

CLEAR

COLLABORATIVE LEARNING FOR
EDUCATIONAL ACHIEVEMENT
AND RESILIENCE

STAFF SURVEY RESULTS 2015-2016

CLEAR STAFF SURVEY RESULTS 2015-2016

KEY FINDINGS

In this report, we demonstrate that school staff in 12 active CLEAR schools report high levels of program acceptability and evidence of positive shifts in individual staff practices, perception of student behavior, staff-student engagement, and school climate. These results demonstrate that CLEAR is associated with changes in staff associated with school characteristics predictive of improved academic outcomes. In addition, we demonstrate preliminary results that indicate meaningful and statistically significant gains in schoolwide academic performance of CLEAR schools.

1. The majority of staff report increased adoption of trauma-informed care (TIC) practices irrespective of their level of involvement in CLEAR intervention elements.
2. On multiple TIC practice elements, practice change increases with progression over the three years of program intervention.
3. On multiple measures, staff reporting any individual interactions with the CLEAR consultant report significantly greater adoption of TIC practices.
4. Staff reporting greater adoption of TIC practices are more positive about the impact of the program on shifts in their personal practice, perception of student behavior in the school, quality of student-staff engagement, and the quality of the school climate.
5. CLEAR consultants are significantly more likely to have individual level contact with certificated staff (54% of all teaching staff) than with classified staff (15%). This is identified as an area of continuing program development.
6. We find that students in CLEAR intervention schools showed significant gains in English language arts standardized tests compared to those in matched comparison schools.

BACKGROUND

CLEAR (Collaborative Learning for Educational Achievement and Resilience) is an evidence-informed whole school model that incorporates recommendations on trauma-informed systems change and consensus principles on high-quality trauma response.

CLEAR explicitly adapts the principles for the treatment of complex trauma as the foundation for school response. While disasters and other acute traumatizing events occur too often, the more profound challenge for schools is addressing the developmental consequences of early life adversity and the common developmental challenges that follow for many children. Supporting the academic and social success of students is a powerful intervention to mitigate the long term effects of trauma even when more formal treatment access is not possible. The capacity of natural systems like schools to meet student needs becomes the principal intervention for many at-risk children.

CLEAR is a professional development model where trauma expertise is built progressively and aligned with routine school instructional and student support practices. Over a 3-year intervention process, CLEAR seeks to (1) create the whole school cultural and professional skills needed to effectively support students with trauma, (2) develop effective identification and care coordination for the most vulnerable students and families, and (3) create the coordination structures that assure school and support services operate from a unified plan to support students and families.

CLEAR operates as a multi-tiered systems of support (MTSS) response framework that emphasizes whole-school actions to improve learning outcomes for all student using a continuum of evidence-based practices based on need (Stoiber & Gettinger, 2016). Practices are intended to assure resources reach the appropriate

students with services needed to permit students to achieve and/or exceed proficiency in academics and social emotional development.

CLEAR is a structured but adaptive problem-solving model which employs mindfulness principles to guide practice in contrast to an emphasis on standardized strategies and curricula. Mindfulness is an overarching concept for a variety of educational and psychological concepts including reflective practice (Schon, 1983) and the core techniques of self-monitoring and self-talk in cognitive therapies. Being mindful is associated with increased creativity and new learning (Langer, 1997). When adaptive and anticipatory problem solving is the critical professional skill, mindfulness defines a teachable set of teacher skills that can support improved outcomes. A small body of literature has demonstrated that mindfulness is associated with improved classroom management practices and student performance (e.g., Aaronsohn, 2003; Kounin, 1983). Weick and Sutcliffe (2007) have extended the concept of mindfulness to understanding and improving organizational practice and Hoy et al., (2006) have extended the organizational practice of mindfulness to school improvement practices. Multiple research studies demonstrate that mindfulness is a teachable skill and its practice is associated with improved outcomes including health status and learning (e.g., Langer, 1997).

CLEAR employs a formal professional development education series with consulting practices engaging leadership and staff concurrently in a co-design process to shift both individual practices and the building system's policies and climate to support sustainable trauma-informed practices among all adults. The professional development model is designed as a three-year progressive training process using a strategy of brief (one hour), cumulative (nine trainings in Year 1, six trainings in Year 2, and

four trainings in Year 3), and progressive (each training builds to the next) elaboration of best-practice trauma principles (NCTSN core principles and the Attachment, Self-Regulation, and Competence (ARC; Blaustein & Kinniburgh, 2010) Framework).

Although CLEAR has a highly structured professional development instructional component, CLEAR is principally a consultation intervention. CLEAR provides a structured but adaptable process to train educators in trauma management skills that can improve instruction and classroom management, change policies and procedures to help children succeed academically and emotionally, and prioritize safety and role-appropriate relationships. These skills benefit all children but are particularly important to helping traumatized children learn. CLEAR school supports are delivered by a consistent trauma expert referred to as the CLEAR consultant. These support activities address whole classroom practices, individualized learning, and brief trauma interventions when required and based on the resources available to the school. Because we prioritize sustainable practice, these more individualized and formal supports to vulnerable students operate within the relationships and resources potentially available to each school. As a result, the depth of supports for the most vulnerable students can be very different in an isolated rural school compared to a high need urban school.

CLEAR is intended to shift the depth and consistency of practices in the adults who work in schools. Caregiver education and support and targeted student interventions develop through trauma-informed plans lead by schools. Four coordinated staff practices define the goals of this trauma-informed strategy to both improve universal student outcomes and meet the adjustment needs of children with functional impairment due to trauma. First, teachers need skills development to adapt instructional practice and student supports based on an understanding of complex trauma's risk to age appropriate

cognition and social/emotional development. Second, CLEAR supports well-implemented social and emotional learning for all students by positive management of emotional and behavioral responses to improve academic and social success. Third, CLEAR uses the consultant as a resource to help teachers adapt classroom management practices in light of social emotional learning and trauma care principles to support the physical and social learning environments enhance the individual child's learning experience and the success of the overall class. Fourth, CLEAR supports development of effective identification, referral, and access to psychotherapeutic interventions when additional supports are needed for symptomatic students as they continue in typical classes.

In contrast to other trauma-informed school approaches, CLEAR explicitly extends the use of trauma-informed practices to instructional practices in addition to the more universally shared emphases on school climate and management of dysregulated behavior. Instructional practices are supported through integration of trauma-informed language in delivery of content, use of trauma-informed principles to improve classroom management, and individualization of instruction when dysregulated student responses interfere with persistence, memory, and task organization. Instructional supports are provided through the consulting process.

The goal at the end of the three-year intervention period is that policies, decision making structures, leadership practices, and the skills of individual educators are developed to a degree that trauma-informed practices are self-sustaining. Although we have the most experience in elementary schools, CLEAR has been implemented in middle, high and alternative school programs as well. CLEAR practices and recommendations are adapted to fit the level of education.

PARTICIPANTS

Across 12 CLEAR buildings (10 elementary, 1 middle, 1 high school), 432 staff completed the survey with 76% of responses from certificated staff (includes administrators and specialists) while 24% of respondents were classified staff. Forty-four percent of respondents were in schools that had completed their first year of CLEAR, while 27% and 29% of responded respectively were from Year 2 and Year 3 schools. Ten of the 12 schools are elementary buildings. This distribution generally reflects the make-up of the CLEAR schools active in the 2015-16 school year. Based on current information on staff counts by buildings, staff participation in the survey was in excess of 60% on average.

METHODS

At the end of each academic year, staff in active CLEAR schools are invited to complete an anonymous web-based survey. The 2015-16 survey represents the second annual cycle of data collection with a comparable survey format. Because survey completion is anonymous and CLEAR buildings participate across multiple years, each year's results are analyzed separately and we do not pool results across the survey years. We do, however, examine the consistency of results across the years.

The survey specifically addresses shifts in use of trauma-informed care (TIC) concepts embedded in the CLEAR model (e.g., use of validation, attunement practices, grace and repair when students are dysregulated, support for self-regulation strategies) and staff assessment of the impact of CLEAR on their own practice, student behavior, student-teacher engagement, and shift in school policies and practices that support adoption of practices in buildings.

At the end of the academic year, all staff in CLEAR buildings are provided with a link to a secure web-based survey site that includes mechanisms to assure anonymous but single survey completion by an individual. Participation is strictly voluntary.

We employ a retrospective baseline reporting structure for staff description of the degree to which they have adopted the trauma-informed practices supported by CLEAR. Staff are asked to rate their practice in the year prior to the current academic year and then to rate their practice now. We employ this retrospective baseline reporting strategy because it is an accepted evaluation practice and because an individual cannot rate their own trauma-informed practices until they have a basic understanding of the concepts.

ANALYSES

Analyses were conducted as repeated measures ANOVAs with implementation year (first, second, or third program year) and use of the CLEAR consultant (Yes/No) in the past year. Secondary analyses intended to confirm unique predictors of change in practice or perception of school characteristics were tested using linear regression. In the regression analyses, practice or school perceptions with past year rating on the criterion variable, implementation year, classified or certificated staff, use of CLEAR consultant, length of time in education, and time at the school as the primary predictors.

FOUR PRINCIPAL QUESTIONS ARE ADDRESSED IN THIS REPORT:

1. Do staff report progressive adoption of trauma-informed practices supported by CLEAR?
2. Does the use of the consultant increase the adoption of trauma-informed practices?
3. Is the adoption of CLEAR practices related to the year of program implementation (Year 1, Year 2, and Year 3)?
4. Is the adoption of trauma-informed practices by staff associated with staff reports of changes resulting from CLEAR in student behavior, student-teacher engagement, school climate, and increased school policies supportive of trauma-informed practices?

RESULTS

ADOPTION OF CLEAR TRAUMA-INFORMED CARE PRACTICES

CLEAR involves a progressive introduction of key trauma-informed care principles over three years. In Year 1, the core concepts introduced to create common language and address foundational practice include:

1. Core concepts: Understanding and use of basic concepts of brain development, behavioral regulation, and trauma effects in educational planning and response.
2. Routines and Rituals: Creating an environment during transitions that is safe, secure, and predictable for staff and students.
3. Validation: Understanding what validation is and its use in helping students self-regulate.
4. Grace: Understanding the difference between fair and equal and holding students accountable for behavior without the use of punishment.
5. Attunement: Understanding attunement and how to use attunement for accurate identification of student needs and support of relationship with the student.
6. Self-Development and Identity: Understanding how staff interact with their environment and developing strength-based relationships with students.

