Mental Health: Multi-tiered Interventions to Create Trauma-informed Schools

Summary Evidence Table

This table outlines information from the studies included in the Community Guide systematic review of Family-based Interventions to Prevent Substance Use Among Youth. It details study quality, population and intervention characteristics, and study outcomes considered in this review. Complete references for each study can be found in the Included Studies section of the review summary

Abbreviations Used in This Document:

- Intervention components
  - TIS: trauma-informed schools
  - SEL: social-emotional learning
  - CBITS: Cognitive Behavioral Intervention for Trauma in Schools
- Measurement terms
  - CI: confidence interval
  - pct pts: percentage points
  - SD: standard deviation
- Study design
  - RCT: randomized control trial
- Other terms:
  - NA: not applicable
  - NR: not reported
  - NS: not significant
  - SES: socioeconomic status

- ACEs: Adverse Childhood Events
- PTSD: post-traumatic stress disorder

Notes:
- Suitability of design includes three categories: greatest, moderate, or least suitable design. Read more >>
- Quality of Execution – Studies are assessed to have good, fair, or limited quality of execution. Read more >>
- Race/ethnicity of the study population: The Community Guide only summarizes race/ethnicity for studies conducted in the United States.

Study	Population Characteristics	Intervention Characteristics	Results
Author, Year Baez, 2019 **Location** US: NY **Study design** Before-after **Suitability of design** Least **Quality of Execution: Fair** **Limitations: 2** Sampling, loss to follow-up	**Eligibility criteria for inclusion in evaluation** Student in participating school **Total sample population** Schools: 2 Students: 500 **Demographics** Age: NR Sex: NR Race/Ethnicity: 83.7% Hispanic, 12.6% Black, <2% White, 1.8% Asian SES: Low, "high poverty" 30-42%; high parental unemployment: 16-18%; >80% free lunch Disability: Special needs: 22.5-24.6% Trauma: 77% experienced 1 or more ACEs; 37% 2-3 ACEs; 18% 4+ ACEs Types of trauma experienced: Two most common were neighborhood violence, separation/divorce of parents	**Setting** School level: Middle School School grades: NR **Dates of implementation** 2015-2017 **Evaluation duration** 21 months **Geographic scale** Urban **Intervention:** Intervention name: NR Framework: NR Tier 1 Student Strategies: Screening, SEL Adult Strategies: Training for teachers, teacher/staff psychoeducation, parent engagement Programmatic/Policy Strategies: Field trips and assemblies, milieu support: transitions, family events, group celebrations Tier 2 Student Strategies: Trauma-specific group therapy, mentoring for chronic absenteeism Adult Strategies: NA Programmatic/Policy Strategies: Crisis de-escalation and mediation	**Internalizing/Externalizing Student Behaviors Combined** Outcome measure: Problem behaviors (externalizing, bullying, hyperactivity/inattention, and internalizing) measured by the Social Skills Improvement System Rating. Tier measured: Tier 1 Results: Pre: 1.75 Post: 1.62 Absolute difference: -0.13, NS Relative difference: -7.4% **Paper conclusions:** The evaluation found that students reported lower social skills and higher problem behaviors as the level of reported traumatic experience increased. In addition, students with higher reported levels of trauma reported more problem behaviors over the course of a school year, in spite of receiving additional interventions.

