

## REL Southwest Ask A REL Response

June 2020

### Question:

*What is the evidence for the effectiveness of different school-based mental health resources or programs for promoting safe and supportive schools?*

### Response:

Thank you for the question you submitted to our REL Reference Desk. We have prepared the following memo with research references to help answer your question. For each reference, we provide an abstract, excerpt, or summary written by the study's author or publisher. Following an established Regional Educational Laboratory (REL) Southwest research protocol, we conducted a search for research reports as well as descriptive study articles on the effectiveness of various school-based mental health resources for promoting safe and supportive schools.

We have not evaluated the quality of references and the resources provided in this response. We offer them only for your reference. Also, we searched the references in the response from the most commonly used resources of research, but they are not comprehensive, and other relevant references and resources may exist. References provided are listed in sections with sources in each section in alphabetical order, not necessarily in order of relevance. We do not include sources that are not freely available to the requestor.

### Research References

#### Social-emotional learning/trauma-informed schools

Cook, C. R., Frye, M., Slemrod, T., Lyon, A. R., Renshaw, T. L., & Zhang, Y. (2015). An integrated approach to universal prevention: Independent and combined effects of PBIS and SEL on youths' mental health. *School Psychology Quarterly, 30*(2), 166–183. <https://eric.ed.gov/?id=EJ1167964>. Retrieved from <http://faculty.metrostate.edu/barrerma/SitePages/EDU310-610/PBIS%20Cook%20et%20al%202015.pdf>

*From the ERIC abstract:* “Mental health among children and adolescents is a growing national concern and schools have taken center stage in efforts to prevent problems and promote wellness. Although research and policymakers support the integration of mental health services into the schools, there is limited agreement on the ways to package or

combine existing supports to achieve prevention-oriented goals. Positive Behavioral Interventions and Supports (PBIS) and Social Emotional Learning (SEL) are 2 of the most widely adopted, evidence-based approaches that have been advocated to address student mental health. These universal prevention approaches, however, stem from different theoretical camps and are often advocated and implemented apart from one another. The purpose of this study was to examine the independent and combined effects of PBIS and SEL on student mental health outcomes. A quasi-randomized control design at the classroom level was used to make comparisons across 4 conditions: business-as-usual (BAU), PBIS alone, SEL alone, and COMBO condition with regard to their acceptability to teachers, integrity of program delivery, and student outcomes. As predicted, the COMBO condition produced significantly greater improvements in overall mental health and reductions in externalizing behaviors when compared to all other conditions. The results also indicated that the PBIS- and SEL-only conditions were both able to produce significant improvements in overall mental health functioning as compared with the BAU control. The implications of an integrated approach for school-based universal prevention and directions for future research are discussed.”

*REL Southwest note:* What Works Clearinghouse (WWC) Rating states, “Does not meet WWC standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups do not satisfy the baseline equivalence requirement.”

Dorado, J. S., Martinez, M., McArthur, L. E., & Leibovitz, T. (2016). Healthy Environments and Response to Trauma in Schools (HEARTS): A whole-school, multi-level, prevention and intervention program for creating trauma-informed, safe and supportive schools. *School Mental Health*, 8(1), 163–176. <https://eric.ed.gov/?id=EJ1229162>. Retrieved from <http://design.fixschooldiscipline.org/wp-content/uploads/2016/12/Dorado-Martinez-McArthur-Leibovitz-SMH-2016-with-figures-1.pdf>

