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School and Family Engagement – Trauma Informed (SAFE-TI)
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School and Family Engagement – Trauma Informed: A Research Project to Examine What Keeps Schools Safe.

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Purpose

While individual and group-based clinical interventions for addressing childhood trauma have been researched in mental health services and in some school settings, information is lacking on the implementation of a comprehensive, multi-tiered, trauma-informed approach in schools, including its impact on discipline, recidivism, attendance, and academic achievement. Our *School and Family Engagement—Trauma-Informed* (SAFE-TI; pronounced "SAFE-tee-eye") project has served as one of the first such projects of its kind in the United States. The SAFE-TI team implemented, evaluated, and will disseminate the findings of a project built on multi-agency collaboration and a Randomized Controlled Trial of multi-tiered, trauma-informed, evidence-based practices in one high school, two middle schools, and eight elementary schools in Bozeman, Montana. While initially conceived as evaluation in a specific local context, we believe that many useful lessons have been learned; our goal now is simple and clear: to further the national understanding of what works to make schools safer, to answer the question, "What are the impacts of a multi-tiered, trauma-informed intervention strategy on key indicators of school safety?

SAFE-TI brought together the combined expertise of the University of Montana (UM) Montana Safe Schools Center (MSSC), the National Native Children's Trauma Center (NNCTC), and Montana's Bozeman School District #7 (BSD7). MSSC and NNCTC have had decades of combined experience implementing grants and designing research studies on the subjects of youth trauma and school safety, and BSD7 was an optimal district for the implementation of such a project. The district is nationally representative in size (6,219 students in 2013-2014) as well as in its students' reported levels of risk-

taking and victimization. BSD7 also has a stable school structure and a history of sound grant and fiscal management. Existing partnerships between the district, community agencies, and juvenile justice allowed for minimal startup times on this project and provided the conditions for clear pre- and post-intervention impact documentation and evaluation analysis.

Program

A package of six varied interventions was selected to be integrated along a continuum of care in BSD7. The interventions, as indicated by the research base for each, had the clear potential to impact discipline, truancy, recidivism, aggression, risk-taking, and suicidal ideation or attempts. The SAFE-TI package furthermore had the unique capacity to counteract the national norm of fragmented service delivery within multiple levels of school and community student supports. Our intervention package was intended to be implemented and evaluated across an integrated, multi-tiered, trauma-informed system of care and its impacts on school safety to be determined. The package employed the widely accepted public health model of universal, selective, and indicated interventions (Gordon, 1983) and an expanded framework of this model proposed by the Institute of Medicine (1994) that includes a prevention, treatment, and maintenance continuum of care for behavioral health that is equally applicable for youth at risk.

Universal interventions. *Trauma-Informed Positive Behavior Intervention Supports (TI-PBIS)* is a comprehensive systems approach to behavior management designed to promote the development of social, emotional, and behavioral skills (Solomon, Klein, Hintze, Cressey, & Peller, 2012). Over the previous seven years NNCTC had successfully incorporated information on trauma into PBIS trainings and used this adapted form of PBIS in educational settings. Sugai et al. (2000) report that PBIS produces reductions in misbehavior, office discipline referrals (ODRs), and restraint and seclusion ("time out rooms"), and that it improves school climate. Implementation of TI-PBIS was expected to a) increase BSD7's capacity to initiate trauma-informed disciplinary procedures, b) make terminology consistent across the continuum of care, and c) enhance the ability of school employees at all grade and staffing

levels to make referrals to SAFE-TI's Tier 2 (Selective) and Tier 3 (Indicated) interventions. The infusion of TI-PBIS principles was highly complementary to PBIS-based work BSD7 had already undertaken in collaboration with the Montana Office of Public Instruction's Montana Behavioral Initiative, as described below.

The *Think Trauma Training for Juvenile Justice* is a 4-6 module, evidence-informed training, created by the National Child Traumatic Stress Network (NCTSN) with contributions from the UM team, that guides juvenile justice staff toward the creation of a trauma-informed juvenile justice system. Creating such a system is a process that requires not only knowledge acquisition and behavioral change but also cultural and organizational paradigm shifts and, in some cases, policy and procedural change at every level of the system (Marrow, 2014). The Think Trauma training, like TI-PBIS, was expected to create a common understanding of the SAFE-TI project across school and staffing levels, enhance the referral procedures, and provide important knowledge about clinical outcomes to School Resource Officers (SROs), and Youth Court and CFSD staff members.

Selective interventions. *Cognitive Behavioral Intervention for Trauma in Schools (CBITS)* is an evidence-based, in-school group treatment program for middle and high school students (Jaycox, 2004, 2018). It is 10 sessions long and includes both individual and family sessions in addition to peer-to-peer work. In a randomized controlled study children in the CBITS intervention group showed a significant reduction in symptoms of PTSD and depression (Stein et al., 2003), and UM's NNCTC has replicated and adapted CBITS successfully with American Indian youth in Montana (Morsette et al., 2009; Morsette, van den Pol, Schuldberg, Swaney, & Stolle, 2012). CBITS was delivered by Student Assistance Specialists (SAS) in BSD7.

