 -0.01 0.50 -0.02 04 00 92 00 96 0 Attended Same 4,4 0.69 0.4 4,7 0.70 0.4 9,17 -0.01 0.45 -0.02 School Last Year 4 9 23 61 51 56 10,4 0.49 Hispanic 5,4 0.47 0.4 4,9 0.56 0.4 -0.09 -0.19 97 99 96 30 8 33 NH - AIAN 5,4 0.01 0.0 4,9 0.01 0.1 10,4 0.00 0.09 -0.01 97 94 33 00 30 7 NH - Asian 5,4 0.02 0.1 4,9 0.01 0.1 10,4 0.00 0.11 0.04 97 30 5 24 33 04 NH - Black 4,9 0.02 10,4 0.14 0.00 5,4 0.02 0.1 0.1 0.00 97 43 44 30 4 33 NH - NHPI 5,4 0.00 0.0 4,9 0.00 0.0 10,4 0.00 0.05 -0.03 97 30 5 47 33 62 0.47 NH - White 5,4 0.4 4,9 0.32 0.4 10,4 0.08 0.17 0.40 9 97 91 33 68 30

Appendix E. Baseline Equivalency Table

NH - Multiracial	5,4 97	0.08	0.2 72	4,9 33	0.07	0.2 54	10,4 30	0.01	0.26 3	0.04
Grades - Above Average	5,5 14	0.65	0.4 78	4,9 55	0.61	0.4 87	10,4 69	0.03	0.48 3	0.07
Grades - About Average	5,5 14	0.30	0.4 58	4,9 55	0.32	0.4 67	10,4 69	-0.02	0.46 3	-0.05
Grades - Below Average	5,5 14	0.05	0.2 26	4,9 55	0.07	0.2 47	10,4 69	-0.01	0.23 7	-0.05
Bullying and Victimization	5,5 19	1.57	0.6 82	4,9 66	1.54	0.6 61	10,4 85	0.03	0.67 2	0.04
Deliquency	5,5 05	1.19	0.3 92	4,9 49	1.19	0.4 08	10,4 54	0.01	0.40 0	0.01
Adult-student Relationships	5,4 53	3.06	0.7 80	4,8 91	3.01	0.7 91	10,3 44	0.05	0.78 6	0.06
Rule Clarity	5,4 35	2.79	0.7 17	4,8 76	2.79	0.7 33	10,3 11	0.01	0.72 5	0.01
School Bonding	5,4 43	3.42	0.8 13	4,8 61	3.40	0.8 12	10,3 04	0.02	0.81 2	0.02
Connectedness and Safety	5,4 57	3.32	0.6 67	4,8 75	3.30	0.6 86	10,3 32	0.02	0.67 7	0.03
SRO Perceptions	5,3 61	3.39	1.1 24	4,7 67	3.32	1.1 36	10,1 28	0.07	1.13 0	0.06

Appendix F. Individual School Ratings of Implementation Fidelity

School	Middle School	Year 1	Year 2	Change		
Code	or High School					
05	Middle School	Strong	Moderate	\checkmark		
06	High School	Strong	Moderate	\checkmark		
07	High School	Strong	Strong	No change		
08	High School	Moderate	Strong	\uparrow		
09	Middle School	Moderate	Moderate	No ohongo		
10	Middle School	Widderate	Moderate	No change		
11	High School	Strong	Strong	No change		
17	Middle School	Moderate	Strong	\uparrow		
18	Middle School	Moderate	Moderate	No change		
19	Middle School	Limited	Moderate	\uparrow		
20	Middle School	Strong	Strong	No change		
23	Middle School	Moderate	Moderate	No change		
24	High School	Limited	Strong	\uparrow		

Implementation Fidelity in Treatment Schools Across Years

Indicators of Treatment in Control Schools Across Years

School Code	Middle School or	Baseline	Year 1	Year 2
0.4	High School	-		-
01	Middle School	Low	Moderate	Low
02	Middle School	Low	Low	Low
03	Middle School	N/A	Low	Low
04	Middle School	N/A	Low	Low
12	Middle School	Low	Moderate	Moderate
13	Middle School	Low	Low	Low
14	Middle School	Low	Moderate	Low
15	High School	Low	Low	Low
16	High School	Low	Low	Low
21	High School	Moderate	Low	Low
22	Middle School	Moderate	Low	Low
25	High School	Low	Low	Low