*From the ERIC abstract:* “The University of California, San Francisco’s Healthy Environments and Response to Trauma in Schools (HEARTS) Program promotes school success for trauma-impacted students through a whole-school approach utilizing the response to intervention multi-tiered framework. Tier 1 involves school-wide universal supports to change school cultures into learning environments that are more safe, supportive and trauma-informed. Tier 2 involves capacity building with school staff to facilitate the incorporation of a trauma-informed lens into the development of supports for at-risk students, school-wide concerns and disciplinary procedures. Tier 3 involves intensive interventions for students suffering from the impact of trauma. Program evaluation questions were: (1) Was there an increase in school personnel’s knowledge about addressing trauma and in their use of trauma-sensitive practices? (2) Was there an improvement in students’ school engagement? (3) Was there a decrease in behavioral problems associated with loss of students’ instructional time due to disciplinary measures taken? (4) Was there a decrease in trauma-related symptoms in students who received HEARTS therapy? Results indicate preliminary support for the effectiveness of the HEARTS program for each of the evaluation questions examined, suggesting that a whole-school, multi-tiered approach providing support at the student, school personnel and system levels can help mitigate the effects of trauma and chronic stress. Key areas for further studies include (a) an examination of data across more HEARTS schools that

includes comparison control schools and (b) disaggregating disciplinary data by race and ethnicity to determine whether disproportionality in the meting out of disciplinary actions is reduced.”

Jones, S. M., Brown, J. L., & Aber, J. L. (2011). Two-year impacts of a universal school-based social-emotional and literacy intervention: An experiment in translational developmental research. *Child Development*, 82(2), 533–554. <https://eric.ed.gov/?id=EJ927881>. Retrieved from [https://www.eccnetwork.net/sites/default/files/media/file/JonesBrownAber\\_2011.pdf](https://www.eccnetwork.net/sites/default/files/media/file/JonesBrownAber_2011.pdf)

*From the ERIC abstract:* “This study contributes to ongoing scholarship at the nexus of translational research, education reform, and the developmental and prevention sciences. It reports 2-year experimental impacts of a universal, integrated school-based intervention in social-emotional learning and literacy development on children’s social-emotional, behavioral, and academic functioning. The study employed a school-randomized, experimental design with 1,184 children in 18 elementary schools. Children in the intervention schools showed improvements across several domains: self-reports of hostile attributional bias, aggressive interpersonal negotiation strategies, and depression, and teacher reports of attention skills, and aggressive and socially competent behavior. In addition, there were effects of the intervention on children’s math and reading achievement for those identified by teachers at baseline at highest behavioral risk. These findings are interpreted in light of developmental cascades theory and lend support to the value of universal, integrated interventions in the elementary school period for promoting children’s social-emotional and academic skills.”

Kramer, T. J., Caldarella, P., Young, K. R., Fischer, L., & Warren, J. S. (2014). Implementing “Strong Kids” school-wide to reduce internalizing behaviors and increase prosocial behaviors. *Education and Treatment of Children*, 37(4), 659–680. <https://eric.ed.gov/?id=EJ1070187>. Retrieved from <https://www.jstor.org/stable/44683942?seq=1>

*From the ERIC abstract:* “Instruction and training in social and emotional learning (SEL) is an important component in addressing the emotional and behavioral needs of students. This study is the first to examine whether ‘Strong Kids,’ an SEL program, delivered school-wide in all classrooms, could result in decreased internalizing behaviors and increased prosocial behaviors for both at-risk and general education students. This study also evaluated whether teachers could implement ‘Strong Kids’ as designed and whether they viewed it as socially valid. A non-equivalent control group design was used. The treatment school consisted of 348 student participants and 17 teacher participants in grades K-6. The control school consisted of 266 student participants and 11 teacher participants in grades K-6. Pretest and posttest teacher ratings revealed significant decreases in students’ internalizing behaviors at the treatment school, while these behaviors increased at the control school. Students at risk for emotional and behavioral disorders improved significantly more than those not at risk on ratings of internalizing symptoms and prosocial behaviors, even when the intervention was delivered school-wide in all classrooms. Teachers were able to implement ‘Strong Kids’ with a high level of fidelity and they held moderately favorable views of the program.”

*REL Southwest note:* This article can be read for free at the JSTOR website with setup of a free account.