Indicated Interventions. *Attachment, Self-Regulation, and Competency (ARC)* is a components-based framework to address traumatic stress in children and adolescents (Blaustein & Kinniburgh, 2010). ARC was to be utilized with the children deemed most at risk of trauma-influenced difficulties, along with their families, provided consent is obtained. The CSCT (Comprehensive School and Community Treatment) teams was expected to work collaboratively with the SAS to deliver this intervention.

Treatment As Usual (TAU) in BSD7. The above interventions were tested relative to "Treatment as Usual" (TAU; a term generally applied in clinical trials) in BSD7. Although TAU in BSD7 involved a multi-tiered approach to mental health services, none of the tiers contained trauma-informed assessments or interventions. TAU in BSD7 was the product of collaboration with the Office of Public Instruction's Montana Behavioral Initiative (MBI) and its Multi-Tiered System of Supports (MTSS) program, which BSD7 uses to identify at-risk students. Tier 1 (Universal level) of the MTSS program involves implementing counseling standards that focus on academic, career, and personal/social development. At the Tier 2 (Selective) level, interventions and supports align with the specific personal wellness and mental health needs of smaller groups of students. Shared needs, including social adjustment, peer relations, and relations with adults, are addressed through "student assistance programs," which may include counseling services, positive behavior support plans, and/or community partnerships with nonprofit organizations such as Thrive, a strong partner organization of BSD7. At the Tier 3 (Indicated) level, supports become more intensive. These supports are implemented (as in districts throughout the state) under Montana's Comprehensive School and Community Treatment (CSCT) program, which allows districts to contract with community mental health agencies to place licensed mental health providers in schools. BSD7 contracts with Altacare, Montana's largest provider of in-school mental health services. Children and families access the program after families give permission and participate in an evaluation and intake process; these services are billed through Medicaid, private insurance, or on a scaled-fee basis.

People receiving SAFE-TI intervention components

School Resource Officers, Youth Court Services (Probation) Officers, and all of the SAFE-TI staff (Specialists, Project Director, and Data Analyst) received the Think Trauma Training. Referrals to specific SAFE-TI services were made through each school's MTSS (Multi-tiered Systems of Support) process, which looked at the ABCs (Attendance, Behavior, and Course progress) of students. Parents were also given the opportunity to communicate to

school staff during the All In One Form (enrollment form online which was ideally updated annually), through a question as to whether their child had experienced a significant life event which might get in the way of the child being ready/able to learn. We received many referrals through this self-identification. Teachers and staff could also always refer a student (again preferably though the MTSS process) if it came to their attention that a student had experienced a significant life event, even if they were not exhibiting difficulties in the "ABCs." In addition, after the first two years we had a significant number of self-referrals, particularly at the high school, when the program became known among students and staff.

We used the Traumatic Events Symptom Inventory (TESI; Ribbe, 1996) with all students referred. If it was known they had experienced even one event on the TESI they were given the Child Post Traumatic Stress Symptom scale (CPSS; Foa et al., 2001). A student needed to score at least 4 on the CPSS to begin receiving supports through the program. The score on the CPSS also gave us an indication of what type of group/support would be most helpful.

For 199 students receiving services, the mean score on the TESI was 9.53 (SD=4.2) and the mean score on the initial (referral) CPSS was 6.83 (SD=4.2), indicating substantial levels of exposure to potentially traumatic events, and of child traumatic stress symptoms, in the referred students receiving Tier 2 services.

Program implementation

As mentioned previously, BSD7 has 11 schools which include one high school, two middle schools, and eight elementary schools. Splitting the one high school for purposes of randomization was challenging, but the research team decided the school would be divided into A-K and L-Z groups based on student last name, since administrators, deans, and counselors were split alphabetically as well. With two middle schools it was clear that one would continue to receive TAU and the other would immediately receive the package of interventions. Of the eight elementary schools, four are large and four are small.

The research team agreed on which four large schools to pair and which of the small schools to pair based on comparing factors such as socio-economic, minority status, and the number of behavioral assessments, infractions, and absences. Once pairing was accomplished the team literally flipped a coin to determine which group and which school in each pair would begin receiving the package first. At the end of the three-month delay (or somewhat longer), the other group of schools began receiving the package of interventions; all schools received services at this point. See Figure 1.

Hypotheses

There are four main research questions, three of which correspond to quantitative hypotheses and one of which guided the qualitative study. The quantitative hypotheses are as follows: H1) immediate availability and referral to appropriate trauma-informed services and care is expected to result in improvements in students' school safety related or risk indices; H2) a 3-month delay is expected to result in smaller intervention effects and different overall student responses to the intervention; and H3) students in the immediate intervention group were expected to have better outcomes on the school safety related or risk indices at follow-up. The qualitative research question, Q4, asks what impact SAFE-TI has on the day-to-day functioning and practices of the schools and their staff, as well as on associated agencies.