Study	Population Characteristics	Intervention Characteristics	Results
		Tier 3 Student Strategies: Individual trauma-specific therapy, referrals or partnering to other local mental health providers, home-based intervention, family meetings Adult Strategies: NA Programmatic/Policy Strategies: NA Comparison: NA	
Author, Year Beehler 2012 **Location** US: NJ **Study design** Before-after **Suitability of design** Least **Quality of Execution: Fair** **Limitations: 3** Sampling, data analysis, bias	**Eligibility criteria for inclusion in evaluation** Schools in Jersey City and Clifton, NJ **Total sample population** Schools: 9 Students: 1034 **Demographics** Mean age: 14.4 Sex: 63.1% female Race/Ethnicity: NR Immigrant Status: 50% born outside of the US SES: Middle/high Disability: NR Trauma: Average of 4 traumatic events Types of trauma experienced: Community violence, traumatic loss or bereavement, physical maltreatment/abuse/assault, and domestic violence	**Setting** School level: Elementary, Middle, High School School grades: K-12 **Dates of implementation** NR; Data were collected every 3 months; study took place over 3 years **Evaluation duration** 3 years **Geographic scale** Urban and suburban **Intervention:** Intervention name: Cultural Adjustment and Trauma Services (CATS) Framework: Family, Adult, and Child Engagement Services model Tier 1 Student Strategies: Screening, support for students who are upset	**PTSD** Outcome measure: PTSD Symptomology measured using the UCLA PTSD Reaction Index (RI) Tier measured: Tier 3 Results: Pre: 24.22 Post: 15.52 Absolute difference: -8.7 (p<0.05) Relative difference: -35.9% **Internalizing/Externalizing Student Behaviors Combined** Outcome measure: Functional impairment measured using the Child and Adolescent Functional Assessment Scale Tier measured: Tier 3 Results: Pre: 48.71 Post: 21.33 Absolute difference: -27.4 (p<0.01) Relative difference: -56.2%

Study	Population Characteristics	Intervention Characteristics	Results
		or distracted in class, wraparound support Adult Strategies: Training for teachers, education for caregivers Programmatic/Policy Strategies: NA Tier 2 Student Strategies: Psychoeducation for at-risk students, screening, also provided tangible assistance to students and wraparound support Adult Strategies: NR Programmatic/Policy Strategies: Programming (school and program staff created a system to ensure new immigrant students were introduced to CATS program staff within the first week of arriving at school and created a special acculturation group to help orient them to the new culture and school). Tier 3 Student Strategies: Individual trauma-specific therapy, wraparound support Adult Strategies: Family therapy/meetings Programmatic/Policy Strategies: NA Comparison: NA	**Paper Conclusions:** CATS services resulted in improved functioning and fewer PTSD symptoms for their clients. Functional impairment decreased as a result of greater cumulative totals of supportive therapy, TF-CBT, and CBT services. PTSD symptoms decreased as a result of greater cumulative totals of TF-CBT and coordinating services.

Study	Population Characteristics	Intervention Characteristics	Results
Author, Year Diggins 2021 **Location** Non-US: Australia **Study design** Before-after **Suitability of design** Least **Quality of Execution: Fair** **Limitations: 2** Data analysis, loss to follow-up	**Eligibility criteria for inclusion in evaluation** All students at one of the school campuses were exposed to the intervention, but only students with two valid data points were included in the analyses. **Total sample population** Schools: 1 Students: 64 **Demographics** Mean age: 12.5 Sex: 11% female Race/Ethnicity: 22% Aboriginal or Torres Strait Islander SES: NR Disability: Many of the students in the population had existing diagnoses including autism spectrum disorder (50%), ADHD (50%), and anxiety (56%). Occupational Defiance Disorder (ODD) diagnosis = 22% Trauma: NR Types of trauma experienced: NR	**Setting** School level: Elementary, Middle, High School School grades: K-12 **Dates of implementation** December 2018-December 2019 **Evaluation duration** 12 months **Geographic scale** Urban **Intervention** Intervention name: The Rethinking Learning and Teaching Environments (ReLATE) Framework: SAMHSA principles of trauma informed care, 'Helping Traumatized Children Learn', and the National Child Traumatic Stress Network literature Tier 1 Student Strategies: Screening, SEL, psychoeducation, safety plans for all students Adult Strategies: Training for teachers, teacher/staff psychoeducation Programmatic/Policy Strategies: NA Tier 2 Student Strategies: Psychoeducation for at-risk students, screening, trauma-specific group therapy	**Internalizing/Externalizing Student Behaviors Combined** Outcome measure: Total difficulties (combination of emotional symptoms, conduct problems, hyperactivity, & peer problems) measured by the Strength & Difficulties Questionnaire Tier measured: Tier 1 Results: Pre:　25.0 Post:　17.75 Absolute difference: -7.3 (p<0.01) Relative difference: -29.0% **Quality of Life** Outcome measure: Total impact (impact of students' behavior on family, homelife, friendships, learning and leisure activities) measured by the Strengths & Difficulties Questionnaire Tier measured: Tier 1 Results: Pre:　7.14 Post:　4.14 Absolute difference: -3.0 (p=0.08) Relative difference: -42.0% **Paper Conclusions:** This study demonstrated that over 12 months, a schoolwide trauma-informed intervention model led to a range of emotional and behavioral benefits with moderate to large effect sizes.

