REL SOUTHWEST Regional Educational Laboratory Southwest

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 prevention of suicide and depression?

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 focused on the prevention of suicide and depression.

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

Suicide prevention/intervention

Aseltine, R. H., James, A., Schilling, E. A., & Glanovsky, J. (2007). Evaluating the SOS suicide prevention program: A replication and extension. *BMC Public Health, 7*(161). Retrieved from https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-7-161

From the abstract: "Methods: 4133 students in 9 high schools in Columbus, Georgia, western Massachusetts, and Hartford, Connecticut were randomly assigned to intervention and control groups during the 2001–02 and 2002–03 school years. Self-administered questionnaires were completed by students in both groups approximately 3 months after program implementation.

Results: Significantly lower rates of suicide attempts and greater knowledge and more adaptive attitudes about depression and suicide were observed among students in the intervention group. Students' race/ethnicity, grade, and gender did not alter the impact of the intervention on any of the outcomes assessed in this analysis.

Conclusion: This study has confirmed preliminary analysis of Year 1 data with a larger and more racially and socio-economically diverse sample. *SOS* continues to be the only universal school-based suicide prevention program to demonstrate significant effects of self-reported suicide attempts in a study utilizing a randomized experimental design. Moreover, the beneficial effects of *SOS* were observed among high school-aged youth from diverse racial/ethnic backgrounds, highlighting the program's utility as a universal prevention program."

Ciffone, J. (2007). Suicide prevention: An analysis and replication of a curriculum-based high school program. *Social Work, 52*(1), 41–49. https://eric.ed.gov/?id=EJ756258. Retrieved from https://static1.squarespace.com/static/547a2f62e4b0ab191e978ace/t/59f7441dd6839ac415f9d693/1509377053316/NASW+article.pdf

From the ERIC abstract: "This article highlights some of the concerns about and benefits of curriculum-based suicide prevention programs delivered to students in a high school setting. In addition, it presents information about a specific curriculum-based prevention program and provides evidence that the program changed unwanted attitudes about suicide in all the areas targeted for change and reduced adolescents' reluctance to seek mental health treatment for themselves and their peers. The positive results were much like those found in a similar study by Ciffone (1993). Furthermore, multiple presenters in two separate schools all obtained similar positive results."

Cross, W. F., Seaburn, D., Gibbs, D., Schmeelk-Cone, K., White, A. M., & Caine, E. D. (2011). Does practice make perfect? A randomized control trial of behavioral rehearsal on suicide prevention gatekeeper skills. *Journal of Primary Prevention, 32*(3-4), 195–211. https://eric.ed.gov/?id=EJ938194. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3249637/

From the ERIC abstract: "Suicide is the third leading cause of death among 10–24-year-olds and the target of school-based prevention efforts. Gatekeeper training, a broadly disseminated prevention strategy, has been found to enhance participant knowledge and attitudes about intervening with distressed youth. Although the goal of training is the development of gatekeeper skills to intervene with at-risk youth, the impact on skills and use of training is less known. Brief gatekeeper training programs are largely educational and do not employ active learning strategies such as behavioral rehearsal through role play practice to assist skill development. In this study, we compare gatekeeper training as usual with training plus brief behavioral rehearsal (i.e., role play practice) on a variety of learning outcomes after training and at follow-up for 91 school staff and 56 parents in a school community. We found few differences between school staff and parent participants. Both training conditions resulted in enhanced knowledge and attitudes, and almost all participants spread gatekeeper training information to others in their network.

Rigorous standardized patient and observational methods showed behavioral rehearsal with role play practice resulted in higher total gatekeeper skill scores immediately after training and at follow-up. Both conditions, however, showed decrements at follow-up. Strategies to strengthen and maintain gatekeeper skills over time are discussed."