Testing Hypothesis 1.

Because of complicated issues regarding detection of effects in our data, we initially were concerned with whether any treatment effect could be detected. Thus, we initially tested H_1, in a single analysis for each index. This was done prior to the testing of H_2 and H_3, which relate to differing effects in the delayed intervention group compared to the immediate group. We would test the second two hypotheses if any H_1 effects were detected. H_1 tests whether there are significant differences for Behavior and Absences (and evaluates the magnitude of any effects) between the immediate and delayed conditions across elementary and middle schools; see below regarding the high school. Because no significant effects were found for H1, we did not go on to the second two hypotheses.

Additional quasi-experimental analyses are ongoing on 1) the high school and 2) elementary middle and high school students who were referred to SAFE-TI interventions, including those not receiving services (for a variety of reasons) and students who received safety SAFE-TI services, a non-equivalent control group approach. Analyses were also conducted on a small group of students receiving SAFE-TI services examining pre-post levels of Child Traumatic Stress symptoms.

Design

The components of the evaluation are encompassed in the framework of an Embedded Mixed Methods Design (Creswell & Creswell, 2017). This design guided the qualitative and quantitative work, and the integrative framework is being implemented in organizing the findings for in-depth presentation to BSD7 and for dissemination.

Quantitative Evaluation

A Randomized Clinical Trial design was conducted for the elementary and middle schools, and a strategy was developed for quasi-experimental examination of data from the high school, where randomization on the basis of dividing the building was not feasible. As noted, randomization was conducted at the level of the building, with matching occurring in the elementary schools.

Qualitative Evaluation

The qualitative portion of the SAFE-TI study utilized methodological procedures for an instrumental case study focusing on a single issue within a bounded case (Creswell & Poth, 2018; Stake, 1995). The SAFE-TI project met these criteria in that the project involved was a single issue with clear bounds in space (BSD7) and time (Fall 2015-Spring 2019). Stake (2006) notes the importance of additionally understanding the context of a case, including related components inside and outside of the case, following Stake, provides a visual representation, including internal and external components; see Figure 2.

Methods

Quantitative Measures

The original proposal was for the student outcome Independent Variable to be based on students' data on the Montana Dropout Risk index from the Early Warning System (EWS) developed by the Montana Office of Public Instruction. Due to difficulties involving the implementation and availability of this index, we instead used index components based on behavior as well as attendance, and (analyses in progress) test scores. The Attendance and Behavior Indices comprise the outcome school safety-related or risk indices discussed here.

Behavior

The safety-related Behavior index summarize a student's school-safety related problem behaviors (infractions) per time period. Relevant behaviors recorded in the district's record system comprised 21 possible behaviors, including assault, drug-related behavior, possessing a weapon, and bullying. The index constructed consists of the sum of the number of these behaviors occurring in a given time slice, divided by the number of days the student was enrolled in that slice, multiplied by 100 (for ease of visualization).

The following specific behaviors or infractions were counted: Disregard for safety, Abusive behavior, Fighting, Assault, Firearm, Explosives, Weapons, Influence of alcohol or drugs, Possession of alcohol or drugs, Alcohol or Drugs transactions, Alcohol or Drugs (other), Paraphernalia, Arson, Vandalism, Stealing, Robbery or Extortion, Receiving stolen property, False emergency alarm, Hostile environment, Sexual harassment, and Bullying. The units are Behaviors per 100 days. For the first three months before the SAFE-TI program rolled out in the Immediate schools, the mean score on the Behavior measure was 0.23, or approximately .04 Undesirable behavior per (risk-group) student per month; the score ranged from 0 to a maximum of 47 (or about one infraction every other day).

Absences

Both positive (e.g., "College Visit") and negative ("Unexcused") absences are noted. The attendance (or Absences) index is based on the sum of six types of these negative absences, which included Unexcused and Excused Absences, Alternative to Expulsion, Expulsion Homebound, and Suspended. The units are related to the proportion of days absent, and in the new analyses reported here are Absences per 100 student-days. For the first three months before the SAFE-TI program rolled out in the Immediate schools, the mean score on the Absences measure was 5.5, or approximately 1 negative absence per 18 school days (about one month) for each student in the sub-population being analyzed.

Subsample for Hypothesis tests

Several factors went into the construction of an at-risk sub -group. One might think that the ideal subgroup for testing hypotheses would be students in need of the services, or indeed students that received Tier 1 or Tier 2 services from SAFE-TI. However, the three-tiered SAFE-TI intervention program includes Universal interventions, and the program is aimed at the building and the District as a whole. Nevertheless, particularly in the earlier phases of implementation, we did not expect the effect of the program to be visible across the entire school population. If we were to test the building-level effects of the SAFE-TI intervention over all elementary, middle, and high-school students, this would likely obscure any effects of the intervention, due to a large number of students experiencing low levels of difficulty and only minimally exposed to (and possibly benefitting from) SAFE-TI.

