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School Mental Health

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School Mental Health

Supporting Innovative, Scalable Approaches to School-Based Mental Health Development and Innovation Research at the U.S. Department of Education's Institute of Education Sciences (IES)

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Abstract:	Abstract The Institute of Education Sciences (IES), the research arm of the U.S. Department of Education, is the nation's leading source for rigorous, independent education research, evaluation, and statistics. IES's National Center for Education Research (NCER) supports rigorous research that addresses the nation's most pressing education needs from early childhood to adult education. IES's National Center for Special Education Research (NCSER) supports a comprehensive program of education research designed to expand knowledge and understanding of infants, toddlers, and youth with and at risk for disabilities to improve their developmental, education, transition, and postsecondary outcomes. This paper makes the case that IES Development and Innovation research can support the development of usable, feasible, and affordable approaches (practices, programs, or policies) to help schools meet the mental health needs of their students and staff. The goal of this research is to ensure that school-based interventions are contextually appropriate, implemented with high fidelity, and more likely to produce equitable outcomes than current practice.

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Supporting Innovative, Scalable Approaches to School-Based Mental Health: Development and Innovation Research at the U.S. Department of Education's Institute of Education Sciences (IES)

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Supporting Innovative, Scalable Approaches to School-Based Mental Health: Development and Innovation Research at the U.S. Department of Education's Institute of Education Sciences (IES)

School-Based Mental Health Research – Why is it Important?

Mental health concerns among students are prevalent and on the rise. Various studies released since the onset of the COVID-19 pandemic have revealed increased rates of depression, anxiety, and suicide-related behaviors for youth. According to the U.S. Department of Health and Human Services (National Healthcare Quality and Disparities Report, 2022), 1 in 5 school-age youth experienced serious mental health issues prior to the COVID-19 pandemic. These numbers have since grown, with emergency room visits for mental health issues increasing by 24 percent for children and by 31 percent for adolescents. Results from the Youth Risk Behavior Survey: Data Summary and Trends Report (Centers for Disease Control & Prevention, 2023) reveal more about the prevalence, and disparities, in these rates. For example, in 2021, 42 percent of high school students reported feeling so sad or hopeless almost every day over a two-week period that they stopped doing their usual activities. Disparities in feelings of sadness and hopelessness were especially pronounced for female students, Hispanic and multiracial students, and LGBQ+ students.

The pandemic also exacerbated the academic and behavioral challenges that students with or at risk for disabilities already faced, with pandemic-related school closures decreasing student access to available special education and related services. For children and adolescents with mental health needs in particular, such closures meant a lack of access to the resources they usually have through schools. For example, the majority of children with individualized education plans (IEPs) for emotional disturbance receive their mental health support from

schools, and these supports were disrupted or completely eliminated during the pandemic (e.g., Golberstein et al., 2020). Neece, McIntyre, and Fenning (2020) report that nearly 80 percent of families who have a child with a disability saw a decrease in services for their child during the COVID-19 pandemic, with parents' biggest challenge being the discontinuity in behavioral services and supports.

The School Pulse Panel (SPP), administered through IES's National Center for Education Statistics (NCES), is a monthly study collecting information on the impact of the COVID-19 pandemic from a national sample of public schools. The SPP gathered information on the mental health and well-being of students and staff in April 2022 and March 2024. In the most recent data collection, 58 percent of public schools reported that the percentage of students who sought school-based mental health services increased since the last school year (2022-2023). The percentage of staff expressing concerns with students' exhibiting depression, anxiety, trauma, or emotional dysregulation or disturbance also increased from the prior school year (61 percent). Adolescents with disabilities have been particularly vulnerable. Elementary students were often prioritized in return to school plans, so high school students may have spent the most time in distance learning and without educational and mental health supports.

While SPP data indicate that nearly all public schools (97 percent) provide mental health services to students, only 48 percent felt that services were effective and only 19 percent of students actually made use of the services offered. SPP data indicate this may be due to insufficient mental health professional staffing (55 percent), inadequate funding (54 percent), and inadequate access to licensed mental health professionals (49 percent). SPP data also include information about the mental health needs of school staff, with 43 percent of public schools reporting an increase since last year in the number of staff who were concerned about their own

or their colleagues depression, anxiety, trauma, or emotional dysregulation or disturbance. However, only 59 percent of public schools reported that they have mental health services to support their staff through employee assistance programs and only 35 percent of these schools reported using district or school financial funding to support mental health services for staff.