For each of the six questions, staff rated their practice a year ago to their practice today using the following scale:

1. I was/am not integrating this into my practice through a trauma lens.
2. I understood/understand the value of this concept through a trauma lens but am not yet integrating this into my practice.
3. I was/am sometimes implementing this concept in my practice through a trauma lens.
4. I was/am fully integrating this concept into my practice through a trauma lens.

RISK OF A RESPONSE SET USING THE RETROSPECTIVE BASELINE EVALUATION FRAMEWORK

In the following figures, we demonstrate a general increase in reported practices across all implementation years regardless of the use of the consultant. Although not presented in detail, this overall positive gain was consistently shown across schools and types of educational staff.

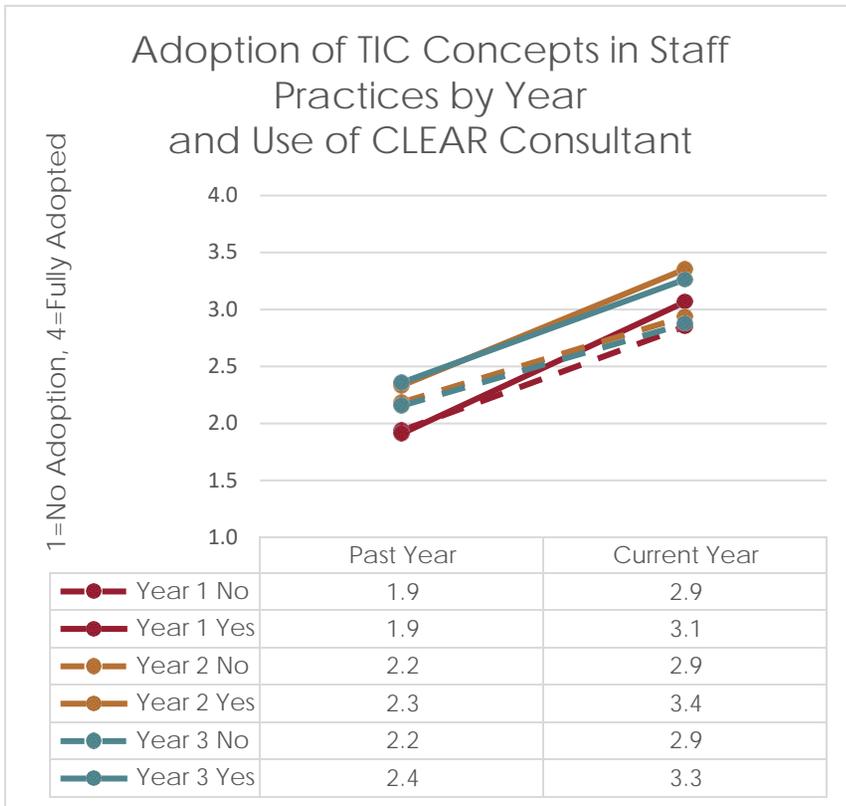
This consistent report of positive gains opens the potential of a response set across participants from influences such as social desirability or justification of effort resulting from being part of the intervention. To test for a response set, we examined if all participants reported positive changes or if there was more of a range of responses including reporting no change or negative change. Using our assessment scales, participants reporting past year practices scored as 1, 2, or 3 (no adoption, considering adoption, incomplete adoption of the practices) have the potential to report positive increases in practices. Summarized in the next table, we found on the six dimensions of TIC practice introduced in the first year of implementation that a number of participants report no change or negative change. This would be expected with a complex and voluntary intervention like CLEAR. Staff reporting that they already used these practices some of the time show less change. But, even among staff reporting no prior adoption 14-26% report no positive change across the six practices. While we can't exclude the potential of a generalized response set, these findings suggest a level of variability in staff reports inconsistent with a generalized bias in reporting.

VARIATION

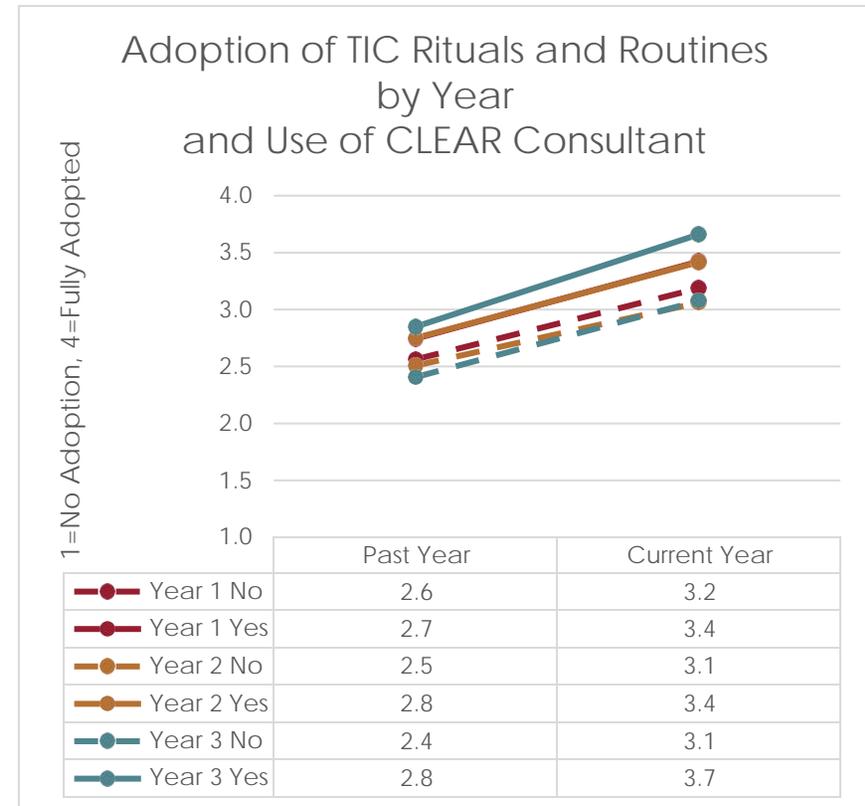
There is significant variation across participating schools in the level of reported integration of the six CLEAR practices. We also found that there were significant differences between certificated (classroom teachers, administrators, student learning support staff) and classified staff (e.g., instructional aides, administrative support staff, transportation staff) such that adoption of practice is reported as greater among certificated staff. These differences are important for our program implementation success but are integrated in the examination of shifts in practice and benefits presented below.

CLEAR PRACTICES	PAST YEAR PRACTICE	NEGATIVE CHANGE REPORTED IN CURRENT PRACTICE	NO CHANGE IN PRACTICE REPORTED	TOTAL PERCENT NO INCREASED ADOPTION
CLEAR CORE CONCEPTS	1 N=124	--	14%	14%
	2 N=136	2%	13%	15%
	3 N=112	2%	50%	52%
CLEAR RITUALS	1 N=79	--	20%	20%
	2 N=90	30%	13%	16%
	3 N=131	10%	53%	54%
CLEAR VALIDATION	1 N=86	--	20%	20%
	2 N=127	2%	18%	20%
	3 N=139	3%	60%	63%
CLEAR GRACE	1 N=86	--	15%	15%
	2 N=127	1%	14%	15%
	3 N=139	2%	54%	56%
CLEAR ATTUNEMENT	1 N=107	--	23%	23%
	2 N=112	0%	29%	29%
	3 N=125	0%	61%	61%
CLEAR SELF DEVELOPMENT AND IDENTITY	1 N=88	--	23%	23%
	2 N=106	0%	26%	26%
	3 N=147	1%	63%	64%

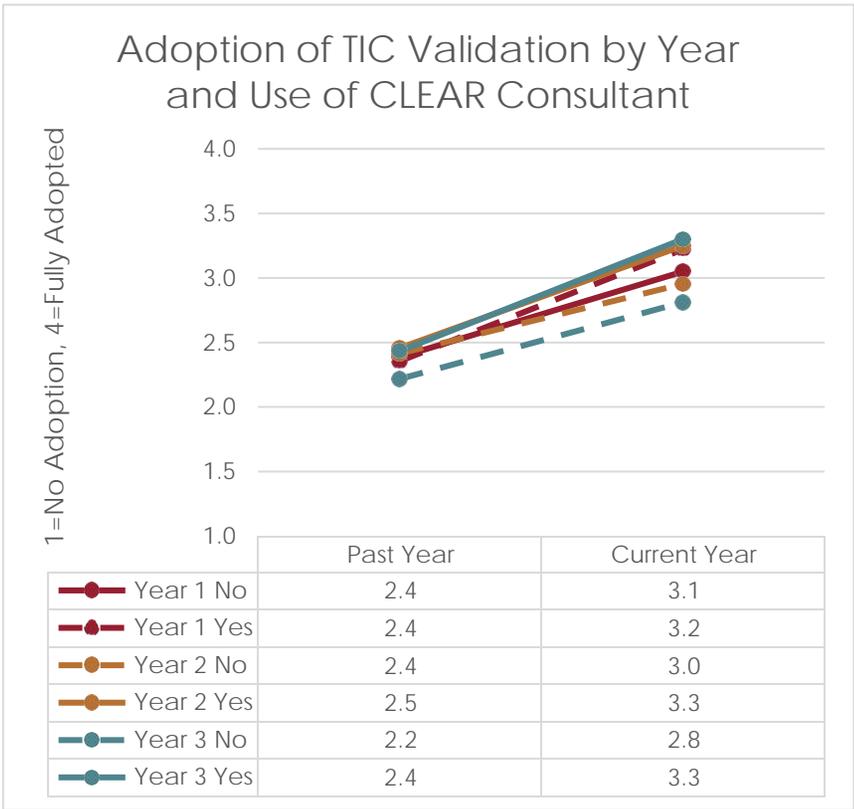
OVERALL, STAFF REPORT SIGNIFICANT CHANGE OVER TIME ON EACH OF THE SIX TRAUMA-INFORMED CARE PRACTICES. HOWEVER, THE RELATIVE DEGREE OF CHANGE WAS RELATED TO THE YEAR OF IMPLEMENTATION AND WHETHER SCHOOL STAFF REPORT THEY ENGAGED THE CLEAR CONSULTANT FOR CONSULTATION SUPPORTS.