For this reason, the hypothesis tests were conducted for a sub-group of students. We settled on the strategy of constructing a hypothetical risk group on the basis of a number of factors, after experimenting with several methods and with assistance from our consultants in the UM Math-Statistics CORE. We used factors such as homelessness, free and reduced lunch, having an IEP, child abuse reports, as well as threshold non-zero values on the two Dependent Variables (Absences and relevant behavioral infractions) measured before the program was implemented, prior to the first immediate group intervention. The

selected participants represent a hypothetical or potential risk group of students ($n = 3241$) thought most likely to benefit from the effects of the program.

Procedures

Extensive data cleaning, organization, collating, and the computation of indices for safety-related behavior and absences was completed for the year before the study began (Year 1 or baseline, 2014-2015); the primary years of the study in the RCT (2015–16 and 2016–17), as well as the additional years 4 and 5 (2017-18 and 2018-19). The approach of maintaining the level of analysis at the building level was solidified, and well-defined student potential "at-risk days" were computed for all participants included in the statistical analyses[1].

Focus group interviews with school staff including teachers, school counselors, and school psychologists were conducted during this period, and analysis of the resulting transcripts was integrated with the ongoing analysis of prior data sets. Following Stake's (1995) methodology outlining the key phases of case study analysis, the qualitative team consolidated data categories and prioritized findings that could be triangulated across grade groupings (elementary, middle, and high schools) and study participant type (SAFE-TI staff, district administrators, school administrators, School Resource Officers, teachers, school counselors, and school psychologists). (This project did not have approval to interact with students directly.)

Seven sub-questions in turn provided the basic structure for interview guides: 1) What is the level of knowledge about trauma and its impact on youth? 2) How has the response to student needs been influenced? 3) What does the referral process look like within SAFE-TI? 4) What are the system-level responses to SAFE-TI? 5) What barriers or facilitating factors affected implementation? 6) What support has SAFE-TI received from stakeholders? 7) What is the relationship among partners? While each interview guide addressed all seven sub-questions, the formulation of questions differed depending on the

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[1] Potential caveats regarding the difficulties of determining when students who drop out, enroll late, re-enroll, or move within the district will be discussed in a manuscript being prepared.

interview subject's position within the district/school and corresponding perspective relative to SAFE-TI and the students served by the project.

Analyses

The data analytic strategy for the hypothesis testing was decided on very deliberately; we did not want to fall prey to repeated tests and potential "fishing." The University of Montana's Department of Mathematical Sciences Statistics and Applied Math CORE assisted in and conducted the data analyses for the hypothesis tests. We also grappled with issues of variability (seasonal and other) in the data, differences among types of schools and among pairs, issues involving missing or patchy data, and other factors. We are continuing to work with both seasonal variation and differences among the Immediate and Delayed schools in levels of the two Independent Variables.

A key design issue that was evident from the start concerned the question of how much "lag" to expect before possible effects of the SAFE-TI program might emerge (delayed effects). A procedure was developed by the Math CORE for determining an "optimal" lag time for the data analyses, using a randomly selected half of the sample. This resulted in the choice of a lag value of approximately one month (one time slice). This selected lag value was then used for the hypothesis tests, conducted on the other half of the sample. Thus, attention was initially focused on Tranche 16 (January 27-February 18, 2016), the tranche starting approximately 8 weeks after the Immediate group rollout had begun.

For the qualitative work, transcripts were reviewed for accuracy, edited, and uploaded to the qualitative and mixed-methods software program NVIVO 12 Plus (QSR International, 2018). Data analysis, including numerous levels and phases of coding, was also conducted using this software. This analysis followed the phases suggested by Stake (1995) and included 1) categorical aggregation or direct interpretation and 2) the development of correspondence and patterns. Thirteen initial categories emerged. These categories were determined by the purpose of the case study, the primary research question, and the seven sub-questions, and were as follows: 1) Barriers to SAFE-TI's success, 2) Change brought about by SAFE-TI, 3) Context of the project, 4) Data procedures utilized by the project staff, 5) Factors facilitating

SAFE-TI's success, 6) Lessons learned, 7) Partnerships with external agencies, 8) Project description, 9) Referral process, 10) Staff training, 11) Stories related to the project, 12) Support or buy-in by stakeholders, and 13) Sustainability issues. Individual passages from interview transcripts were in many cases coded multiple times as potentially informing an understanding of multiple categories. As a result, the 13 categories were linked to 1373 specific instances of those categories. Iteration of the data arrangement refined the categories to six: 1) Change in Individual's Approach to Job, 2) School Level Change, 3) Student Level Change, 4) Barriers/Complications, 5) Facilitating Factors, and 6) Stakeholder Support for SAFE-TI.