According to the Centers for Disease Control and Prevention (n.d.), the most commonly diagnosed mental health challenges in school-aged youth include attention deficit hyperactivity disorder (ADHD), anxiety, behavioral or conduct problems, and depression. Youth with depression are more likely to have a co-occurring disorder such as anxiety or behavior problems. Persistent youth anxiety and depression are negatively associated with educational achievement outcomes (e.g., Owens et al., 2012). Overall, anxiety and depressive disorders place youth at risk for impaired functioning in multiple domains, including at home, in school, and with their peers (e.g., Grover, Ginsberg, & Ialongo, 2007; Ialongo et al., 1995). There is an urgent need to better understand the behavioral and mental health needs of students and to implement interventions to promote students' social, behavioral, and mental health to improve their school functioning, social relationships, and academic outcomes.

The U.S. Surgeon General released an advisory in December 2021 (U.S. Department of Health & Human Services, 2021), outlining ways to prevent and treat the mental health challenges facing youth. School-based prevention and intervention supports are important parts of the solution. Indeed, the prevention paradox, the idea that "a large number of people exposed to a small risk may generate many more cases [of an undesirable outcome] than a small number exposed to a high risk" (Rose, 1985) supports the idea that schools are an ideal place to support the mental health of students in need and to prevent negative mental health outcomes for many more students.

The Need for School Mental Health Development and Innovation Research

Although schools are a logical place where students' mental health needs can be met, NCES's School Pulse Panel data indicate that only just over half of public schools report that they are able to effectively provide mental health services to all students in need, primarily due to staffing and funding challenges. Though evidence-informed programs for childhood mental health problems exists, research has shown that as many as 60 percent or more of youth fail to receive effective care (e.g., Wang et al., 2023). Given these issues, it is crucial to maximize opportunities for mental health service delivery "where children are" - in the school system (e.g., Weist, 2003). Development of new and innovative school-based mental health interventions is critical to increasing access to mental health services and ultimately, improving student and staff well-being and student education outcomes. Developing new interventions that have the potential to improve outcomes requires a solid understanding of effective mental health treatment, knowledge of existing practice to recognize the limitation in current approaches, and a recognition of the current context of schools which typically have limited fiscal and staffing resources to address student and staff mental health needs. It will also require the creativity to conceptualize innovative approaches that will be usable and feasible in school settings. This may require the development of brand-new interventions or modifying existing effective mental health treatments delivered in clinical settings to be implemented feasibly and with fidelity in schools to support the mental health needs of students and staff.

The Institute of Education Sciences (IES)

IES is the nation's leading source for rigorous, independent education research, evaluation, and statistics. Our mission is to generate scientific evidence to guide education practice and policy and to share this information broadly. IES was created by the Education

Sciences Reform Act of 2002. Through this public law, we are charged with improving academic achievement and attainment and access to educational opportunities for all learners, with a particular focus on low-performing learners and those lacking access to high-quality educational opportunities. Through our field-initiated research grant programs, we seek to improve our understanding of the extent to which policies, practices, and programs lead to differences in education outcomes for different groups, especially those that have been historically underserved. IES's National Center for Education Research (NCER) supports rigorous research that addresses the nation's most pressing education needs from early childhood to adult education. IES's National Center for Special Education Research (NCSER) supports a comprehensive program of education research designed to expand knowledge and understanding of infants, toddlers, and youth with and at risk for disabilities to improve their developmental, education, transition, and postsecondary outcomes.

In carrying out this work, we commit to being objective, secular, neutral, and nonideological; free of partisan political influence; and free of racial, cultural, gender, or regional bias. The U.S. Office of Management and Budget (OMB) gave IES an effective rating, the highest a program can receive. OMB concluded: "IES has transformed the quality and rigor of education research within the Department of Education and increased the demand for scientifically based evidence of effectiveness in the education field as a whole."

IES Support for Field-Initiated Development and Innovation Research

IES supports research that will generate empirical evidence to improve the quality of education in the United States. Our mission is pragmatic as well, emphasizing the importance of making education research applicable, relevant, and usable for schools. The work of IES is grounded in the principle that effective education research must address the interests and needs

of education practitioners and policymakers, as well as students, parents, and community members. Thus, while focused on providing evidence through rigorous research, IES is committed to building a stronger science of education that helps us understand, for example, how to improve teaching and student learning, as well as the policies and practices needed to reach these outcomes.

IES is well-known for high-quality evaluation research to test the impact of programs, practices, and policies on education outcomes, and disseminating results of that research through the What Works Clearinghouse (WWC). Our Standards for Excellence in Education Research (SEER) emphasize things like equity, scaling, implementation, and cost in an effort to make the research we support more meaningful and useful to schools around the country.