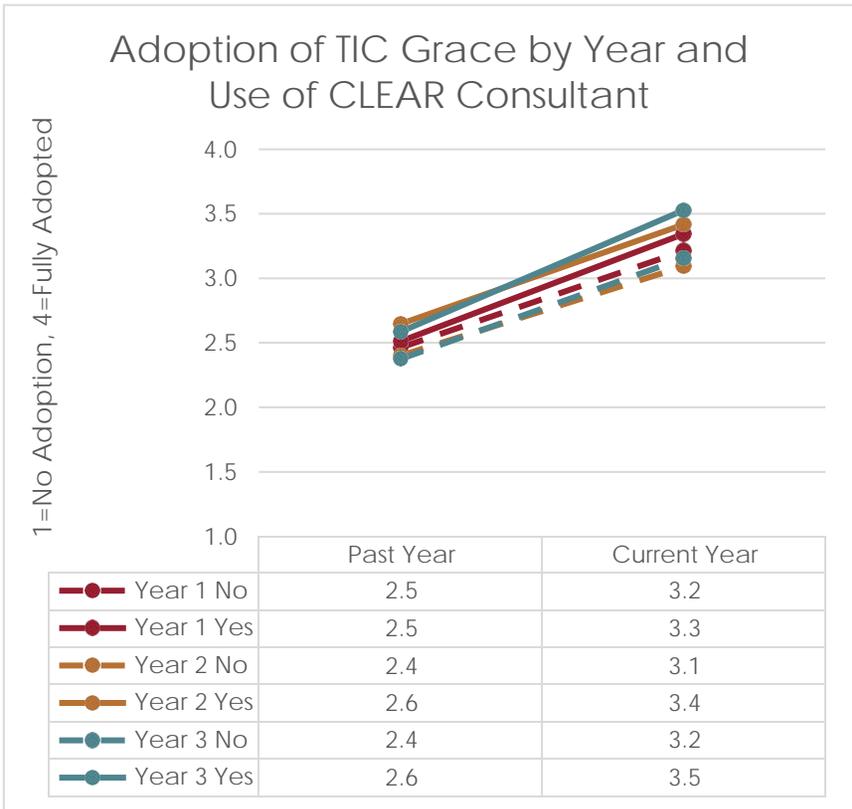
Year X Yes: Used the CLEAR Consultant in the reporting year
 Year X No: Did not use CLEAR Consultant in the reporting year
 Main effect for implementation year: $F(2, 394) = 5.3, p < .005$
 Interaction implementation year X Change over time: ns
 Main effect for use of consultant: $F(1, 394) = 8.9, p < .003$
 Use of Consultant X Change over time: $F(1, 394) = 7.8, p < .006$
 Use of Consultant X Implementation year: ns
 Use of Consultant X Implementation year X Time: ns



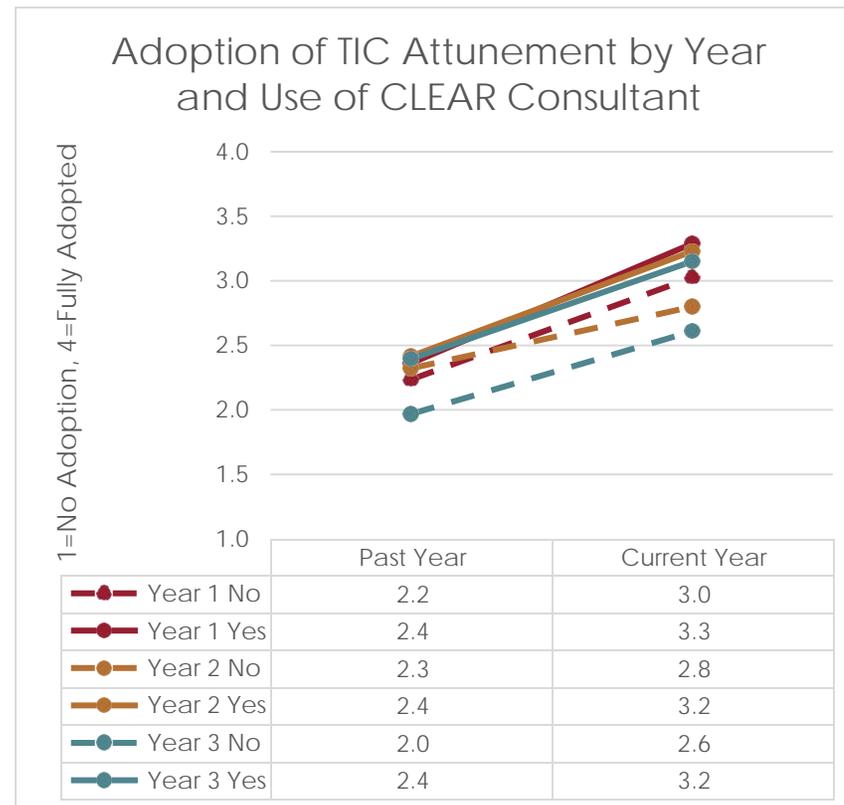
Year X Yes: Used the CLEAR Consultant in the reporting year
 Year X No: Did not use CLEAR Consultant in the reporting year
 Main effect for implementation year: ns
 Interaction implementation year X Change over time: ns
 Main effect for use of consultant: $F(1, 394) = 15.8, p < .001$
 Use of Consultant X Change over time: ns
 Use of Consultant X Implementation year: ns
 Use of Consultant X Implementation year X Time: ns



Year X Yes: Used the CLEAR Consultant in the reporting year
 Year X No: Did not use CLEAR Consultant in the reporting year
 Main effect for implementation year: ns
 Interaction implementation year X Change over time: ns
 Main effect for use of consultant: $F(1, 394) = 6.3, p < .01$
 Use of Consultant X Change over time: $F(1, 394) = 8.6, p < .004$
 Use of Consultant X Implementation year: ns
 Use of Consultant X Implementation year X Time: ns



Year X Yes: Used the CLEAR Consultant in the reporting year
 Year X No: Did not use CLEAR Consultant in the reporting year
 Main effect for implementation year: ns
 Interaction implementation year X Change over time: ns
 Main effect for use of consultant: $F(1, 394) = 8.1, p < .005$
 Use of Consultant X Change over time: ns
 Use of Consultant X Implementation year: ns
 Use of Consultant X Implementation year X Time: ns



Year X Yes: Used the CLEAR Consultant in the reporting year
 Year X No: Did not use CLEAR Consultant in the reporting year
 Main effect for implementation year: ns
 Interaction implementation year X Change over time: ns
 Main effect for use of consultant: $F(1, 394) = 13.6$ $p < .001$
 Use of Consultant X Change over time: $F(1, 394) = 5.7$ $p < .02$
 Use of Consultant X Implementation year: ns
 Use of Consultant X Implementation year X Time: ns

ADOPTION OF CLEAR PRACTICES AND SCHOOL CHARACTERISTICS OF TIC CONDITIONS FOR SUCCESS

In CLEAR, we contend that there are four inter-related school characteristics associated with trauma-informed care and improving academic outcomes. The four characteristics are:

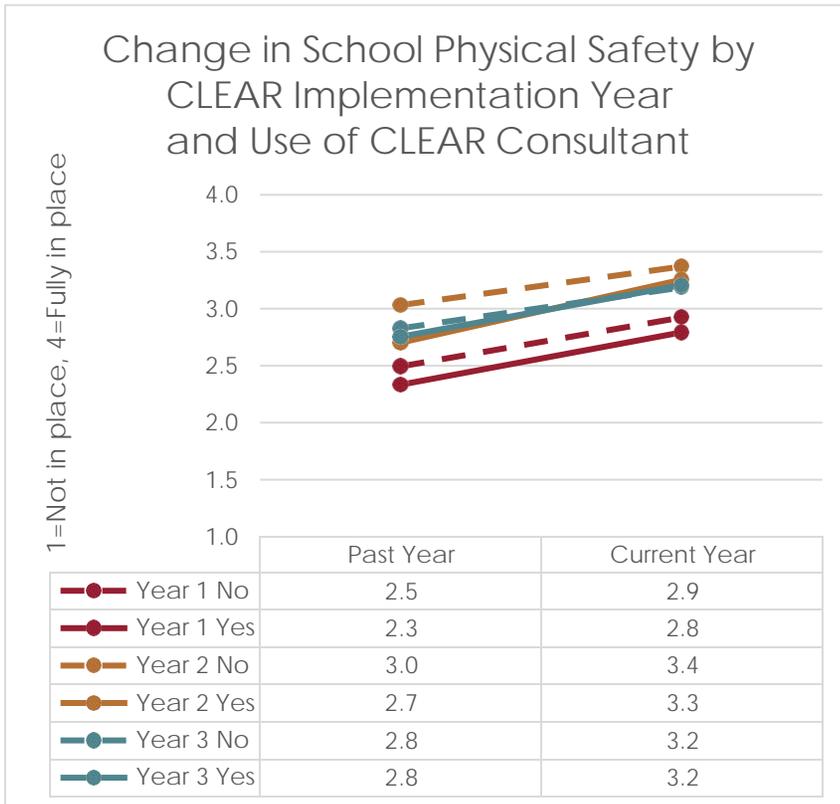
1. **Physical safety in the school for staff and students.**
School contains predictable and safe environments, including classrooms, hallways, playgrounds, and school bus, that are attentive to transitions and sensory needs.
2. **Emotional safety in the school for staff and students.**
School environment fosters trust and emphasizes authenticity, transparency, and quality of communication between and among staff and administration.
3. **The consistency of policies and staff practices in supporting students and colleagues.**
Students and staff can anticipate expectations when a change is implemented or during periods of transition. Change is implemented with consideration for expectations and values.
4. **The emphasis placed on supporting predictability staff-staff and staff-student exchanges.**
CLEAR values are collectively adopted and evident throughout the school and the school is shifting to adoption of schoolwide practice.

The four dimensions are highly correlated ($r=0.60$ to $r=0.65$) indicating we are measuring overlapping concepts and caution about interpreting single school characteristics should be exercised.