Freedenthal, S. (2010). Adolescent help-seeking and the yellow ribbon suicide prevention program: An evaluation. *Suicide and Life-Threatening Behavior, 40*(6), 628–639. https://eric.ed.gov/?id=EJ966096. Retrieved fromhttps://guilfordjournals.com/doi/pdf/10.1521/suli.2010.40.6.628

From the ERIC abstract: "The Yellow Ribbon Suicide Prevention Program has gained national and international recognition for its school- and community-based activities. After the introduction of Yellow Ribbon to a Denver-area high school, staff and adolescents were surveyed to determine if help-seeking behavior had increased. Using a pre-post intervention design, staff at an experimental school and comparison school were surveyed about their experiences with student help-seeking. Additionally, 146 students at the experimental high school were surveyed. Staff did not report any increase in student help-seeking, and students' reports of help-seeking from 11 of 12 different types of helpers did not increase; the exception was help-seeking from a crisis hotline, which increased from 2.1% to 6.9%. Further research with larger, more inclusive samples is needed to determine whether Yellow Ribbon is effective in other locations."

Hooven, C., Herting, J. R., & Snedker, K. A. (2010). Long-term outcomes for the promoting CARE suicide prevention program. *American Journal of Health Behavior, 34*(6), 721–736. https://eric.ed.gov/?id=EJ955331. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3119363/

From the ERIC abstract: "Objectives: To provide a long-term look at suicide risk from adolescence to young adulthood for former participants in Promoting CARE, an indicated suicide prevention program. Methods: Five hundred ninety-three suicide-vulnerable high school youth were involved in a long-term follow-up study. Latent class growth models identify patterns of change in suicide risk over this period. Results: Three distinct trajectories are determined, all showing a maintenance of decreased suicide risk from postintervention in adolescence into young adulthood for direct suicide-risk behaviors, depression and anger. Intervention conditions as well as key risk/protective factors are identified that predict to the long-term trajectories. Conclusion: Early intervention is successful in promoting and maintaining lower-risk status from adolescence to young adulthood, with the caveat that some high-risk behaviors may indicate a need for additional intervention to establish earlier effects."

Schilling, E. A., Lawless, M., Buchanan L., & Aseltine, R. H. Jr. (2014). "Signs of Suicide" shows promise as a middle school suicide prevention program. *Suicide and Life-Threatening Behavior, 44*(6), 653–667. Retrieved from http://mssaa.org/gen/mssaa_generated_bin/documents/basic_module/2014_MS_Research.pdf

From the abstract: "Although the Signs of Suicide (SOS) suicide prevention program has been implemented at both the middle and high school levels, its efficacy has been demonstrated previously only among high school students. The current study evaluated SOS implemented in "high military impact" middle schools. Compared to controls, SOS participants demonstrated improved knowledge about suicide and suicide prevention, and participants with pretest ideation reported fewer suicidal behaviors at posttest than controls with pretest ideation. These results provide preliminary evidence for SOS's efficacy as a suicide prevention program for middle school students."

Singer, J. B., Erbacher, T. A., & Rosen, P. (2018). School-based suicide prevention: A framework for evidence-based practice. *School Mental Health, 11*(1), 54–71. https://eric.ed.gov/?id=EJ1229683. Retrieved from https://www.researchgate.net/publication/322436333

From the ERIC abstract: "Suicide is the second leading cause of death among youth aged 10–25 years, and approximately one in six adolescents reported serious suicidal ideation in the past year (Centers for Disease Control and Prevention [CDC] in Web-based Injury Statistics Query and Reporting System (WISQARS). http://webappa.cdc.gov/cgi-bin/broker.exe, 2017). Schools are a unique environment in which to identify and respond to youth suicide risk, yet the research base for school-based suicide prevention programs is limited due to challenges with implementation and evaluation. The purpose of this article is to review best practice approaches and existing empirical support for school-based suicide prevention and to present a framework for how these efforts can be embedded within multi-tiered systems of support (MTSS). In line with the Substance Abuse and Mental Health Services Administration [SAMHSA] (Preventing suicide: a toolkit for high schools. https://store.samhsa.gov/shin/content//SMA12-4669/SMA12-4669.pdf, 2012) framework for suicide prevention in schools, the article overviews existing programs for student education, staff training, and screening, noting where these programs may be situated across tiers of intervention. This is followed by a review of school-related outcomes of existing suicide prevention programs, which highlights the limitations of existing research. Because there are only two school-based prevention programs with evidence for reducing suicide risk in students, the authors encourage school staff to implement best practice recommendations in collaboration with school mental health professionals who can provide ongoing evaluation of program effectiveness, as well as with researchers who are able to design and conduct outcome studies addressing the limitations of current research. Findings also underscore the need for greater integration of suicide prevention programming with existing school initiatives such as MTSS, which aligns with a growing focus in the field of suicide prevention on 'upstream approaches.'"