Study	Population Characteristics	Intervention Characteristics	Results
		Adult Strategies: NA Programmatic/Policy Strategies: NA Tier 3 Student Strategies: Individual trauma-specific therapy Adult Strategies: Referrals/crisis support for trauma-impacted school staff Programmatic/Policy Strategies: NA Comparison: NA	
Author, Year Dorado 2016 **Location** US: CA **Study design** Before-after **Suitability of design** Least **Quality of Execution: Fair** **Limitations: 3** Description, measurement: exposure, other changes occurred simultaneously	**Eligibility criteria for inclusion in evaluation** Schools were chosen based on need, principal buy-in and good-enough infrastructure. **Total sample population** Schools: 4 Students: 1243 **Demographics** Mean age: 8.5 Sex: 47% female Race/Ethnicity: 38% African American, 4% Asian, 8% Pacific Islander, 4% Filipino, 2% White, 4% two or more Races, 1% American Indian or Alaska Native, 4% race/ethnicity not reported 34 % Hispanic or Latino of any race SES: Low, 76% students qualifying for free or reduced lunch Disability: NR Trauma: NR	**Setting** School level: Elementary, Middle School School grades: K-8th **Dates of implementation** 2009-2014 **Evaluation duration** 60 months **Geographic scale** Urban **Intervention** Intervention name: Health Environments and Response to Trauma in Schools (HEARTS) Framework: RTI, PBIS, RJ, The Attachment, Self-Regulation, and Competency (ARC) framework Tier 1	**Externalizing Student Behaviors** Outcome measure: Arousal regulation measured by the Child and Adolescent Needs and Strengths Tier measured: Tier 3 Results: Pre: 1.93 Post: 1.54 Absolute difference: -0.4 (p=0.000) Relative difference: -20.2% **Internalizing Student Behaviors** Outcome measure: Intrusions measured by the Child and Adolescent Needs and Strengths Tier measured: Tier 3 Results: Pre: 0.61 Post: 0.33 Absolute difference: -0.3 (p=0.026)

Study	Population Characteristics	Intervention Characteristics	Results
	Types of trauma experienced: NR	Student Strategies: Screening, SEL, psychoeducation Adult Strategies: Training for teachers, education for caregivers, community engagement Programmatic/Policy Strategies: school policy change Tier 2 Student Strategies: Psychoeducation for at-risk students Adult Strategies: Strategies for caregivers, wellness support for teachers/staff Programmatic/Policy Strategies: On-site consultation Tier 3 Student Strategies: Individual trauma-specific therapy, referrals or partnering to local mental health provider Adult Strategies: Referrals/crisis support for trauma-impacted school staff, family therapy/meetings Programmatic/Policy Strategies: District-wide focus to improve access to tier 3 services Comparison: NA	Relative difference: -45.9% **Disciplinary actions** Outcome measure: # of disciplinary incidents measured by office referrals and suspensions Tier measured: Tier 1 Results: Pre: 674 Post: 87 Absolute difference: -587 (p<0.001) Relative difference: -87.1% Outcome measure: # of incidents involving physical aggression measured by office referrals and suspensions Tier measured: Tier 1 Results: Pre: 407 Post: 58 Absolute difference: -349 (p<0.001) Relative difference: -85.7% Outcome measure: # of out of school suspensions measured by office referrals and suspensions Tier measured: Tier 1 Results: Pre: 56 Post: 3 Absolute difference: -53 (p<0.001) Relative difference: -94.6% **Quality of Life**