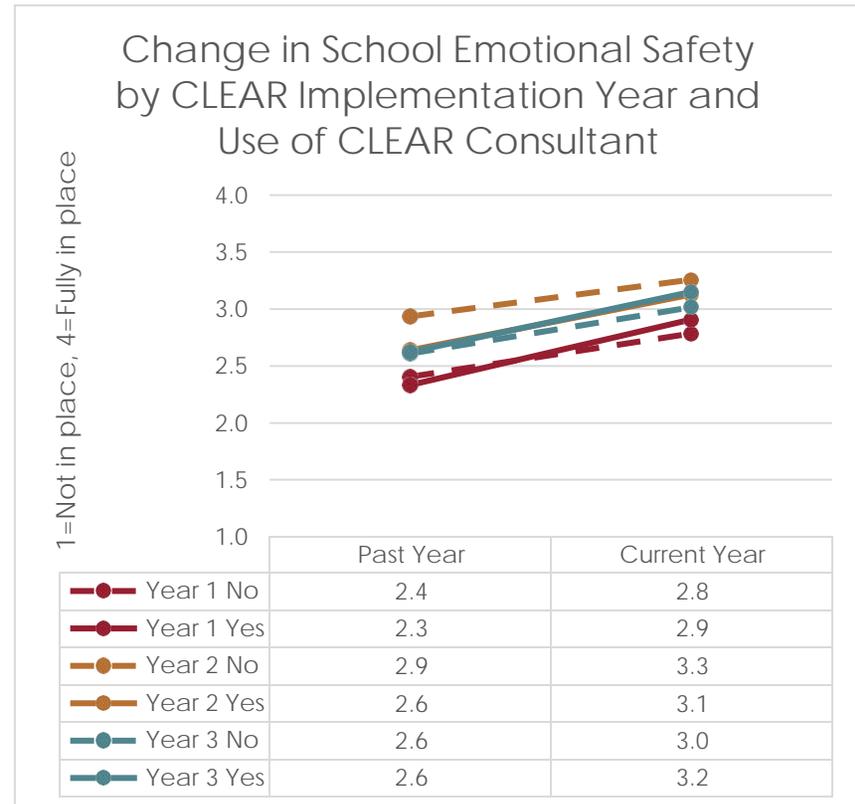
Participants were asked to rate the nature of practice in their school on each of the four elements of trauma-informed care using the following scale:

1. Element is not at all in place
2. Element is partially in place
3. Element is mostly in place
4. Element is fully in place.

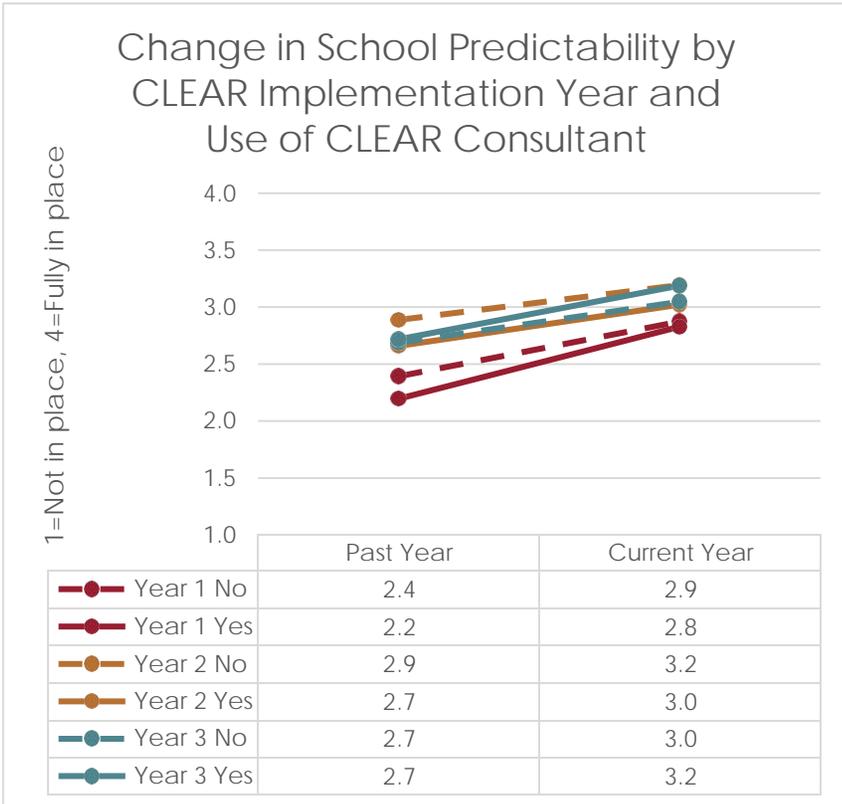
We found that across schools, staff report positive gains on the four school characteristics. Gains on these four dimensions were primarily the result of implementation year impact such that there were progressive gains with implementation after the first program year. Overall, Year 2 and 3 staff responses were similar and both were significantly different from reported practices in Year 1. Engagement with the CLEAR consultant was a significant effect only for Emotional Safety.



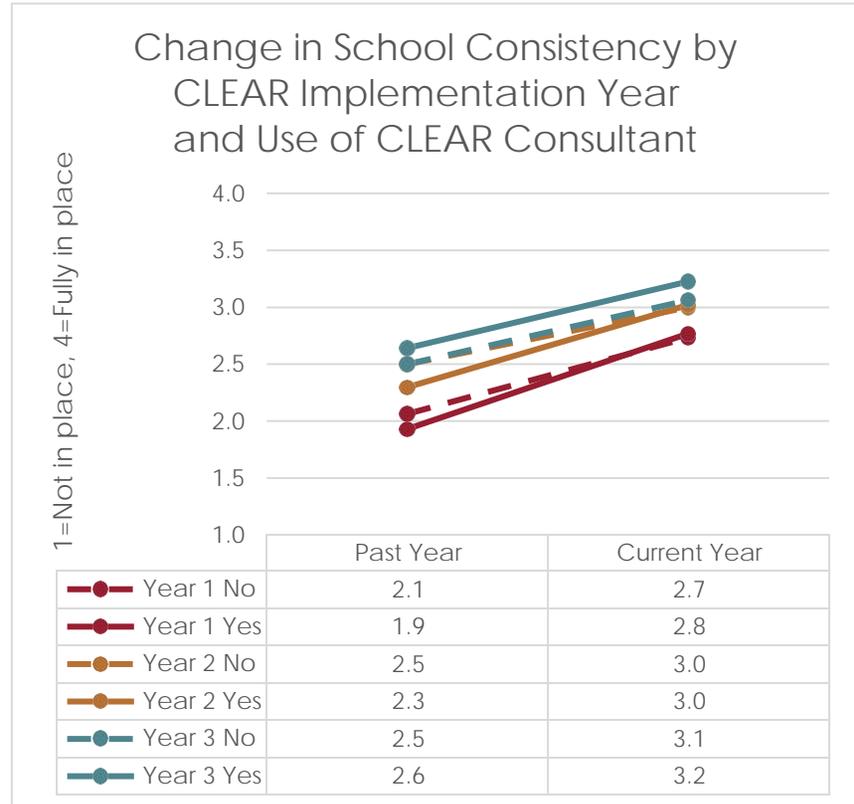
Main effect for implementation year: $F(2, 386) = 17.3, p < .001$
 Interaction implementation year X Change over time: ns
 Main effect for use of consultant: ns
 Use of Consultant X Change over time: ns
 Use of Consultant X Implementation year: ns
 Use of Consultant X Implementation year X Time: ns



Main effect for implementation year: $F(2, 386) = 10.3, p < .001$
 Interaction implementation year X Change over time: ns
 Main effect for use of consultant: ns
 Use of Consultant X Change over time: ns
 Use of Consultant X Implementation year: $F(1, 386) = 4.6, p < .03$
 Use of Consultant X Implementation year X Time: ns



Main effect for implementation year: $F(2, 386) = 11.7, p < .001$
 Interaction implementation year X Change over time: $F(2, 386) = 3.9, p < .02$
 Main effect for use of consultant: ns
 Use of Consultant X Change over time: ns
 Use of Consultant X Implementation year: ns
 Use of Consultant X Implementation year X Time: ns



Main effect for implementation year: $F(2, 386) = 18.6, p < .001$
 Interaction implementation year X Change over time: ns
 Main effect for use of consultant: ns
 Use of Consultant X Change over time: ns
 Use of Consultant X Implementation year: ns
 Use of Consultant X Implementation year X Time: ns

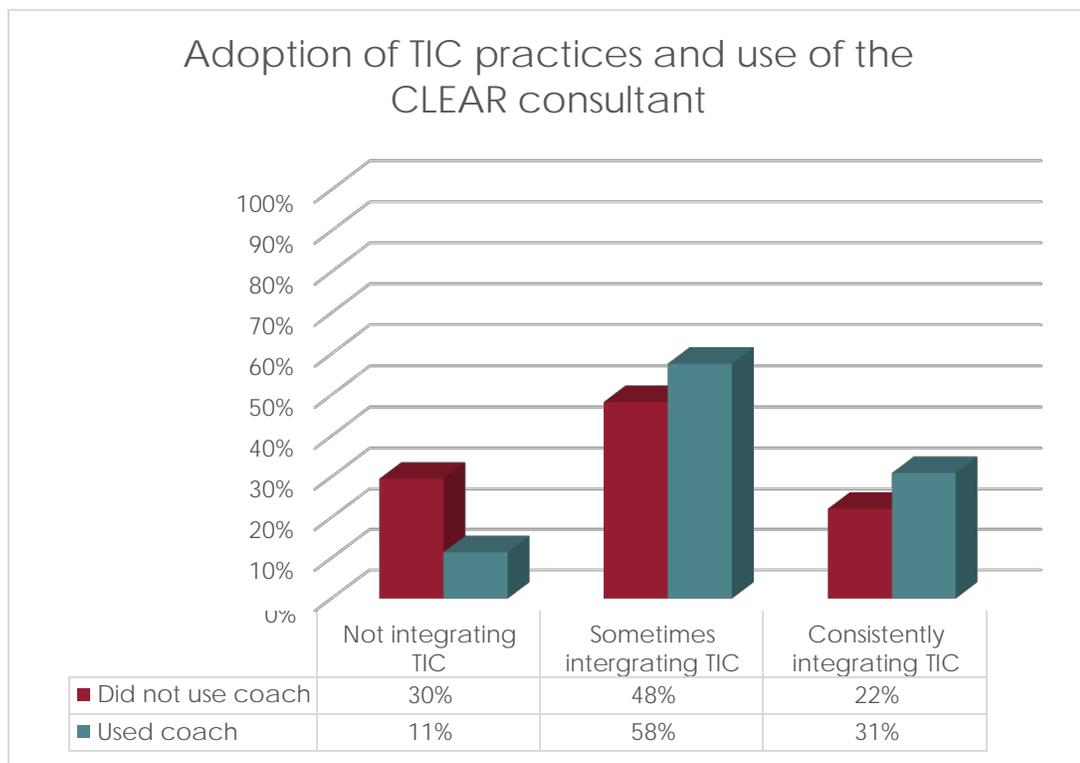
THE ASSOCIATION OF INCREASED TIC PRACTICE AND SCHOOL CHARACTERISTICS OF TIC CONDITIONS FOR SUCCESS.