Wyman, P. A., Brown, C. H., Inman, J., Cross, W., Schmeelk-Cone, K., Guo, J., et. al. (2008). Randomized trial of a gatekeeper program for suicide prevention: 1-year impact on secondary school staff. *Journal of Consulting and Clinical Psychology, 76*(1), 104–115. https://eric.ed.gov/?id=EJ784049. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2771576/

From the ERIC abstract: "Gatekeeper-training programs, designed to increase identification and referral of suicidal individuals, are widespread but largely untested. A group-based randomized trial with 32 schools examined impact of Question, Persuade, Refer (QPR) training on a stratified random sample of 249 staff with 1-year average follow-up. To test QPR impact, the authors introduced and contrasted 2 models of gatekeeper-training effects in a population: gatekeeper surveillance and gatekeeper communication. Intent-to-treat analyses showed that training increased self-reported knowledge (effect size [ES] = 0.41), appraisals of efficacy (ES = 1.22), and service access (ES = 1.07). Training effects varied dramatically. Appraisals increased most for staff with lowest baseline appraisals, and suicide identification behaviors increased most for staff already communicating with students about suicide and distress. Consistent with the communication model, increased knowledge and appraisals were not sufficient to increase suicide identification behaviors. Also consistent with the communication model were results from 2,059 8th and 10th graders surveyed showing that fewer students with prior suicide attempts endorsed talking to adults about distress. Skill training for staff serving as "natural gatekeepers" plus interventions that modify students' help-seeking behaviors are recommended to supplement universal gatekeeper training."

Depression prevention/intervention

Benas, J. S., McCarthy, A. E., Haimm, C. A., Huang, M., Gallop, R., & Young, J. F. (2016). The depression prevention initiative: Impact on adolescent internalizing and externalizing symptoms in a randomized trial. *Journal of Clinical Child and Adolescent Psychology 48*(sup1), 57–71. Retrieved from https://europepmc.org/article/PMC/5493504#R23

From the abstract: "This randomized controlled trial examined the longitudinal effects of two school-based indicated depression prevention programs on adolescents' internalizing and externalizing symptoms, as measured by adolescents, their parents, and their teachers. One hundred eighty-six adolescents participated in this study. The average age was 14.01 (*SD* = 1.22) years, and the sample was 66.7% female. One third of the sample belonged to a racial minority. Youth received either Interpersonal Psychotherapy–Adolescent Skills Training or group counseling. Symptoms were assessed using adolescent, parent, and teacher reports on the Achenbach System of Empirically Based Assessment at baseline, postintervention, and 6-month follow-up. Adolescents reported the most robust effects in favor of Interpersonal Psychotherapy–Adolescent Skills Training. Adolescents in Interpersonal Psychotherapy–Adolescent Skills Training reported significantly greater reductions in internalizing symptoms through the 6-month follow-up and significantly greater reductions in externalizing symptoms during the intervention as compared to group counseling. Less robust effects were found when examining parent and teacher reports, although there was evidence of significant within-group change in parent- and teacher-reported internalizing symptoms for both interventions and significant between-group differences in teacher-reported externalizing symptoms. This study provides additional evidence supporting the efficacy of Interpersonal Psychotherapy–Adolescent Skills Training as a depression prevention program for adolescents. Interpersonal Psychotherapy– Adolescent Skills Training appears to have fast-acting effects on broadband internalizing and externalizing symptoms as reported by adolescents. This suggests that Interpersonal Psychotherapy–

Adolescent Skills Training may serve as a transdiagnostic preventive intervention. Moreover, given the disparate reports of adolescents, parents, and teachers, this study demonstrates the significance of collecting information from multiple sources when possible."