Study	Population Characteristics	Intervention Characteristics	Results
			Outcome measure: Adjustment to trauma (how students are able to function in daily living) measured by the Child and Adolescent Needs and Strengths Tier measured: Tier 3 Results: Pre: 1.96 Post: 1.50 Absolute difference: -0.46 (p=0.00) Relative difference: -23.5% **Paper Conclusions:** School personnel who responded to the Program Evaluation Survey reported significant increases in their understanding of trauma and use of trauma-sensitive practices, as well as significant improvements in their students' ability to learn, time on task and school attendance. Authors also report a significant drop in disciplinary office referrals, incidents involving physical aggression and out-of-school suspensions. HEARTS clients improved in their adjustment to trauma (how they are able to function in daily living), affect regulation (ability to identify, express and modulate emotions), intrusions (thoughts related to the trauma that impact attention and behavior), attachment (ability to relate to others and develop healthy relationships) and dissociation.

Study	Population Characteristics	Intervention Characteristics	Results
Author, Year Ellis 2013 **Location** US: New England **Study design** Before-after **Suitability of design** Least **Quality of Execution: Fair** **Limitations: 3** Description, loss to follow-up, bias	**Eligibility criteria for inclusion in evaluation** 1 school with Somali and Somali Bantu students who are English language learners **Total sample population** Schools: 1 Students: 30 **Demographics** Mean age: 13 Sex: 36.7% female Race/Ethnicity: 60% Somali, 40% Somali Bantu SES: NR Disability: NR Trauma: NR Types of trauma experienced: NR	**Setting** School level: Middle School School grades: 6-8 **Dates of implementation** 2008-2009 **Evaluation duration** 12 months **Geographic scale** Urban **Intervention** Intervention name: Project SHIFA (Supporting the Health of Immigrant Families and Adolescents) Framework: Inter-Agency Standing Committee's intervention pyramid for mental health and psychosocial support Tier 1 Student Strategies: Screening, SEL Adult Strategies: NA Programmatic/Policy Strategies: NA Tier 2 Student Strategies: Screening, school-based skill-building psychotherapy Adult Strategies: NA Programmatic/Policy Strategies: NA	**PTSD** Outcome measure: PTSD Symptomology measured by the UCLA PTSD RI-1 Tier measured: Tier 1, 2, and 3 Results: Pre: Tier 1 0.66, Tier 2 0.93, Tier 3 1.01 Post: Tier 1 0.43, Tier 2 0.36, Tier 3 0.66 Absolute difference: Tier 1 -0.23, Tier 2 -0.57, Tier 3 -0.35 Relative difference: Tier 1 -34.8%, Tier 2 -61.3%, Tier 3 -34.7% **Depression** Outcome measure: Depression symptoms measured by the Depression Self-Rating Scale Tier measured: Tier 1, 2, and 3 Results: Pre: Tier 1 0.35, Tier 2 0.49, Tier 3 0.65 Post: Tier 1 0.22, Tier 2 0.32, Tier 3 0.4 Absolute difference: Tier 1 -0.13, Tier 2 -0.17, Tier 3 -0.25 Relative difference: Tier 1 -37.1%, Tier 2 -34.7%, Tier 3 -38.5% **Quality of Life** Outcome measure: Resource hardship measured by the Post-War Adversities Scale Tier measured: Tier 1, 2, and 3 Results: Pre: Tier 1 0.15, Tier 2 0.16, Tier 3 0.18 Post: Tier 1 0.05, Tier 2 0.05, Tier 3 0.22 Absolute difference: Tier 1 -0.1, Tier 2