In order to assess the impact of self-reported adoption of trauma-informed school practices, we produced a mean score for the six CLEAR practices. We then created groups based on the mean composite score as “Not integrating TIC”, “Sometimes integrating TIC”, and “Fully integrating TIC” in practice.

Adoption of TIC practice overlaps with use of the CLEAR consultant but is a distinct dimension given many staff who did not use the consultant as an individual resource do report significant increased use of TIC practices. Based on overall staff report of TIC practice adoption at the end of the current year, we find the following distribution:

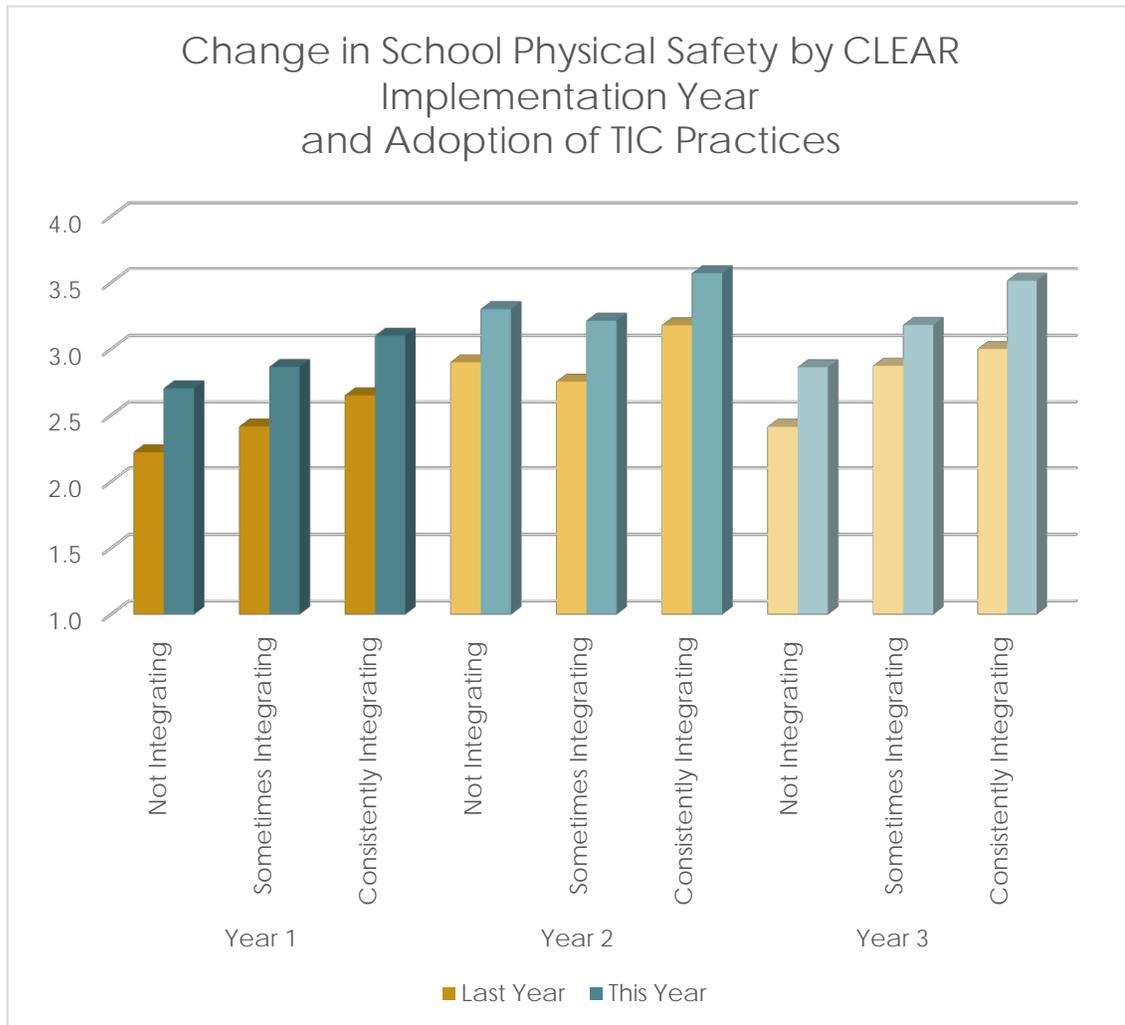
- Not integrating TIC practices 21%
- Sometimes integrating TIC practices 53%
- Fully integrating TIC practices 26%

Implementation year does not impact the adoption of TIC practices. As noted, those staff using the CLEAR consultant also are significantly more likely to report shifts in TIC practices.



Chi Square (2) = 19.6, $p < .001$

AS INDIVIDUAL STAFF'S TIC PRACTICE ADOPTION INCREASES, WE FIND THAT STAFF REPORT SIGNIFICANT CHANGES IN THE SCHOOL CHARACTERISTICS NECESSARY FOR TIC IN THE SYSTEM AS A WHOLE. ON ALL FOUR OF THE SCHOOL PRACTICE MEASURES, AS TIC ADOPTION INCREASES, STAFF IN SCHOOLS SEE THAT THE SCHOOL BUILDING INCREASINGLY IS CHARACTERIZED BY HIGHER LEVELS OF PHYSICAL SAFETY, EMOTIONAL SAFETY, PREDICTABILITY, AND CONSISTENCY.



Main effect for implementation year: $F(2, 373) = 15.3$. $p < .001$

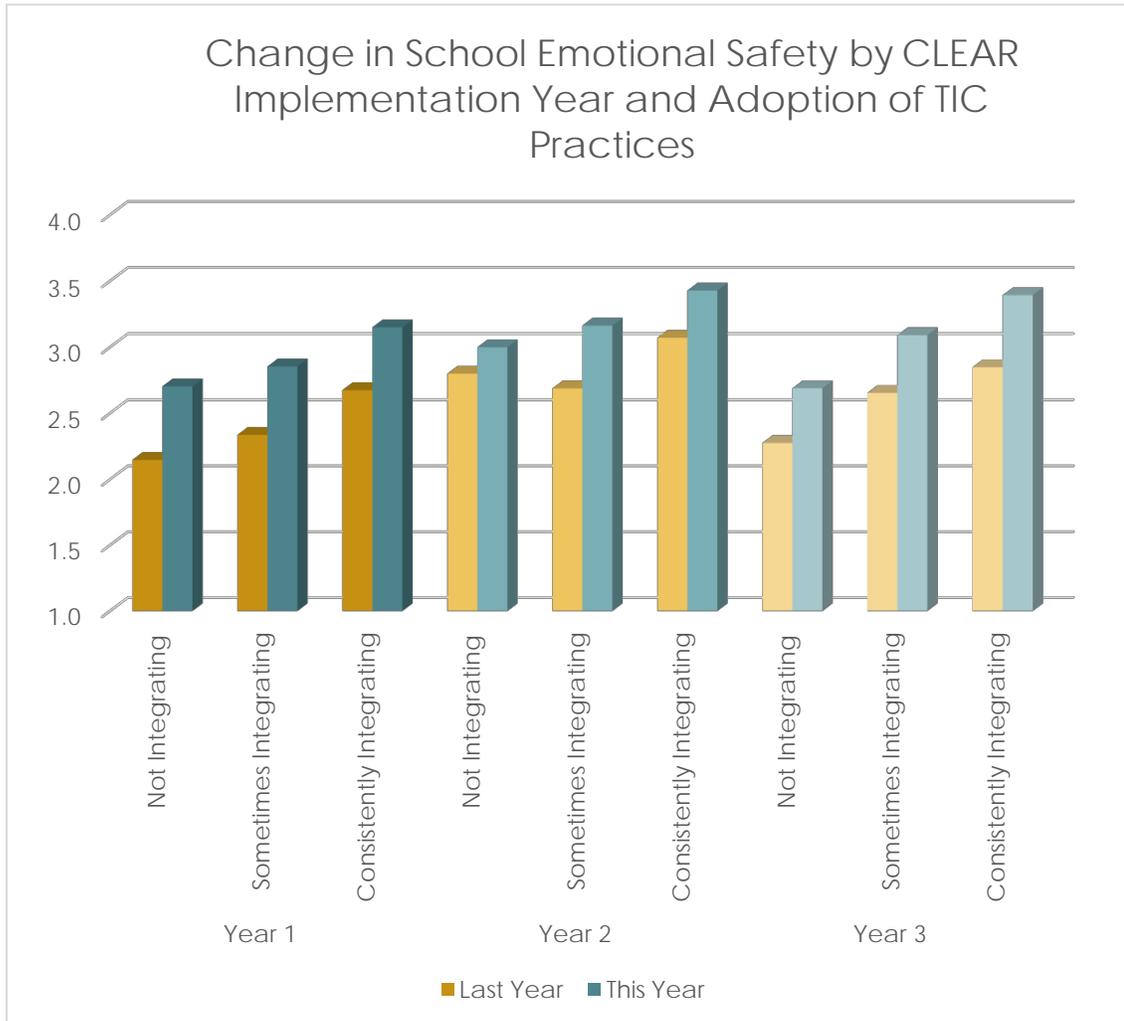
Interaction implementation year X Change over time: ns