Sullivan, A. L., & Simonson, G. R. (2016). A systematic review of school-based social-emotional interventions for refugee and war-traumatized youth. *Review of Educational Research*, 86(2), 503–530. <https://eric.ed.gov/?id=EJ1100242>. Retrieved from <https://pdfs.semanticscholar.org/6ce4/caf7302e72e8a973b262d4bc90c756ca1af6.pdf>

*From the ERIC abstract:* “Refugees often experience significant psychological distress, but many do not receive necessary services. Among children and youth, most mental health services are provided by schools, so schools are an important service provider for young refugees. We conducted a systemic literature review to synthesize and evaluate the existing research on school-based interventions to improve mental health or social-emotional functioning of students who are refugees, asylum seekers, or immigrants with war trauma. Three types of school-based interventions were identified: cognitive behavioral therapy, creative expression, and multitiered or multimodal models. The review identified several interventions with positive effects, as well as multiple interventions that had null or negative effects. We address the implications of this body of intervention research for practice and research.”

Zapolski, T. C. B., & Smith, G. T. (2017). Pilot study: Implementing a brief DBT skills program in schools to reduce health risk behaviors among early adolescents. *Journal of School Nursing*, 33(3), 198–204. <https://eric.ed.gov/?id=EJ1141023>. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6263959/>

*From the ERIC abstract:* “A significant proportion of youth engage in health risk behaviors, which are of concern, as they are associated with adverse health consequences across development. Two factors associated with engagement in such behaviors are emotion dysregulation and impulsivity. Dialectical behavioral therapy (DBT) is an effective intervention that enhances emotion regulation skills to reduce problem behaviors among adolescent populations; however, limited research has been conducted implementing the program within school settings. The current study was a 9-week DBT skills group conducted among 80 middle school youth, with pre-posttest data among 53 students. Findings indicated feasibility to implement the program in schools and preliminary evidence of efficacy in decreasing youth’s likelihood to engage in risky [behaviors], particularly among youth high on an emotion-based impulsivity trait. Brief DBT skills group may be an effective program to be utilized by school nurses and health-care teams to reduce health risk behaviors among school-aged youth.”

## General promotion of mental health

Barrett, S., Eber, L. & Weist, M. (Eds.) (2013). *Advancing education effectiveness: Interconnecting school mental health and school-wide positive behavior support*. Washington, DC: Office of Special Education Programs of the U.S. Department of Education, and the Maternal and Child Health Bureau, Health Resources and Services Administration, U.S. Department of Health and Human Services. Retrieved from <https://assets.website->

[files.com/5d3725188825e071f1670246/5d76c6a8344facab50085275\\_final-monograph.pdf](https://files.com/5d3725188825e071f1670246/5d76c6a8344facab50085275_final-monograph.pdf)

*From the monograph's overview:* “The Interconnected Systems Framework (ISF) described in this monograph represents a proposed and developing interconnection of Positive Behavioral Interventions and Supports (PBIS) and School Mental Health (SMH) systems to improve educational outcomes for all children and youth, especially those with or at risk of developing mental health challenges. This monograph represents a collective effort to further develop the ISF concept and guide the interconnection of PBIS and SMH toward effective multi-tiered mental health promotion for all students, with guidance for this work at school building, district, and state levels.”

Britton, W. B., Lepp, N. E., Niles, H. F., Rocha, T., Fisher, N. E., & Gold, J. S. (2014). A randomized controlled pilot trial of classroom-based mindfulness meditation compared to an active control condition in sixth-grade children. *Journal of School Psychology, 52*(3), 263–278. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4060047/>

*From the abstract:* “The current study is a pilot trial to examine the effects of a nonelective, classroom-based, teacher-implemented, mindfulness meditation intervention on standard clinical measures of mental health and affect in middle school children. A total of 101 healthy sixth-grade students (55 boys, 46 girls) were randomized to either an Asian history course with daily mindfulness meditation practice (intervention group) or an African history course with a matched experiential activity (active control group). Self-reported measures included the Youth Self Report (YSR), a modified Spielberger State-Trait Anxiety Inventory, and the Cognitive and Affective Mindfulness Measure – Revised. Both groups decreased significantly on clinical syndrome subscales and affect but did not differ in the extent of their improvements. Meditators were significantly less likely to develop suicidal ideation or thoughts of self-harm than controls. These results suggest that mindfulness training may yield both unique and non-specific benefits that are shared by other novel activities.”