Results and findings

Initial Quantitative results:

Initial experimental results focusing on differences in Tranche 16 for Hypothesis 1 (test for a significant effect for immediate vs. delayed building status) indicated a significant and positive effect for immediate implementation of SAFE-TI among schools for a preliminary measure of Absences; $F(1, 1432) = 8.46$, $p < 0.0005$. The Effect size (analogous to Cohen's D) was 0.14, a "Small" effect (Kirk, 1996). The immediate vs. delayed building difference was *not* significant for Behavior, and in the opposite direction; $F(1, 1432) = .95$, $p = 0.33$. While there were *caveats* regarding these findings and we continued to resolve potential threats to the validity of the experiment, they appeared to indicate a significant positive effect for the SAFE-TI program in decreasing absences.

Corrected results:

However, while we believe that the focus on Tranche 16 was appropriate in the context of detecting the time-lag of possible intervention effects, we realized that the hypothesis tests (notably for Attendance) did not take into account differences between the Immediate and Delayed groups in general and prior to the program, nor potential differences in levels across the intermediate and the delayed school in each pair.

For this reason, we revisited the analyses of the Absences variable, and we are preparing to do so for the Behavior variable; we conducted a new Absence analysis using corrected absence scores as described above. This was done by looking at the levels of absences in the Immediate and Delayed schools in each pair, this time adjusting the Tranche 16 Absence scores on the basis of the previous year's absences for the same Tranche. Thus, Tranche 16 scores were corrected by subtracting each school's mean Tranche 6 (corresponding year 1) absence score from the students' Tranche 16 scores.

When this was done, the effects observed earlier for Absences sadly disappeared. The treatment effect was non-significant (F [1,1762] = 1.47, p =0.23). Only two pair differences were in the correct direction; to interpret the magnitude of differences, the largest difference was 3 points for one pair, and this corresponds to a mean difference between the two schools of approximately one day of absence per 33 school days (about half a day of absence per month. This school pair is being examined further.

Qualitative findings

The qualitative researchers found a clear consensus among study participants that SAFE-TI brought about change in each BSD7 school during the project period. Specifically, participant accounts converged in suggesting that implementation of SAFE-TI led to significant positive changes in the following areas: the approach of many school administrators' and school staff members' to their jobs; the nature and functioning of the systems that were already in place for supporting students; the availability of meaningful adult relationships for students; and, in student behaviors perceived to be signs and symptoms of traumatic stress or other mental health problems.

In multiple focus groups across grade groupings, teachers suggested that it was the presence of the Student Assistance Specialist (SAS) that led to their engagement with a trauma-informed perspective. "If you've got somebody who's actively addressing those needs," a middle school teacher said, "you have that conversation [about trauma]. You don't talk about boating if you don't have a boat. You stop talking about trauma if you don't have somebody helping you address the trauma you identify."

Participants pointed to SASs' ability to provide continuous, relationship-based support as unique within the past or present BSD7 service system. Another key difference in SAS services was ease of referral into the program. Once a student had been identified as a potential fit, student assent and parent consent were the only barriers to services. If and when consent was obtained, access was immediate, with no further registration, eligibility, billing, or payment complications.

SAFE-TI services were also noted as de-stigmatizing due to its training and discussions, in which traumatic exposure was routinely described as "something that happens to everyone;" this contrasted with traditional mental health treatment focusing on labeled disorders that might set the student apart from others. Another factor was the group nature of the evidence-based treatments used by SASs, which reportedly facilitated camaraderie among members and led to subsequent supportive peer-to-peer relationships and referral of students to the program by their peers.

The inclusion of SASs in MTSS meetings reportedly strengthened the MTSS system, promoting an explicit focus on trauma in what was already an environment devoted to supporting students socially and emotionally. SASs' ability to build trusting relationships with students placed them in a position to comment knowledgeably. A middle school principal noted that that he says, "'Okay, what do I need to know?' And then ... they can say, 'This is what we're working on with that student, and here's how we can use this as an opportunity to extend that learning for the kid.'"

Teachers at all levels described the presence of SAFE-TI as easing their burdens related to students' mental health needs. The SAS positions' being explicitly housed by the school/district, and the expectation that SASs would make themselves visible in their schools were noted as important.

Teachers and administrators frequently described middle and high school students who, prior to SAFE-TI, tended to leave class and/or school frequently because of an inability to regulate their stress levels. Developments in referral helped them not slip through cracks and maintain engagement with the school in cases they were otherwise trending toward leaving campus. SASs, through a combination of CBITS groups and one-on-one skill building and emotional support, appear to have helped students develop self-regulation skills that made it possible for them to feel safe in school and consistently remain

in class. A high school administrator summarized this: "... now they're able to refocus, cope, and even reengage a lot quicker, and we're not losing them to just running out of the building. They're able to stay, pull themselves together, and get back into the classroom. ... that program has helped bridge the gap back to academics for a lot of those students better and more quickly."

As another example, the three School Resource Officers (SROs) reported that close consultation and collaboration with the SASs had made them more effective at meeting the needs of students and addressing student behavior issues proactively, and all stated their belief that because of their collaboration with the SASs and because of the SASs' early intervention with students, student behavior issues were more often being resolved prior to reaching a crisis stage where the SRO might need to intervene on a legal basis.