Cardemil, E. V., Reivich, K. J., Beevers, C. G., Seligman, M. E. P., & James, J. (2007). The prevention of depressive symptoms in low-income, minority children: Two-year follow-up. *Behaviour Research and Therapy, 45*(2), 313–327. Retrieved from https://wordpress.clarku.edu/ecardemil/files/2013/02/The-Prevention-of-Depressive-Symptoms-2-yr-followup-final-2007.pdf

From the abstract: "We present 2-year follow-up data on the efficacy of the Penn Resiliency Program (PRP), a school-based depression prevention program, with low-income, racial/ethnic minority children. This program taught cognitive and social problem-solving skills to 168 Latino and African American middle school children who were at-risk for developing depressive symptoms by virtue of their low-income status. We had previously reported beneficial effects of the PRP up to 6 months after the conclusion of the program for the Latino children, but no clear effect for the African American children. In this paper, we extend the analyses to 24 months after the conclusion of the PRP. We continue to find some beneficial effects for the Latino children and no differentially beneficial effect for the African American children. Implications of findings and future research directions are discussed."

Connell, A. M., & Dishion, T. J. (2008). Reducing depression among at-risk early adolescents: Three-year effects of a family-centered intervention embedded within schools. *Journal of Family Psychology, 22*(3), 574–585. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.584.5623&rep=rep1&type=pdf

From the abstract: "The Adolescent Transitions Program (ATP) is a family-focused multilevel prevention program designed for delivery within public middle schools to target parenting factors related to the development of behavior problems in early adolescence. The current study examines the effects of the ATP on the development of youth depressive symptoms across early adolescence in a sample of 106 high-risk youths. Youths were recruited in 6th grade, and selected as high risk based on teacher and parent reports of behavioral or emotional problems. Depression symptoms were based on youth and mother reports in 7th, 8th, and 9th grades. Receipt of the family-centered intervention inhibited growth in depressive symptoms in high-risk youths over the 3 yearly assessments compared with symptoms in high-risk youths in the control group. Results support the notion that parental engagement in a program designed to improve parent management practices and parent–adolescent relationships can result in collateral benefits to the youths' depressive symptoms at a critical transition period of social and emotional development."

Cutuli, J. J., Gillham, J. E., Chaplin, T. M., Reivich, K. J., Seligman, M. E. P., Gallop, R. J., et al. (2013). Preventing adolescents' externalizing and internalizing symptoms: Effects of the Penn Resiliency Program. *International Journal of Emotional Education, 5*(2), 67–79. https://eric.ed.gov/?id=EJ1085607

From the ERIC abstract: "This study reports secondary outcome analyses from a past study of the Penn Resiliency Program (PRP), a cognitive-behavioral depression prevention program for middle-school aged children. Middle school students (N = 697) were randomly assigned to PRP, PEP (an alternate intervention), or control conditions. Gillham et al., (2007) reported analyses examining PRP's effects on average and clinical levels of depression symptoms. We examine PRP's effects on parent-, teacher-, and self-reports of adolescents' externalizing and broader internalizing (depression/anxiety, somatic complaints, and social withdrawal) symptoms over three years of follow-up. Relative to no intervention control, PRP reduced parent-reports of adolescents' internalizing symptoms beginning at the first assessment after the intervention and persisting for most of the follow-up assessments. PRP also reduced parent-reported conduct problems relative to no-intervention. There was no evidence that the PRP program produced an effect on teacher- or self-report of adolescents' symptoms. Overall, PRP did not reduce symptoms relative to the alternate intervention, although there is a suggestion of a delayed effect for conduct problems. These findings are discussed with attention to developmental trajectories and the importance of interventions that address common risk factors for diverse forms of negative outcomes.