Study	Population Characteristics	Intervention Characteristics	Results
		Tier 3 Student Strategies: Individual trauma-specific therapy, referrals or partnering to local mental health providers, home-based interventions Adult Strategies: NA Programmatic/Policy Strategies: NA Comparison: NA	-0.11, Tier 3 0.04 Relative difference: Tier 1 -66.7%, Tier 2 -68.8%, Tier 3 22.2% **Paper Conclusions:** Participants in Tiers 2, 3, and 4 (equivalent to tiers 1, 2, and 3 by Community Guide's intervention definition) showed reductions in PTSD symptoms. Participants in all tiers showed reductions in symptoms of depression and participants in tiers 1 and 2 showed reductions in resource hardships over time.
Author, Year Hansel 2010 **Location** US: LA **Study design** Before-after **Suitability of design** Least **Quality of Execution: Fair** **Limitations: 4** Description, sampling, loss to follow-up, bias	**Eligibility criteria for inclusion in evaluation** Student in school that signed up for program, parental consent **Total sample population** Schools: NR Students: 157 **Demographics** Mean age: 14.0 Sex: 47.8% female Race/Ethnicity: NR SES: Low, 73% (median) eligible for free/reduced price lunch; 19% median of 3 parishes below federal poverty level Disability: NR Trauma: Mean number of ACEs = 2.3 Types of trauma experienced: 63% traumatic loss/bereavement, 39% domestic violence, 28% impaired caregiver, 20% natural disaster, 11% community violence, 10% school violence, 9% sexual assault/rape, 9% emotional abuse, 6% sexual abuse, 5% physical abuse, there are others reported.	**Setting** School level: Elementary, Middle, High School School grades: 1-12 **Dates of implementation** 2003-2007 **Evaluation duration** NR **Geographic scale** Rural **Intervention** Intervention name: NR Framework: NR Tier 1 Student Strategies: Screening Staff/Caregiver Strategies: Training for teachers, teacher/staff psychoeducation, teacher/staff consultation Programmatic/Policy Strategies: NA	**PTSD** Outcome measure: Proportion meeting PTSD diagnostic criteria measured by the UCLA PTSD RI-1 Tier measured: Tier 3 Results: Pre: 26.1 Post: 17.9 Absolute difference: -8.2, p<.01 Relative difference: -31.5% **Externalizing Student Behaviors** Outcome measure: Anger measured by the Trauma Symptoms Checklist for Children Tier measured: Tier 3 Results: Pre: 8.1 Post: 6.8 Absolute difference: -1.3 Relative difference: -15.6% **Depression**

Study	Population Characteristics	Intervention Characteristics	Results
		Tier 2 Student Strategies: Screening Staff/Caregiver Strategies: NA Programmatic/Policy Strategies: On-site consultation Tier 3 Student Strategies: Individual trauma-specific therapy Staff/Caregiver Strategies: NA Programmatic/Policy Strategies: NA Comparison: NA	Outcome measure: Depression symptoms measured by the Trauma Symptom Checklist for Children Tier measured: Tier 3 Results: Pre: 6.8 Post: 4.6 Absolute difference: -2.2, p<0.01 Relative difference: -32.1% **Anxiety** Outcome measure: Anxiety measured by the Trauma Symptom Checklist for Children Tier measured: Tier 3 Results: Pre: 5.9 Post: 3.9 Absolute difference: -2.0, p<0.01 Relative difference: -34.5% **Paper Conclusions:** The result of the three-tiered approach proved effective in reducing trauma symptoms for some students exposed to traumatic events.
Author, Year Holmes 2015 **Location** US: Midwest **Study design** Before-after **Suitability of design**	**Eligibility criteria for inclusion in evaluation** Preschools with Head Start program **Total sample population** Schools: 3 Students: 1100 Teachers: 400 Parents/Caregivers: 81	**Setting** School level: Pre-school School grades: Pre-K **Dates of implementation** 2011-2012 School Year **Evaluation duration** 24 months	**Externalizing Student Behaviors** Outcome measure: Externalizing behaviors measured by the Achenbach Teacher Report Tier measured: Tier 3 Results: Pre: 63.4 Post: 60.9