Discussion: Qualitative vs. Quantitative findings

It is interesting to note in the above discussion that the experimental quantitative findings are less strong if not non-existent, while the qualitative results appear to provide greater support for the success of the SAFE-TI program. There are a number of potential reasons for this discrepancy. The first is that for reasons of experimental power, it is difficult to detect an intervention effect, especially over the relatively short delay. This is also a relatively "dilute" intervention for most students, applied to heterogeneous groups across diverse pairs of buildings. We have also discussed fundamental differences between the implications of attendance and behavioral infractions.

However, the most fundamental differences across the two sub-methodologies involve the time scales over which change in what students do, and in school culture, occur, and the time periods over which these are observed. We believe that schools need cultural shift to make a difference in trauma-informed approaches to students and community. It has been estimated that such a cultural shift within a building takes 3-5 years. During the period reported in this evaluation the SAFE-TI leaders and other informants were beginning to see and hear about some of these changes. It appears that the qualitative data-gathering captured a shift occurring. Teachers and staff members also saw change occur relatively

quickly with those students who received Tier 2 and 3 interventions such as CBITS, and this is reflected in the qualitative data. Quasi-experimental quantitative analyses done by the school district examined students receiving Tier 2 and 3 services, and these showed marked positive change in Absences and Behavior in students receiving tiered interventions.

The quantitative analyses examine a large subset of students across each building, while the focus groups and interviews can detect small but important instances of change. While they were less cognizant of Tier 1 interventions directed to all students, respondents were aware of the beginnings and underpinnings of the process of cultural shift in schools, as well staff additions and changes in procedures; this too comes out in the qualitative data. It was noted that teachers were starting to approach the SAS for help, something that was observed in qualitative responses but not seen in the quantitative results.

There are also some potential problems with measurement of safety related Behavior. At the elementary level, infractions are only noted at a relatively severe level, or "level 3," and some variations in behavioral reporting between elementary schools were identified. Additionally, during the research period changes were made in the attendance policy at the high school making consequences less severe.

Impact of SAFE-TI

As described in the qualitative interviews, the impact of SAFE-TI was significant. At the Tier I (Universal) level staff began to use a trauma lens when working with students from traumatic backgrounds. It was acknowledged that a culture shift takes more time in schools than the project allowed and more staff training would have been beneficial. Recognizing the importance of Tier I supports, the district has begun training administrators in Trust-Based Relational Intervention (TBRI). During the PIR days (staff training days) before school began, all K-8 staff received a 3-hour training which focused on using the "trauma lens," in approaching student issues, and on building relationships with students from traumatic backgrounds. This is a significant district effort to more fully reach administrators, teachers, and staff at the Tier I level thereby continuing the work begun through SAFE-TI.

Additionally, the Montana State University (MSU) education department had reached out to the SAFE-TI team for assistance in better preparing their student teachers in how to run a trauma responsive classroom. Over the course of the project several hundred new teachers have been trained in TI-PBIS approaches which will hopefully have far reaching impacts in our schools.

The project results indicated a significant need to continue the Tier 2 (Selective) intervention support. The BSD7 Board of Trustees recognized this need, and independent of the staff on the grant, brought forth to the legislature a request to propose legislation allowing school safety funds to include mental health staff. As a result of the Board members' efforts, Senate Bill 92 was passed which has allowed funding to be secured for middle and high school Student Assistance Specialists (SASs) to continue the work of SAFE-TI. Through this bill additional FTE has also been secured to provide similar support at the elementary level. With the passing of SB92 the impact of the SAFE-TI program has gone beyond the BSD7 to assist other schools in the state.

Recognizing the need for more supports at the Tier 1 and Tier 2 levels, a school-based outpatient therapeutic support program is being piloted at the high school beginning in the Fall of 2019. One therapist will be hired through a contracted mental health provider to work closely with the SAS to deliver trauma care to high school students in need.

A great deal of work has been done on design and technical issues for using school databases for evaluation purposes, and this has involved very positive collaboration between the district and UM teams. Also of importance is the refining of the schools' database for easier early identification and monitoring of students of concern. This knowledge will prove useful for future work.

Perhaps the greatest impact of the study is that the cultural shift occurring by the end of the study has resulted in a district-wide commitment to continue the trauma sensitive support and educational practices of SAFE-TI.