Duong, M. T., Cruz, R. A., King, K. M., Violette, H. D., & McCarty, C. A. (2015). Twelve-month outcomes of a randomized trial of the Positive Thoughts and Action program for depression among early adolescents. *Prevention Science, (17*)3, 295–305. Retrieved from https://www.researchgate.net/publication/283214605

From the abstract: "This study was conducted to examine the 12-month effects on depression and depressive symptoms of a group-based cognitive-behavioral preventive intervention for middle school students (Positive Thoughts and Actions, or PTA), relative to a brief, individually administered supportive intervention (Individual Support Program, or ISP). A randomized clinical trial was conducted with 120 early adolescents (73 girls and 47 boys; age 12–14 years) drawn from a school-based population who had elevated depressive symptoms. Youths completed measures of depressive symptoms at baseline, post-intervention, and 6 and 12 months into the follow-up phase. Measures of internalizing problems, externalizing problems, school adjustment, interpersonal relationships, and health behavior were obtained from parents and/or youth. Multilevel models indicated that the effect of PTA on youth-reported depressive symptoms persisted until 12-month follow-up; $d = 0.36$ at post-intervention, $d = 0.24$ at 6-month follow-up, and $d = 0.21$ at 12-month follow-up. PTA youths also reported lower internalizing symptoms at post-intervention, $d = 0.44$, and at 12-month follow-up, $d = 0.39$. Time-limited effects were found for parent-reported internalizing symptoms and health behavior. Onset of new depressive episodes did not differ based on intervention group (21% ISP; 17% PTA). Results demonstrate support for the long-term efficacy of PTA, a cognitive-behavioral preventive intervention in which youths engage in personal goal-setting and practice social-emotional skills."

Michael, K. D., George, M. W., Splett, J. W., Jameson, J. P., Sale, R., Bode, et al. (2016). Preliminary outcomes of a multi-site, school-based modular intervention for adolescents experiencing mood difficulties. *Journal of Child and Family Studies, 25*(2), 1903–1915. Retrieved from

https://libres.uncg.edu/ir/asu/f/Michael_Kurt_SEED%20Pilot%20Michael%20George%20Splett%20Jameson%20et%20al%202016.pdf

From the abstract: "Many evidence-based programs to address the emotional needs of youth experiencing mood difficulties are based on implementing "manualized" interventions. This approach often presents feasibility challenges in the school setting. In contrast, modular strategies, which involve implementing the most effective practices for specific emotional/behavioral problems, may be more feasible. Research, however, on the feasibility, acceptability, and effectiveness of modular approaches in schools to address youth experiencing mood difficulties is lacking. The multi-site current study tested the effectiveness, feasibility, and acceptability of a modular intervention approach delivered in schools for youth presenting with mood disorder symptoms. The pilot study included 20 participants (ages 12–16) and parents/caregivers for each student. Data were collected at baseline, throughout treatment, and following intervention or end of school year. The intervention, called the Student Emotional and Educational Development (SEED) project, included a modularized manual of efficacious and common practice elements for the treatment of mood disorders among adolescents. Decision making protocols guided provision of specific modules based on baseline and treatment data. Statistically significant differences were found between pretest and posttest assessments with modest to large effect sizes for youth and/or parents' report of mood-related symptoms, including reduced symptoms of depression, anxiety and inattention. Clinically significant findings were also detected with more than 50% of participants demonstrating reliable improvement on a global assessment of mental health symptoms. With regards to feasibility, these results were achieved with an average of nine, 45-min sessions across 2–3 months, and a subsample of participants overwhelmingly supported the acceptability of SEED. Although limited by the lack of a controlled comparison and small sample size, findings from this pilot study suggest this modular intervention focused on internalizing symptoms in students can be feasibly implemented in the school setting, is acceptable to students, and holds promise for improving their psychosocial functioning."