Ellis, B. H., Miller, A. B., Abdi, S., Barrett, C., Blood, E. A., & Betancourt, T. S. (2013). Multi-tier mental health program for refugee youth. *Journal of Consulting and Clinical Psychology, 81*(1), 129–140. <https://eric.ed.gov/?id=EJ1006776>. Retrieved from <https://www.researchgate.net/publication/230746411>

*From the ERIC abstract:* “Objective: We sought to establish that refugee youths who receive a multi-tiered approach to services, Project SHIFA, would show high levels of engagement in treatment appropriate to their level of mental health distress, improvements in mental health symptoms, and a decrease in resource hardships. Method: Study participants were 30 Somali and Somali Bantu refugee youths in the English language learner classroom in a middle school in New England. Project SHIFA is a multi-tiered program including prevention and community resilience building for the community at large, school-based early intervention groups for at-risk students, and direct intervention using an established trauma model (trauma systems therapy) for those with significant psychological distress. Data were collected from students at time of enrollment, 6-month follow-up, and 12-month follow-up. Measures used were the War

Trauma Screening Scale, Adolescent Post-War Adversities Scale-Somali version, UCLA PTSD Reaction Index for “DSM-IV” (Revision 1), and the Depression Self-Rating Scale. Results: Students across all tiers of the program demonstrated improvements in mental health and resources. Resource hardships were significantly associated with symptoms of posttraumatic stress disorder over time, and the stabilization of resource hardships coincided with significant improvements in symptoms of depression and posttraumatic stress disorder for the top tier of participants. Conclusions: Project SHIFA is a promising model of treatment for young refugees.”

Roth, R. A., Suldo, S. M., & Ferron, J. M. (2017). Improving middle school students’ subjective well-being: Efficacy of a multicomponent positive psychology intervention targeting small groups of youth. *School Psychology Review, 46*(1), 21–41. <https://eric.ed.gov/?id=EJ1141265>. Retrieved from <https://www.researchgate.net/publication/314145003>

*From the ERIC abstract:* “Most interventions intended to improve subjective well-being, termed “positive psychology interventions” (PPIs), have neglected to include relevant stakeholders in youth’s lives and have not included booster sessions intended to maintain gains in subjective well-being. The current study investigated the impact of a multitarget, multicomponent (i.e., students plus parents), small group PPI on students’ mental health (subjective well-being as well as symptoms of internalizing and externalizing forms of psychopathology) at postintervention and approximately two months follow-up. Forty-two seventh-grade students were randomly assigned either to immediately receive the PPI or to a wait-list control group. At postintervention, students who participated in the PPI evidenced significant gains in all indicators of subjective well-being (life satisfaction, positive affect, and negative affect), and there was a trend for practically meaningful reductions in internalizing and externalizing problems relative to the control group. At follow-up, gains in positive affect were maintained. Findings provide preliminary support for this multicomponent PPI as an evidence-based school-based intervention that causes long-lasting improvements in early adolescents’ positive affect, a primary indicator of subjective well-being.”