Main effect for TIC Adoption: $F(2, 373) = 10.3$. $p < .001$

TIC Adoption X Change over time: ns

TIC Adoption X Implementation year: ns

TIC Adoption X Implementation year X Time: ns



Main effect for implementation year: $F(2, 373) = 8.1, p < .001$

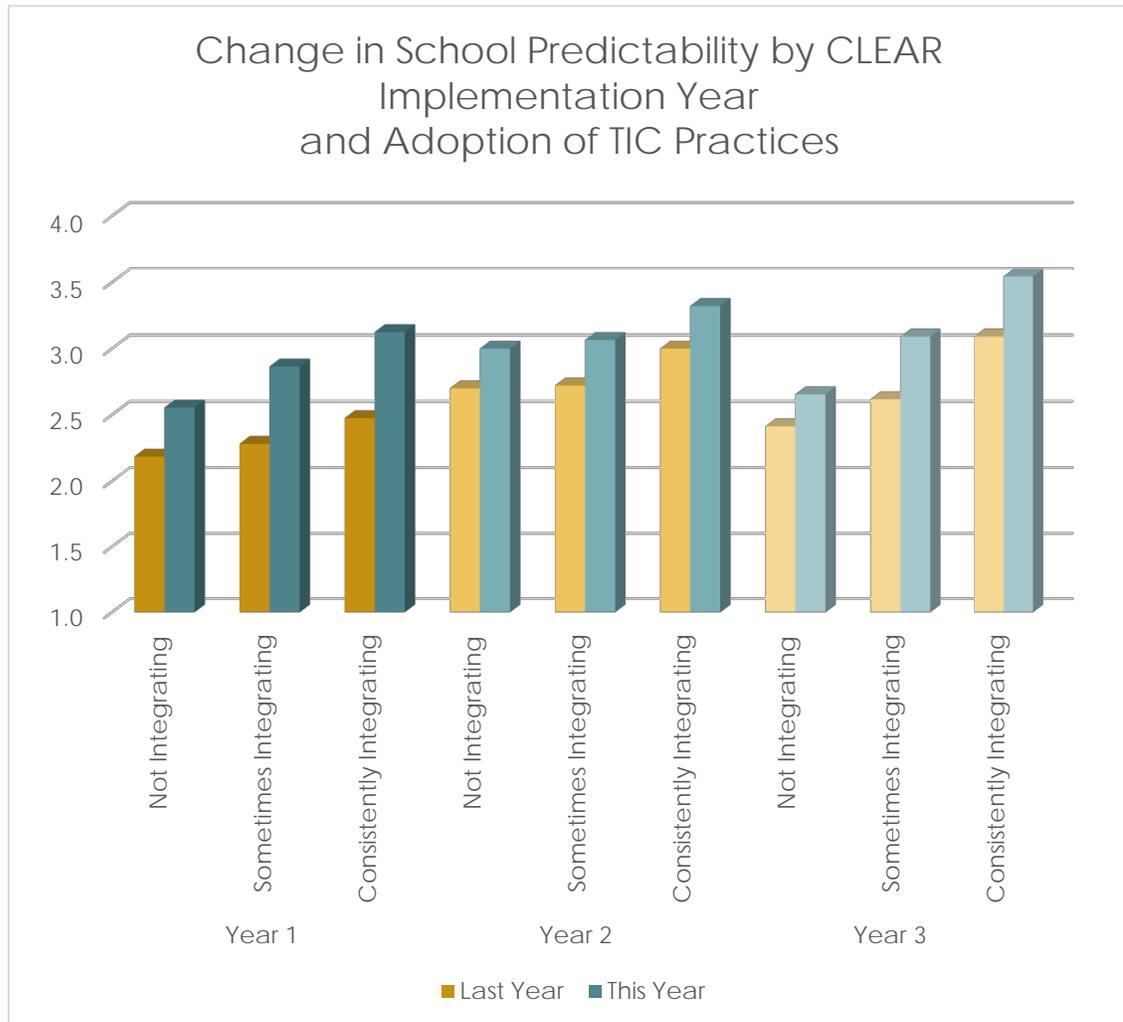
Interaction implementation year X Change over time: ns

Main effect for TIC Adoption: $F(2, 373) = 11.8, p < .001$

TIC Adoption X Change over time: ns

TIC Adoption X Implementation year: ns

TIC Adoption X Implementation year X Time: ns



Main effect for implementation year: $F(2, 373) = 10.0, p < .001$

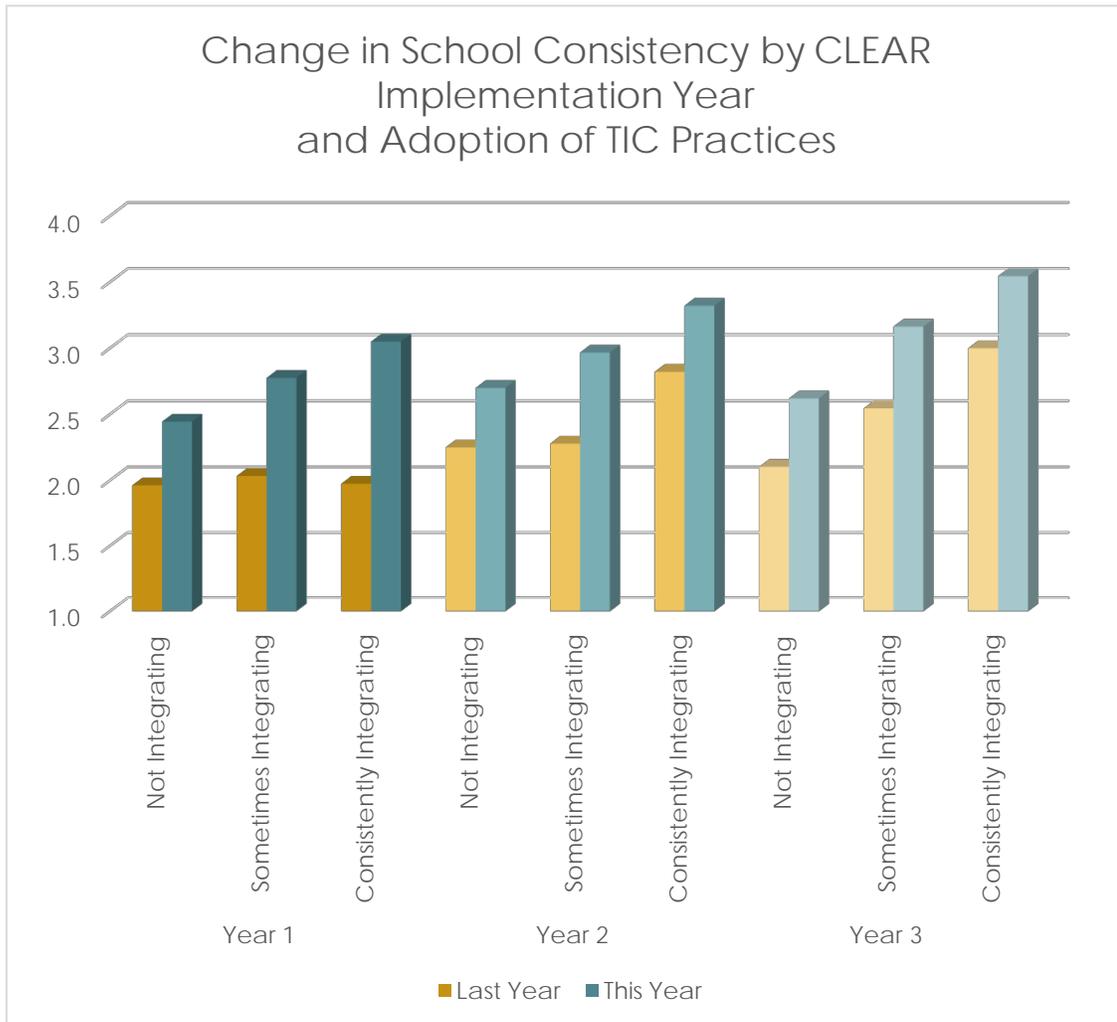
Interaction implementation year X Change over time: $F(2, 373) = 3.0, p < .05$

Main effect for TIC Adoption: $F(2, 373) = 12.4, p < .001$

TIC Adoption X Change over time: ns

TIC Adoption X Implementation year: ns

TIC Adoption X Implementation year X Time: ns



Main effect for implementation year: $F(2, 373) = 15.9, p < .001$

Interaction implementation year X Change over time: $F(2, 373) = 3.2, p < .04$

Main effect for TIC Adoption: $F(2, 373) = 19.3, p < .001$

TIC Adoption X Change over time: ns

TIC Adoption X Implementation year: ns

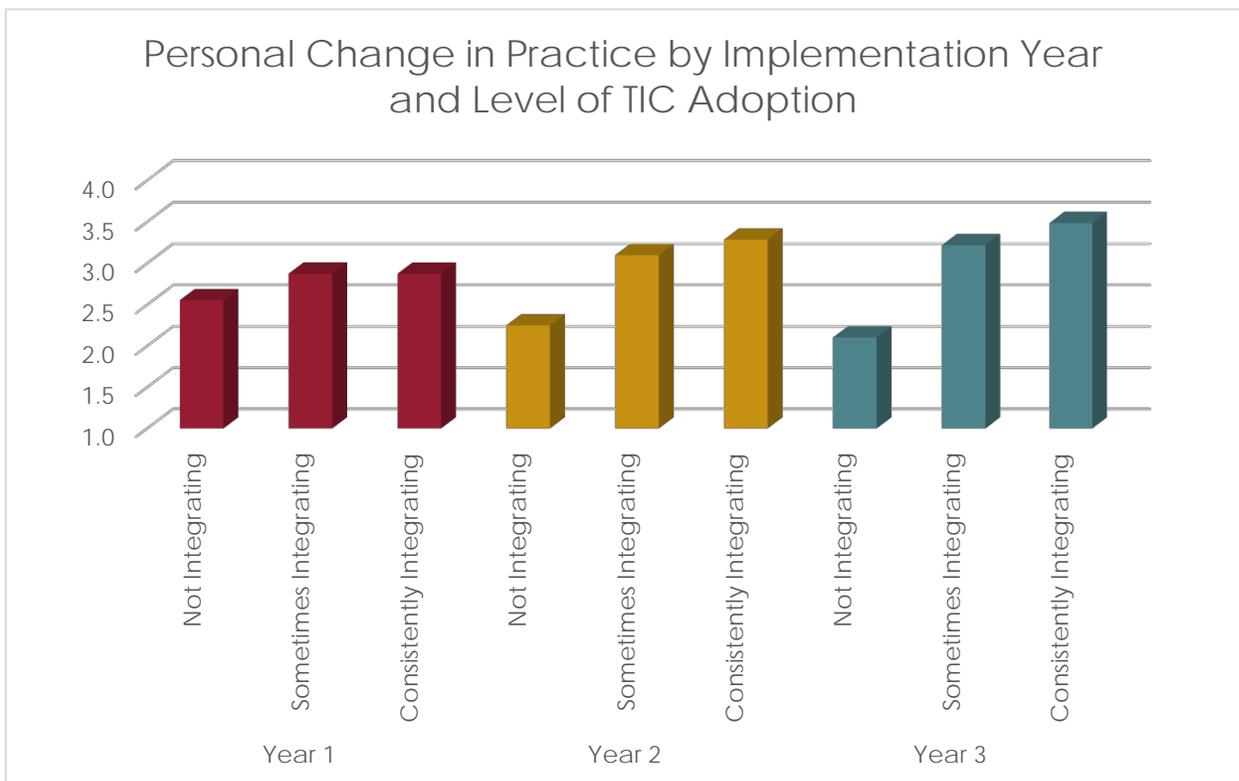
TIC Adoption X Implementation year X Time: ns