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Figure 1. Sequence of the SAFE-TI Program and Clinical Trial

Tranche	School Type	Pair	1	2	3	4	5	6	7	8	9	10
Group 1: Immediate SAFE-TI Schools; T1 = 11/30/15	HS	"1"										
	MS	2										
	ES	5										
	ES	3										
	ES	4										
	ES	6			Year 1 Baseline Data							
Group 2: Delayed SAFE-TI Schools; T2s vary	MS	2										
	ES	5										
	ES	3										
	ES	4										
	ES	6										

(Tranche 6: Building Seasonal control)

Tranche	School Type	Pair	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Group 1: Immediate SAFE-TI Schools; T1 = 11/30/15	HS	"1"	TAU (Treatment As Usual)				Delivery of SAFE-TI						Delivery of SAFE-TI									
	MS	2																				
	ES	5																				
	ES	3																				
	ES	4																				
	ES	6																				
Group 2: Delayed SAFE-TI Schools; T2s vary	MS	2	TAU					TAU		T2	Delivery of SAFE-TI		Delivery of SAFE-TI									
	ES	5	TAU					TAU		T2			Delivery of SAFE-TI									
	ES	3	TAU					TAU			T2		Delivery of SAFE-TI									
	ES	4	TAU					TAU				T2	Delivery of SAFE-TI									
	ES	6	TAU					TAU				TAU	T2	Delivery of SAFE-TI								

(T1: Begin Delivery of SAFE-TI)

Tranche	School Type	Pair	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	End Dat
Group 1: Immediate SAFE-TI Schools; T1 = 11/30/15	HS	"1"	Continue delivery of SAFE-TI										Continue delivery of SAFE-TI								
	MS	2																			
	ES	5																			
	ES	3																			
	ES	4																			
	ES	6																			
Group 2: Delayed SAFE-TI Schools; T2s vary	MS	2	Continue delivery of SAFE-TI										Continue delivery of SAFE-TI								
	ES	5																			
	ES	3																			
	ES	4																			
	ES	6																			

Figure 2. Case-Study Design

Bozeman School District

District Administration

Project Specific Leadership

University of Montana (UM)

National Institute of Justice (NIJ)

Elementary Schools (8)	Middle Schools (2)	High Schools (1)
Administrators	Administrators	Administrators
Staff	Staff	Staff