Study	Population Characteristics	Intervention Characteristics	Results
Least **Quality of Execution: Fair** **Limitations: 2** Sampling, data analysis	**Demographics** Mean age: 4.25 Sex: 36% female Race/Ethnicity: 39% African American, 15% White, 8% Latino/Latina, 3% other, 35% no response SES: Low Disability: NR Trauma: 74% of the caregivers reported that their child had been exposed to at least one traumatic event, 60% reported at least two traumatic events, and close to one-half (45%) reported exposure to three or more traumatic events Types of trauma experienced: Most commonly reported trauma was having a family member in jail/prison or taken away by police (see Table 2 for trauma type frequency)	**Geographic scale** Urban **Intervention** Intervention name: Head Start Trauma Smart Framework: The Attachment, Self-Regulation, and Competency (ARC) framework Tier 1 Student Strategies: Screening Staff/Caregiver Strategies: Training for teachers, education for caregivers, parent engagement, staff mentoring/support, teacher/staff consultation, community engagement Programmatic/Policy Strategies: Structural change Tier 2 Student Strategies: Screening, staff provided individualized interventions for the child, such as play therapy Staff/Caregiver Strategies: Strategies for caregivers/community, classroom support Programmatic/Policy Strategies: NA Tier 3 Student Strategies: Individual trauma-specific therapy Staff/Caregiver Strategies: NA	Absolute difference: -2.5, p<0.05 Relative difference: -3.9% **Student-Staff Relationships** Outcome measure: Emotional support domain measured by the Classroom Assessment Scoring System (CLASS) Tier measured: Tier 3 Results: Pre: 4.6 Post: 5.33 Absolute difference: 0.73 Relative difference: 15.9% **Paper Conclusions:** Significant improvements were seen in the teacher report of key externalizing outcomes. Parents noted positive changes in both internalizing and externalizing behaviors. Parents, teachers, and administrators generally reported satisfaction with the HSTS program.

Study	Population Characteristics	Intervention Characteristics	Results
		Programmatic/Policy Strategies: NA Comparison: NA	

Author, Year
Hutchison 2019
 	
Location
US: CT
 	
Study design
Before-after with concurrent comparison
 	
Suitability of design
Greatest
 	
Quality of Execution
Fair
 	
Limitations: 2
Measurement (exposure), data analysis
	Eligibility criteria for inclusion in evaluation
	Students must attend participating school. Schools selected based on comparable characteristics. Consent to participate.
	
	Total sample population
	Total sample population
	Schools: 2
	Students: 245
	
	Demographics
	Mean age: 8.7 years old
	Sex: 44.5% female
	Race/Ethnicity: 71% Black, 15% Hispanic, 7% Multi-racial, 8% other or unknown
	SES: Mixed, 54% from households with low income
	Disability: NR
	Trauma: NR
	Types of trauma experienced: NR, communities characterized by indicators of increased risk to community violence including high unemployment, high poverty, and high crime rates
		Setting
		School level: Elementary, Middle
		School grades: K-8
		
		Dates of implementation
		Varies; measures completed in September, January, and May for a two-year school period
		
		Evaluation duration
		24 months
		
		Geographic scale
		Urban
		
		Intervention
		Intervention name: Aspire Connect Thrive (ACT) program
		
		Framework: Aspire, Connect, Thrive
		
		Tier 1
		Student Strategies: Screening, SEL, student-peer support, academic support
		
		Staff/Caregiver Strategies: Training for teachers, parent engagement
		
		Programmatic/Policy Strategies: Programming
		
		Tier 2
		Student Strategies: Psychoeducation
			PTSD
			
			Tier measured: Tier 1
			
			Outcome measure: Total score from trauma checklist measured by the Trauma Symptom Checklist for Young Children - Short Form (TSCYC); ages 3-8.
			