Additional Organizations to Consult

American Foundation for Suicide Prevention—https://afsp.org/

From the website: "American Foundation for Suicide Prevention (AFSP) is a voluntary health organization that gives those affected by suicide a nationwide community empowered by research, education and advocacy to take action against this leading cause of death.

AFSP is dedicated to saving lives and bringing hope to those affected by suicide. AFSP creates a culture that's smart about mental health by engaging in the following core strategies:

- Funding scientific research
- Educating the public about mental health and suicide prevention
- Advocating for public policies in mental health and suicide prevention
- Supporting survivors of suicide loss and those affected by suicide in our mission"

National Action Alliance for Suicide Prevention (Action Alliance)—https://theactionalliance.org/

From the website: "The National Action Alliance for Suicide Prevention (Action Alliance) is the nation's public-private partnership for suicide prevention.

The Action Alliance is dedicated to advancing the *National Strategy for Suicide Prevention*, which presents the nation's 13 goals and 60 objectives for suicide prevention.

Through its unique ability to engage and unify passionate stakeholders and leaders in all sectors to collaborate toward a national and comprehensive approach to suicide prevention, the Action Alliance:

- Champions suicide prevention as a national priority
- Catalyzes efforts to implement high priority objectives of the National Strategy
- Cultivates the resources needed to sustain progress."

National Institute on Mental Health (NIMH)—https://www.nimh.nih.gov/health/topics/suicide-prevention/index.shtml

The National Institute on Mental Health website has a section on suicide prevention that provides information on mental illness, suicide prevention, treatment options, and risk factors. NIMH also conducts research on suicide and suicide prevention.

National Suicide Prevention Lifeline—https://suicidepreventionlifeline.org/

From the website: "The National Suicide Prevention Lifeline is a leader in suicide prevention and mental health crisis care. Since its inception, the Lifeline has engaged in a variety of initiatives to improve crisis services and advance suicide prevention for all, including innovative public messaging, best practices in mental health, and groundbreaking partnerships.

The National Suicide Prevention Lifeline is independently evaluated by a federally-funded investigation team from Columbia University's Research Foundation for Mental Hygiene. The Lifeline receives ongoing consultation and guidance from national suicide prevention experts, consumer advocates, and other stakeholders through the Lifeline's Steering Committee, Consumer/Survivor Committee, and Standards, Training and Practices Committee."

The Lifeline also provides informational materials, such as brochures, wallet cards, posters, and booklets.

Society for the Prevention of Teen Suicide (SPTS)—https://sptsusa.org/

From the website: "The mission of the Society for the Prevention of Teen Suicide is to reduce the number of youth suicides and attempted suicides by encouraging public awareness through the development and promotion of educational training programs.

SPTS expert program staff are available to meet your educational and professional development needs with a comprehensive catalog of dynamic workshops and training programs for schools, community groups, professional conferences and parents."

Suicide Prevention Resource Center—https://www.sprc.org/

> *From the website*: "The Suicide Prevention Resource Center (SPRC) is the only federally supported resource center devoted to advancing the implementation of the National Strategy for Suicide Prevention. SPRC is funded by the U.S. Department of Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA).
>
> SPRC advances suicide prevention infrastructure and capacity building through:
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> - Consultation, training, and resources to enhance suicide prevention efforts in states, Native settings, colleges and universities, health systems and other settings, and organizations that serve populations at risk for suicide.
> - Staffing, administrative, and logistical support to the Secretariat of the National Action Alliance for Suicide Prevention (Action Alliance), the public-private partnership dedicated to advancing the National Strategy for Suicide Prevention.
> - Support for Zero Suicide, an initiative based on the foundational belief that suicide deaths for individuals under care within health and behavioral health systems are preventable. The initiative provides information, resources, and tools for safer suicide care."

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 ("intervention" OR "prevention") AND ("multi-tiered systems of support" OR "MTSS")]
- trauma informed care
- grief informed care
- trauma-informed schools
- "suicide prevention" and education or program
- suicide prevention (PBIS or MTSS)

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.

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.