QUANTITATIVE DATA

Students | Students | Students

Historical Context

Economic Context

Student Assistance Specialists

MTSS Teams

Community Context

SROs

CSCT Providers

THRIVE

Parents

Relevant Research

Qualitative Data Sources

- Individual Interviews
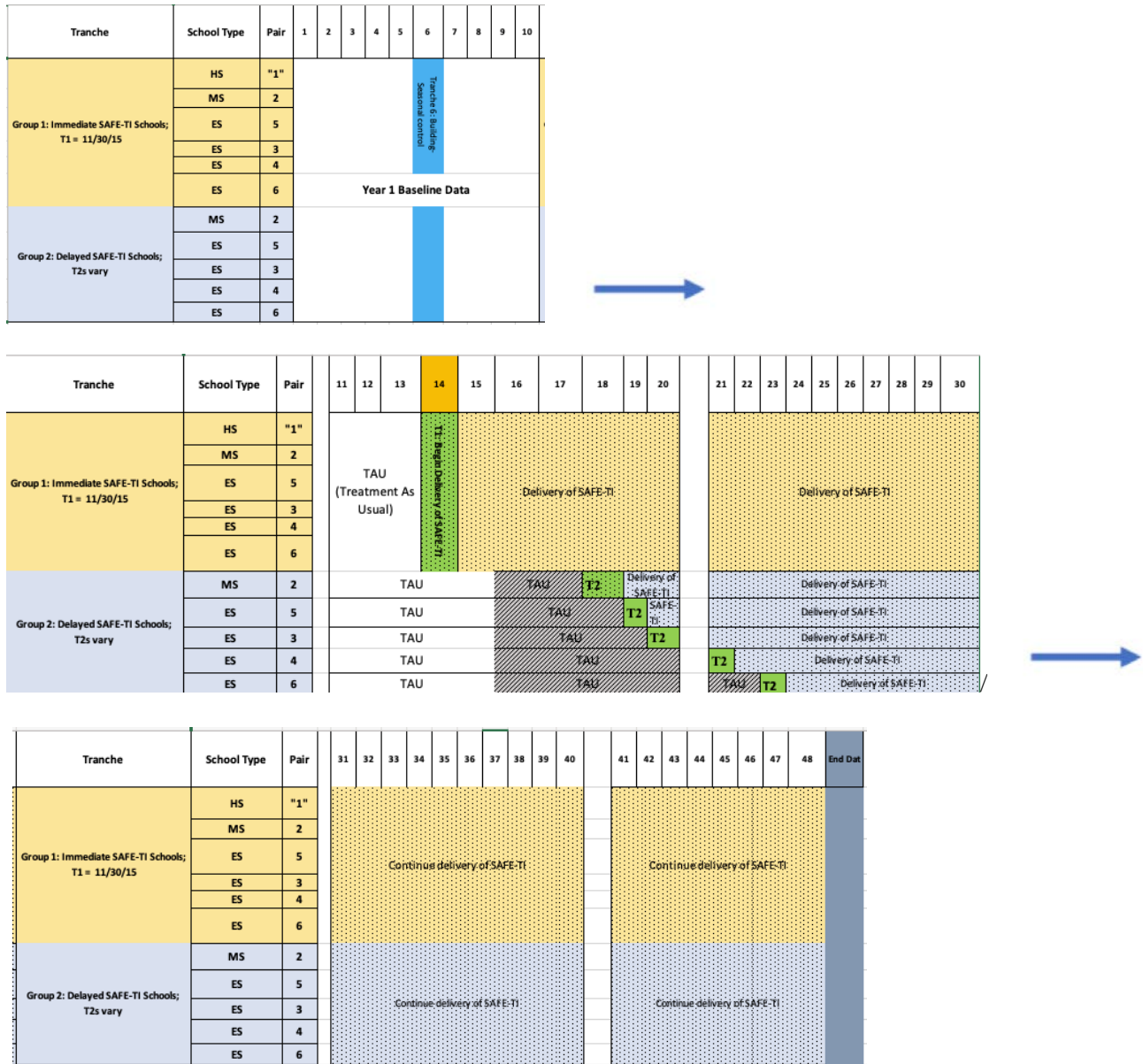- Focus Group Interviews
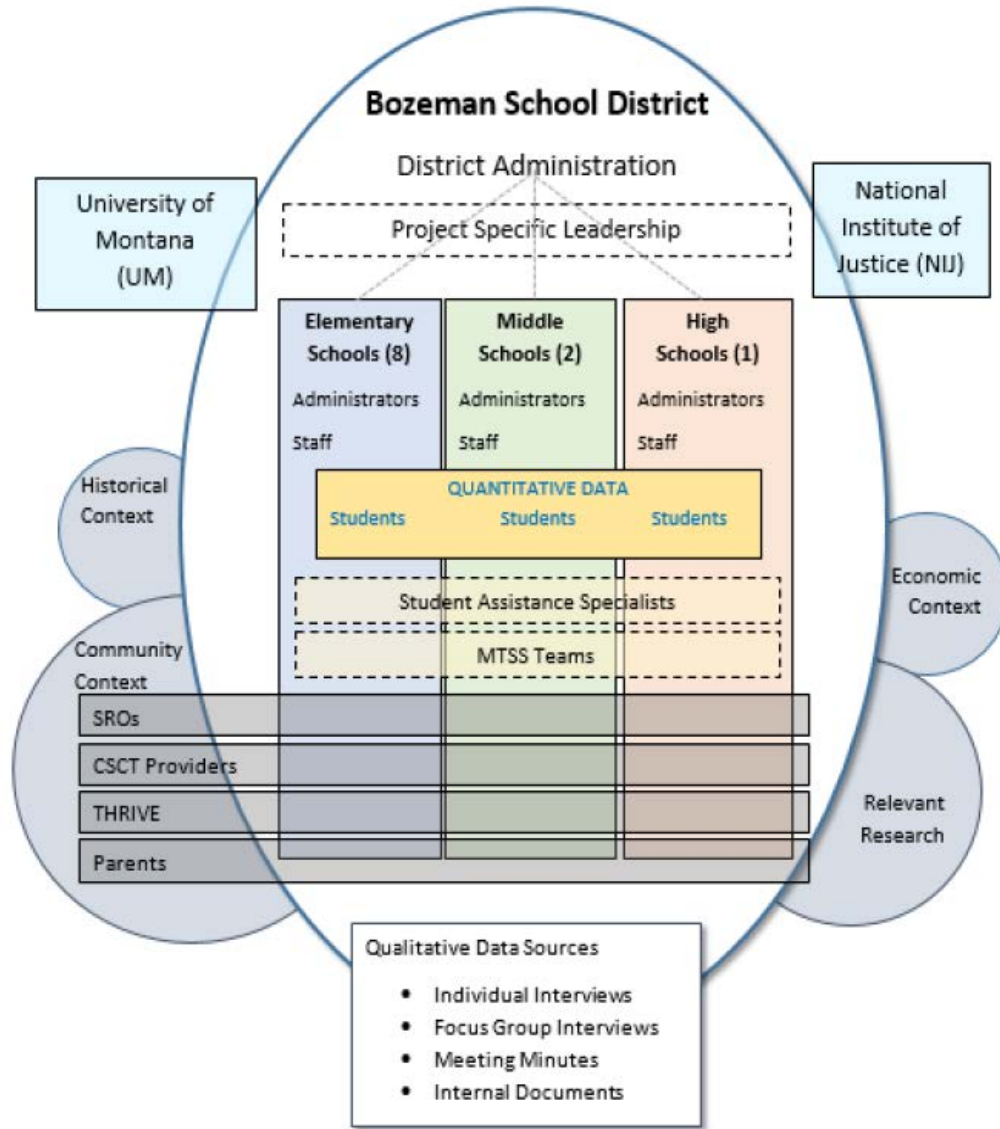- Meeting Minutes
- Internal Documents

Figure 1. Adaptation of Stake's Graphic Design of a Case Study. From *Multiple Case Study Analysis* (p. 5)