Salerno, J. P. (2016). Effectiveness of universal school-based mental health awareness programs among youth in the United States: A systematic review. *Journal of School Health, 86*(12), 922–931. <https://eric.ed.gov/?id=EJ1119694>. Retrieved from <https://www.researchgate.net/publication/310161801>

*From the ERIC abstract:* “Background: Stigmatizing attitudes toward mental illness and low mental health literacy have been identified as links to social adversity, and barriers to seeking and adhering to treatment among adolescents suffering from mental illness. Prior research has found that it is possible to improve these outcomes using school-based mental health awareness interventions. The purpose of this study was to review empirical literature pertaining to universal mental health awareness interventions aiming to improve mental health related outcomes among students enrolled in US K12 schools, especially minorities vulnerable to health disparities. Methods: PsycINFO, Cochrane Library, PUBMED, and reference lists of relevant articles were searched for K-12 school-based mental health awareness interventions in the United States. Universal studies that

measured knowledge, attitudes, and/or help-seeking pertinent to mental health were included. Results: A total of 15 studies were selected to be part of the review. There were 7 pretest/post-test case series, 5 nonrandomized experimental trial, 1 Solomon 4-groups, and 2 randomized controlled trial (RCT) designs. Nine studies measuring knowledge, 8 studies measuring attitudes, and 4 studies measuring help-seeking, indicated statistically significant improvements. Conclusions: Although results of all studies indicated some level of improvement, more research on implementation of universal school-based mental health awareness programs is needed using RCT study designs, and long-term follow-up implementation.”

Weisman, H. L., Kia-Keating, M., Lippincott, A., Taylor, Z. & Zheng, J. (2016). Mental health stigma prevention: Pilot testing a novel, language arts curriculum-based approach for youth. *Journal of School Health, 86*(10), 709–716. <https://eric.ed.gov/?id=EJ1113636>. Retrieved from <https://www.researchgate.net/publication/308044983>

*From the ERIC abstract:* Background: Researchers have emphasized the importance of integrating mental health education with academic curriculum. The focus of the current studies was “Mental Health Matters” (MHM), a mental health curriculum that is integrated with English language arts. It is taught by trained community member volunteers and aims to increase knowledge and decrease stigma toward individuals with mental health disorders. Methods: In Study 1, 142 sixth graders participated in MHM and completed pre- and postprogram measures of mental health knowledge, stigma, and program acceptability. Teachers also completed ratings of acceptability. Study 2 (N = 120 seventh graders) compared participants who had participated in MHM the previous year with those who had not using the same measures. Results: Sixth grade students and teachers rated the program as highly acceptable. Participants significantly increased their knowledge and decreased their levels of stigma. Seventh graders who had participated in MHM had significantly more mental health knowledge than peers who had not, but there were no differences in stigma. Conclusions: The model appears to be acceptable to students and teachers. Future research is needed to assess the long-term effectiveness of integrating mental health education with other academic curriculum such as language arts or science.

Weist, M. D., Hoover, S., Lever, N., Youngstrom, E. A., George, M., McDaniel, H. L., et al. (2019). Testing a package of evidence-based practices in school mental health. *School Mental Health, (11)*4, 692–706. <https://eric.ed.gov/?id=EJ1234624>. Retrieved from <https://www.researchgate.net/publication/332424895>

*From the ERIC abstract:* “This study tested an integrated package for high-quality school mental health (SMH) services involving quality assessment and improvement, family engagement and empowerment, modular evidence-based practice, and implementation support. Within a two-year randomized controlled trial, 35 clinicians, who provided services to 529 students and their families, were randomly assigned to the enhanced quality assessment and improvement intervention condition and a comparison condition focused on promoting personal and staff wellness. Significant clinician-level findings were found for increased use and fidelity of evidence-based practices and greater use of structured assessments and sessions involving family members. Results are discussed in

relation to needed methodological improvements in SMH treatment outcome research and increasing use of evidence-based practices by clinicians by adding accountability and incentives to training, coaching, and implementation support.”

## Additional Organizations to Consult

CASEL – <https://casel.org/>

*From the website:* “The Collaborative for Academic, Social, and Emotional Learning (CASEL) defined SEL more than two decades ago. Today, we collaborate with leading experts and support districts, schools, and states nationwide to drive research, guide practice, and inform policy.”