			Results:
			
			           Intervention Control
			Pre 24.2 24.8
			Post 24.1 25.6
			
			Absolute difference: -0.92
			Relative difference: -3.7%
			
			Outcome measure: Total score from trauma checklist measured by the Trauma Symptom Checklist for Children - Short Form (TSCC); ages 8-16
			
			Results:
			
			           Intervention Control
			Pre 7.1 6.6
			Post 7.2 6.4
			
			Absolute difference: 0.26
			Relative difference: 3.5%
			
			Paper Conclusions: No significant changes were found in PTSD symptoms. The authors found increased levels of social-emotional competence (SEC) as

Study	Population Characteristics	Intervention Characteristics	Results
		Staff/Caregiver Strategies: NA Programmatic/Policy Strategies: NA Tier 3 Student Strategies: Individual trauma-specific therapy, referrals or partnering to local mental health provider Staff/Caregiver Strategies: Referrals/crisis support for trauma impacted school staff Programmatic/Policy Strategies: NA Comparison: Comparable elementary school that did not receive the intervention	indicated by the teacher-completed rating scale for those who participated in the ACT intervention compared to those who did not. Those with elevated trauma scores at baseline reported increased SEC benefits.
Author, Year Perry 2016 **Location** US: CT **Study design** Before-after **Suitability of design** Least **Quality of Execution** Fair **Limitations: 3** Sampling, measurement (exposure), bias	**Eligibility criteria for inclusion in evaluation** Must be a New Haven public school; willing to implement the program **Total sample population** Schools: 1 Students: 77 **Demographics** Age: 10-12-year-olds Sex: NR Race/Ethnicity: 82% African American, 5% White, 13% Hispanic SES (info is for entire school): Low, 76% of students eligible for Free Lunch; 5% eligible for Reduced Lunch Disability: NR Trauma:41% saw someone in their town being beaten, shot, or killed;	**Setting** School level: School serving pre-k-middle school aged children School grades: School serves pre-k-8th grade, intervention implemented in 5th and 6th grades **Dates of implementation** NR **Evaluation duration** Intervention implemented over the school year **Geographic scale** Urban **Intervention** Intervention name: Professional Development; Care Coordination,	**PTSD** Outcome measure: Proportion of participants with PTSD Symptomology measured using the UCLA PTSD Reaction Index (RI) Tier measured: Tier 2 Results: Pre: 100.0 Post: 17.0 Absolute difference: -83.0 pct pts (p-value NR) Relative difference: -83.0% **Paper Conclusions:** The Clifford Beers Clinic (CBC) was able to provide some guidance that assisted school staff and/or community members in learning about

Study	Population Characteristics	Intervention Characteristics	Results
	65% knew about violent death or serious injury of a loved one Types of trauma experienced: Community and family violence	Clinical Services workshops, Clinical Services CBITS Framework: Milwaukee Wraparound philosophy Tier 1 Student Strategies: Screening, Psychoeducation Staff/Caregiver Strategies: Training for teachers and nonteaching staff Programmatic/Policy Strategies: NR Tier 2 Student Strategies: Screening, psychoeducation, trauma-specific group therapy (CBITS) Staff/Caregiver Strategies: Strategies for caregivers Programmatic/Policy Strategies: NR Tier 3 Student Strategies: Wraparound support Staff/Caregiver Strategies: NR Programmatic/Policy Strategies: NR Comparison: NA	trauma sensitive practices (tier 1); identifying students in need of trauma-informed support (tier 2); implementing systems to provide trauma-informed services to students (tier 3); and helping students learn skills in how to cope with current symptoms and how to respond to future stress (tier 3).
Author, Year Shamblin 2016 **Location** US: OH	**Eligibility criteria for inclusion in evaluation** Pre-K classrooms funded by the HRSA Outreach Grant or through Project LAUNCH	**Setting** School level: Preschool School grades Pre-K **Dates of implementation** 2011-2012	**Externalizing behavior** Outcome measure: Self-control measured by Devereux Early Childhood Assessment (DECA) Tier measured: Tier 1