THE ASSOCIATION OF INCREASED TIC PRACTICE ADOPTION WITH CHANGE IN SCHOOL SUCCESS INDICATORS

To assess the impact on school success indicators, staff were asked to rate the degree to which a positive shift in personal practice, student behavior, staff-student engagement, and school climate had occurred that they attribute to the CLEAR intervention. The rating scale was:

1. Not at all
2. Minimal shift
3. Moderate shift
4. Significant shift

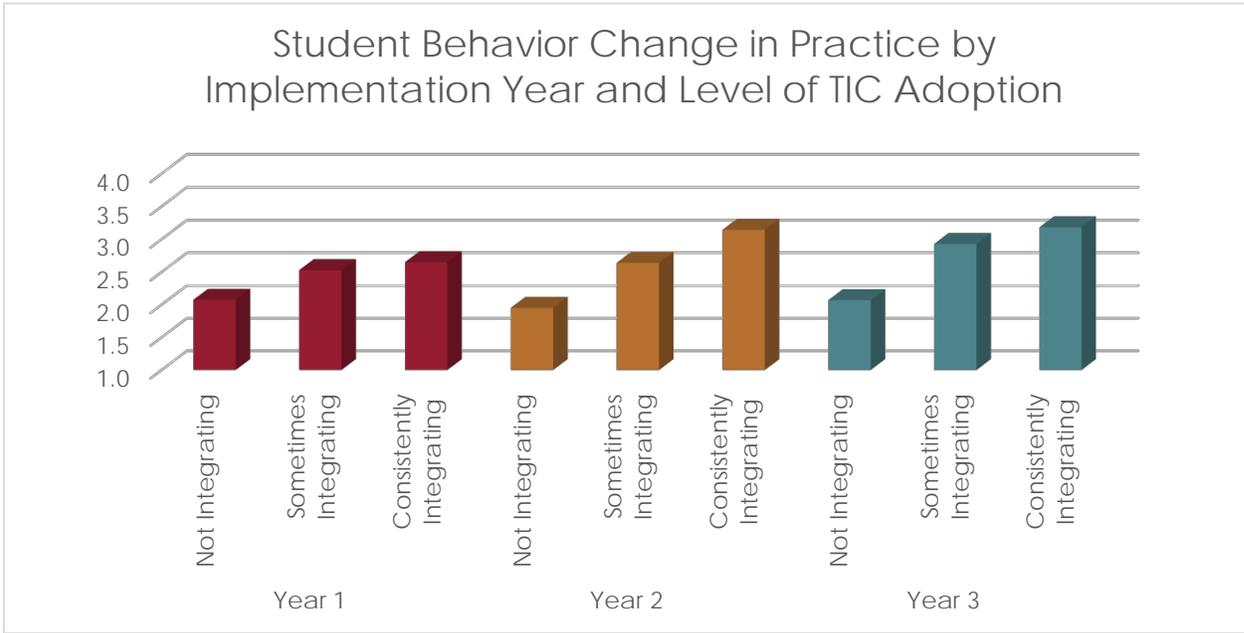
Detailed in the following figures, staff report that CLEAR has had significant benefits on each of the four dimensions mediated by the year of implementation and degree to which staff members report they have adopted TIC practices.



Main effect for implementation year: ns

Main effect for TIC Adoption: $F(2, 373) = 32.0, p < .001$

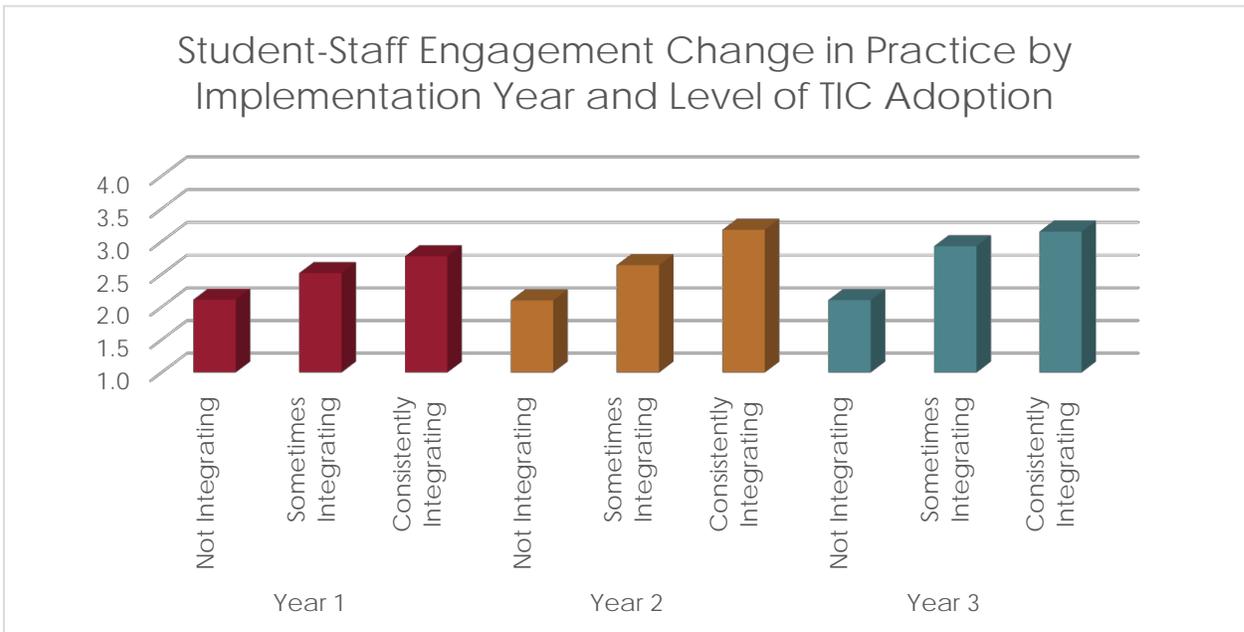
TIC Adoption X Implementation year: $F(2, 373) = 3.9, p < .04$



Main effect for implementation year: $F(2, 373) = 5.1, p < .007$

Main effect for TIC Adoption: $F(2, 373) = 37.3, p < .001$

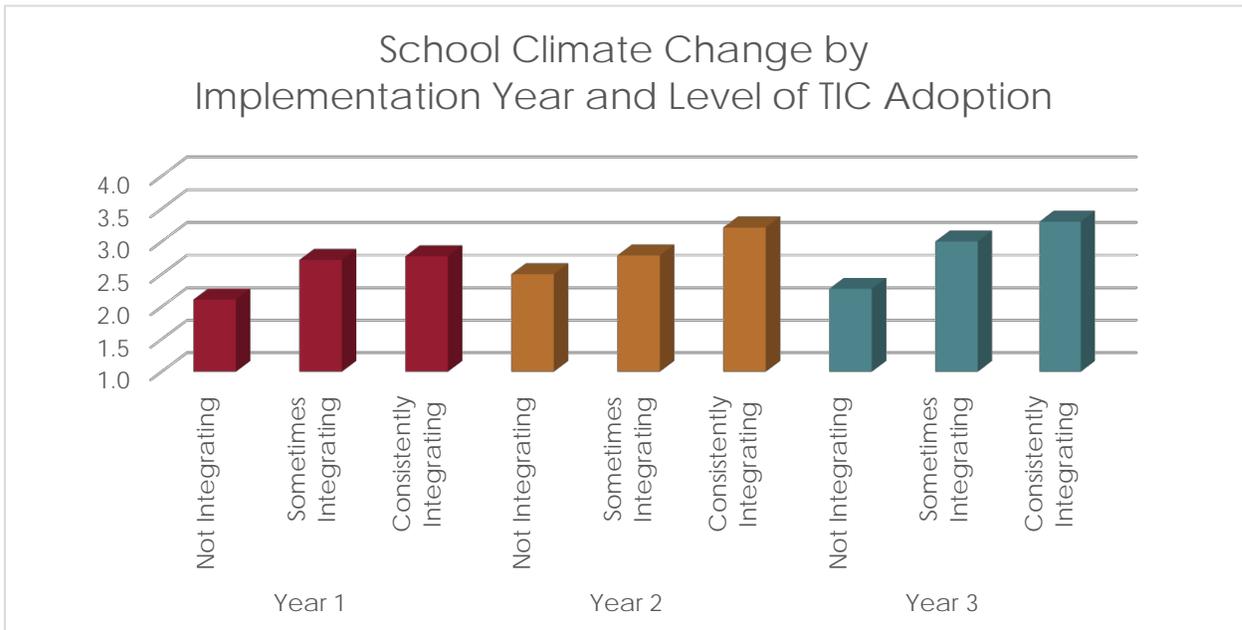
TIC Adoption X Implementation year: ns



Main effect for implementation year: $F(2, 373) = 3.5, p < .03$

Main effect for TIC Adoption: $F(2, 373) = 32.1, p < .001$

TIC Adoption X Implementation year: ns



Main effect for implementation year: $F(2, 373) = 6.6, p < .002$

Main effect for TIC Adoption: $F(2, 373) = 24.7, p < .001$

TIC Adoption X Implementation year: ns

SUPPORT FOR CLEAR CONTINUING IN SCHOOLS

In CLEAR, participating schools re-consent to the continuation of the program at the end of Year 1 and Year 2. The re-consent is based on anonymous survey response in the end-of-year survey. For Year 1 and Year 2 school staff in the current survey, 89% of participants agree (37%) or strongly agree (52%) that CLEAR should continue in their school.