CASEL provides a list of evidence-based social and emotional programs for primary schools: <https://casel.org/guide/programs/>

CASEL provides a guide for effective social and emotional learning programs for middle and high schools: <https://casel.org/middle-and-high-school-edition-casel-guide/>

National Center for Healthy Safe Children – <https://healthysafechildren.org/>

*From the website:* “The National Center for Healthy Safe Children offers resources and technical assistance to states, tribes, territories, and local communities to promote the overall well-being of children, youth, and their families. We believe that, with the right resources and support, all communities – regardless of their ZIP code – can promote positive outcomes for children, youth, and families.”

“The team of experts and resources available through the National Center for Healthy Safe Children can help your community build and support collaborations among education, public health, behavioral health, child welfare, juvenile justice, and law enforcement.

Here’s what we offer:

- Customized support to build, implement, and evaluate school-based mental health services, comprehensive violence prevention and school safety programs.
- Customized training and technical assistance to select, implement, and evaluate evidence-based and informed programs and services.”

National Center on Safe Supportive Learning Environments – <https://safesupportivelearning.ed.gov/>

*From the website:* “The National Center on Safe Supportive Learning Environments offers information and technical assistance to states, districts, schools, institutions of higher learning, and communities focused on improving school climate and conditions for learning. We believe that with the right resources and support, educational stakeholders can collaborate to sustain safe, engaging and healthy school environments that support student academic success.

This website serves as a central location for the Center. In particular, it includes information about the Center’s training and technical assistance, products and tools, and latest research findings.”

## Methods

### Keywords and Search Strings

The following keywords and search strings were used to search the reference databases and other sources:

- [ (“mental health”) AND (“gatekeeper” OR “curriculum”)]
- [ (“mental health”) AND (“multi-tiered systems of support” OR “MTSS”)]
- [ (“mental health”) AND (“intervention” OR “prevention”) AND (“multi-tiered systems of support” OR “MTSS”)]
- mental health (“multi-tiered systems of support” OR “MTSS”)
- [ (“mental health”) AND (“PBIS” OR “positive behavior interventions and supports”)]
- [ (“substance abuse”) AND (“curriculum” OR “PBIS” OR “MTSS”)]
- [ (“Mental health promotion”) AND (“PBIS” OR “MTSS”)]
- trauma informed care
- grief informed care
- trauma-informed schools
- school-based mental health centers

### Databases and Resources

We searched [ERIC](#) for relevant, peer-reviewed research references. ERIC is a free online library of more than 1.8 million citations of education research sponsored by the Institute of Education Sciences (IES). Additionally, we searched the [What Works Clearinghouse](#).

### Reference Search and Selection Criteria

When we were searching and reviewing resources, we considered the following criteria:

- *Date of the publication:* References and resources published from 2005 to present were included in the search and review.
- *Search priorities of reference sources:* Search priority is given to study reports, briefs, and other documents that are published and/or reviewed by IES and other federal or federally funded organizations, academic databases, including ERIC, EBSCO databases, JSTOR database, PsychInfo, PsychArticle, and Google Scholar.

- *Methodology*: The following methodological priorities/considerations were given in the review and selection of the references: (a) study types—randomized control trials, quasi-experiments, correlational studies, descriptive data analyses, literature reviews, mixed methods analyses, and so forth; (b) target population, samples (representativeness of the target population, sample size, volunteered or randomly selected, and so forth), study duration, and so forth; and (c) limitations, generalizability of the findings and conclusions, and so forth.

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This memorandum is one in a series of quick-turnaround responses to specific questions posed by stakeholders in the Southwest Region (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas), which is served by the Regional Educational Laboratory (REL) Southwest at AIR. This memorandum was prepared by REL Southwest under a contract with the U.S. Department of Education’s Institute of Education Sciences (IES), Contract ED-IES-91990018C0002, administered by AIR. Its content does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.