Study	Population Characteristics	Intervention Characteristics	Results
Study design Before-after **Suitability of design** Least **Quality of Execution** Fair **Limitations: 3** Description, sampling, data analysis	**Total sample population** Schools: 5 Students: 217 **Demographics** Age: NR Sex: NR Race/Ethnicity: NR SES: Low, reported as population with economic hardship Disability: NR Trauma: NR Types of trauma experienced: NR	**Evaluation duration** 12 months **Geographic scale** Rural **Intervention** Intervention name: Project LAUNCH (Linking Action to Unmet Needs) and Partnerships Program Framework: Early Childhood Mental Health Consultation (ECMHC) models Tier 1 Student Strategies: Screening, SEL Staff/Caregiver Strategies: Teacher training, staff peer mentoring/support, Programmatic/Policy Strategies: NR Tier 2 Student Strategies: Screening, behavior plans for students Staff/Caregiver Strategies: Strategies for caregivers, classroom support Programmatic/Policy Strategies: NR Tier 3 Student Strategies: Individual trauma-specific therapy Staff/Caregiver Strategies: NR Programmatic/Policy Strategies: NR	Results: DECA results for the intervention group outperformed the control (increased scores on child self-control) **Student-staff relationships** Outcome measure: Positive attributes measured by Classroom Environment and Teacher Practices Tier measured: Tier 1 Results: Pre: 4.29 Post: 4.28 Absolute difference = -0.01 (p=0.91) Outcome measure: Negative attributes measured by Preschool Mental Health Climate Scale Tier measured: Tier 1 Results: Pre: 1.38 Post: 1.15 Absolute difference = -0.23 (p=0.004) (Favorable) **Paper Conclusions:** By positively impacting the resilience of children through the development of compassionate teacher relationships, the Partnerships Program, Project LAUNCH and participating schools have potentially made contributions toward diminishing the effects of trauma.

Study	Population Characteristics	Intervention Characteristics	Results
		Comparison: NA	
Author, Year Tabone 2020 **Location** US: WV **Study design** Before-after with concurrent comparison group **Suitability of design** Greatest **Quality of Execution** Fair **Limitations: 4** Description, sampling, loss to follow-up, bias	**Eligibility criteria for inclusion in evaluation** Schools needed to be in the rural panhandle of West Virginia Total sample population Schools: 11 Students: 94 classrooms (does not report # of students) **Demographics** Age: assume 4-7 based on grade level Sex: NR Race/Ethnicity: NR SES: NR Disability: NR Trauma: NR, but mentions over half of children in West Virginia experience at least one traumatic event including parental opioid overdose Types of trauma experienced: Over half of children in West Virginia experience at least one traumatic event including parental opioid overdose	**Setting** School level: elementary School grades: pre-K thru first grade **Dates of implementation** 2015/16 school year through 2018/19 school year **Evaluation duration** 36 months **Geographic scale** Rural **Intervention** Intervention name: Trauma-Informed Elementary Schools (TIES) Framework: The Attachment, Self Regulation, and Competency (ARC) framework Tier 1 Student Strategies: Screening, SEL Staff/Caregiver Strategies: Classroom training for teachers, training for other school staff, education for parents/caregivers Programmatic/Policy Strategies: NR Tier 2 Student Strategies: Screening, psychoeducation	**Student-Staff Relationships** Outcome measure: Emotional support domain of the Classroom Assessment Scoring System (CLASS) Tier measured: Tier 1 Results: Intervention Control Pre 5.35 5.65 Post 5.96 5.61 Adjusted difference = 0.95 ($p<0.001$) (favorable) **Paper Conclusions:** The current study found evidence of beneficial effects of the TIES program in cultivating a trauma-sensitive school climate and culture.

Study	Population Characteristics	Intervention Characteristics	Results
		Staff/Caregiver Strategies: Wellness support for school staff Programmatic/Policy Strategies: NR Tier 3 Student Strategies: Individual trauma-specific therapy, Referrals or partnering with local mental health provider Staff/Caregiver Strategies: NR Programmatic/Policy Strategies: NR Comparison: classrooms that did not receive the TIES intervention	