Preliminary Evidence for CLEAR's Ability to Increase Academic Success

In CLEAR, we contend that the ultimate goal of trauma-informed whole-school change is to increase the academic success of the entire school. In order to examine the effect of CLEAR on overall school academic success, we compared CLEAR intervention schools' standardized test results with matched schools not receiving CLEAR. All schools in this analysis are Washington State schools to permit common assessment.

Using publicly available pass percentages for buildings on Washington State's standardized state tests of English language arts and Math, we compared CLEAR schools with performance in three groups of matched schools. Three independently selected matched comparison groups were used to test that any observed differences were not simply a result of what schools were selected in comparison groups. Comparison schools were matched for size of school, type of community (rural, suburban, urban), percent free and reduced meal enrollment, percent of teachers with master's degrees, average years of teaching experience in the school, and percent of Hispanic students. The three groups of comparison schools were selected without knowledge of their standardized test performance.

CLEAR intervention schools are all high need, low income schools. Across the intervention and comparison groups mean percent of students enrolled in free and reduced meal programs, a proxy measure for poverty, was 66%. Non-Caucasian student enrollment in the intervention and comparison schools was a mean of 47%. Mean Hispanic enrollment across the groups was 24%. Mean Special Education enrollment across the groups was 16%.

Standardized test results are reported as the percent of students in a grade who passed the test in a given year. Because of the number of elementary schools in CLEAR, we compared change from the 2014 to 2015 academic years in

grades 3, 4, and 5. Washington State adopted the Smarter Balanced assessment protocol as one of 15 states using this assessment approach to align with the Common Core educational standards. In Washington State, 2014 was the first year of statewide adoption of the new assessments.

Total school enrollment across the six intervention schools and the 20 comparison schools was 11,651 students (2,585 students in the intervention schools and 9,065 students in comparison schools). The intervention and comparison groups were confirmed to be equivalent with respect to enrollment, percent Hispanic students, percent teachers with master's degrees, average years of teaching experience in schools, percent of students enrolled in free and reduced meal programs, percent special education enrollment, percent enrollment of racial groups, and teacher-student ratios. CLEAR performance includes six schools represented by 14 grades with testing results, with the comparison groups comprising 6-8 schools per group and testing results for 20 grades in comparison group 1, 18 grades in comparison group 2, and 17 grades in comparison group 3. Comparison group 1 included 8 schools to correct for some missing grade level test results.

School change on the tests of English language arts and Math were compared as repeated measures analyses of covariance with percent of special education students and average years of teaching experience as the covariates. The two covariates were included because they each can significantly influence test results and within groups there were significant differences on these dimensions.

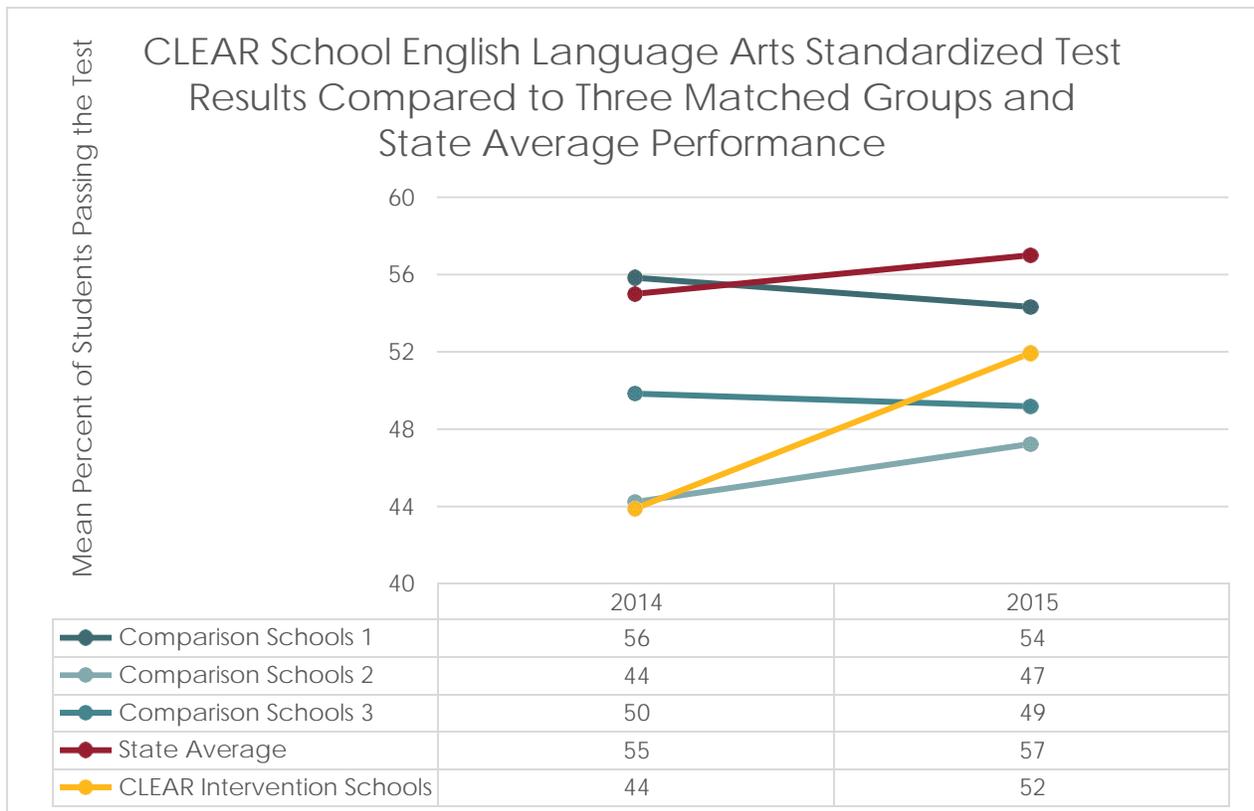
We find that CLEAR intervention schools showed significant gains in English language arts. CLEAR intervention schools increased mean percent of students passing the test compared to flat performance in each of the three comparison groups. CLEAR schools demonstrated a mean

two percentage point gain on the Math state test compared to flat or reduced performance in the three matched comparison groups but the result was not statistically significant.

The 2014 English language arts test results indicate that CLEAR intervention schools were performing at levels significantly lower than the state average for grades 3-5 and lower than two of the three comparison groups [F(3, 63) = 2.54, p<.06]. In 2015, CLEAR intervention schools demonstrate significant increases in mean pass percentages for English language arts demonstrating a mean increase in percent passing the test of eight points across the six schools. While still lagging in performance compared to Washington State averages, the gap in performance between the CLEAR intervention schools and the state average was reduced from a mean 11 point difference in pass percentage in 2014 to a mean five point difference in pass percentage in 2015.

To our knowledge, this report is the first demonstration that an approach to trauma-

informed school practice can result in meaningful and statistically significant gains in schoolwide academic performance. It is also one of the first comparison group tests of trauma-informed school performance relative to schools not engaged in trauma-informed change processes. While trauma-informed practices in schools have shown promising results for attendance, disciplinary practices, and staff adjustment in a number of reports, academic outcomes have been difficult to document because many instances of trauma-informed school practices are based on single schools. CLEAR, while still a small program in terms of implementing sites, has been disseminated in enough sites to permit more rigorous analyses. We believe that the spread of adoption of trauma-informed school practices will ultimately depend on evidence that this approach can meaningfully support schools' core mission as academic institutions. While the findings in this analysis are based on a small number of buildings, the initial evidence is that the CLEAR intervention model holds promise for broad-based improvement in academic outcomes.



School groups change over time: F (3, 63) = 2.89, p<.04

DISCUSSION

To our knowledge, this report is the first opportunity to look at how shifts in trauma-informed practice by staff impact school-wide conditions for academic success. A specific benefit of CLEAR is that we can begin to specify the process of change and what actions influence change. While the specific areas of change reflect our interpretation of trauma-informed best practices, the value of specifying the change mechanisms and associating changes with specific outcomes may serve as a useful model for other trauma-informed strategies.

A challenge in the overall field of trauma-informed schools work is that the excitement about potential benefits from this approach is greater than our evidence about what describes effective practice. This gap is further complicated by (1) the fact that much of trauma-informed school practice is locally defined and supported and (2) we have no agreement on critical indicators of success. CLEAR offers one of the most formally defined intervention models for whole school change currently available. Embedded in CLEAR is a set of practice changes in staff that we believe can create the conditions for significant school change. As a result, CLEAR is well-situated to assess if intended change is occurring and if this change is resulting in important shifts in the wellbeing of schools.

Ultimately, we believe that the test for trauma-informed school reform is the capacity of these interventions to improve overall academic success in schools. However, whole school change that results in significant shifts in academic success is a multi-year process. Given the stage of development in the field, over shorter intervention periods we first need to demonstrate shifts in school conditions that are established predictors of improved academic success that can serve as short term indicators of trauma-informed school intervention benefits. In this report, we have focused on staff perceptions of student behavior,

the quality of staff-student engagement based on staff report, and staff ratings of overall school climate. All three indicators of school wellbeing are established as significant predictors of academic success.

Based on this survey method, we are able to demonstrate that staff in CLEAR schools are reporting overall increased adoption of trauma-informed practice as introduced in CLEAR. We assert in the CLEAR model that the role of the consultant is critical to shifting practice. The current results support the conclusion that staff who have individually engaged the CLEAR consultant report greater gains in adoption of trauma-informed practices. We also assert in CLEAR that shifts in adoption of trauma-informed practices needs to progress over several years. Again, the survey results indicate that for many of our measures there is a progressive gain in reported practice in Years 2 and 3 compared to Year 1. Finally, we are able to demonstrate that as adoption of trauma-informed practice increases, staff report that CLEAR has positively changed staff's perceptions of student behavior, student-staff engagement, and overall school climate.

There are several limitations to this survey that need to be acknowledged. First, while we are comparing across implementation years, each program year includes different schools and we cannot separate the effects of school differences from the effect of the stage of implementation. Second, while we were able to include a sizeable sample of staff across buildings, the number of buildings served by CLEAR is small and again school differences may impact these results in ways we cannot adjust. Third, while the retrospective baseline program evaluation design is an established evaluation methodology, there remains the possibility that there is a response set bias that influences the overall positive shifts in practice we report.

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