To achieve scientifically strong research evidence that is relevant, applicable, and usable, IES supports a range of research grant activities through NCER and NCSER, including the development or refinement and pilot testing of new programs, practices, policies, and approaches to solve intractable challenges in education. Finding ways to help schools meet the mental health needs of their students and staff is one of those challenges. Through our *Development and Innovation project type* in the Education Research (ALN 84.305A) and Special Education Research (ALN 84.324A) grant programs, the two IES research centers support research that engages and partners with those who will use and potentially benefit from new programs, practices, or policies.

A primary goal of IES Development and Innovation research is to address limitations in the current education landscape by developing and pilot testing approaches that are likely to be an improvement over what already exists. When it comes to interventions to support the mental health needs of students, there is often very little already in place in schools that may be usable,

feasible, or cost effective (see March 2024 School Pulse Panel data). A critical aspect of these projects is determining what may be feasible in real world settings given fiscal, logistical, and practical restraints. This is particularly salient for public schools given their financial and staffing challenges for providing effective mental health services.

Theory of Change

IES asks researchers interested in developing or modifying programs, practices, or policies to identify a theory of change that will guide development or refinement and pilot testing. The theory of change should be supported by theoretical frameworks and empirical evidence that illustrate how and why the desired change in education outcomes is expected to happen. The theory of change should make clear why the program, practice, or policy is likely to produce better outcomes relative to current practice, predict the size of the change anticipated, and specify the conditions that must be in place, including implementation support, that will lead to the desired change in education outcomes. An important aspect of the theory of change is the identification of components that are essential for the efficacy of a program, practice, or policy (see the IES SEER standard on *Components*). Much is already known about effective strategies and practices to address mental health issues such as depression and anxiety (e.g., transdiagnostic cognitive behavioral therapy; Clifford, Nguyen, & Bradshaw, 2020). Cognitive behavioral therapy has been identified as a potentially effective school-based approach (The Community Preventive Services Task Force of the U.S. Department of Health & Human Services, 2020). There is also evidence to suggest that universal school-based programs to support the social and emotional learning of all students may be an effective preventive measure to address mental health concerns, i.e., “the prevention paradox” (Greenberg, Domitrovich, Weissberg, & Durlak,

2017). A major challenge is how to instantiate these effective approaches in school settings and ensure they are implemented feasibly and with high fidelity.

Iterative Development and Refinement

IES recommends using an iterative process to develop or refine programs, practices, and policies. Importantly, IES does not require or endorse any specific model of iterative development or suggest an ideal number of iterations. Development and Innovation projects make use of participatory techniques such as interviews and focus groups through a series of iterations specified by the research team in an effort to help close the research to practice gap and ensure that school-based interventions are contextually appropriate, implemented with high fidelity, and more likely to produce equitable outcomes than the status quo.

The iterative development process involves implementing all or component parts of an intervention as feedback is collected from those who will use it and potentially benefit from it. According to NCES's School Pulse Panel data, in the 2023-2024 school year, the majority of public schools (75 percent) used a mix of provider types (two or more) to provide mental health services to students. These providers include school counselors (75 percent), school- or district-employed licensed mental health professionals (67 percent), outside practices or programs (57 percent), and school nurses (17 percent). Feedback gathered from these providers, as well as from the students they support, during the iterative development phase is seen as vital to ensuring usability and feasibility. In addition, this feedback from end users and beneficiaries helps to identify which components of the program, practice, or policy are necessary to improve outcomes and whether any may be optional.

The SEER standard on *Implementation* calls for researchers to document how, and the context within which, programs, practices, or policies are implemented and to measure

intervention fidelity. Researchers should also document, and identify opportunities to learn from, adaptations of the program, practice, or policy during implementation. With input from end users and key stakeholders early on in the iterative development process, crucial information is gathered to identify the support necessary for high fidelity implementation, and the limits to variation in implementation that still allow for expected education outcomes to emerge.

The SEER standard for *Equity* asks researchers who are designing and testing programs, practices, or policies to clearly demonstrate how they address education inequities, such as by improving students' outcomes and their access to resources and opportunities. Research indicates that children and adolescents living in poverty are least likely to be connected with high-quality mental health care despite having the greatest needs (e.g., Hodgkinson et al., 2017) and that they are more likely to access mental health services in schools (e.g., Ali et al., 2019), further reinforcing the idea that effective school-based mental health interventions could be critically important for underserved communities.

The SEER standard for *Cost* expects researchers to document the type and quantity of resources (e.g., personnel, materials and equipment, facilities, and other inputs) required to implement the interventions they study and the economic cost of those resources. Both cost effectiveness and potential cost benefits are of interest to IES, and vitally important given the staffing and financial constraints reported by public schools for supporting the mental health needs of their students (see NCES's School Pulse Panel data).

Determining Usability and Feasibility of the Program, Practice, or Policy

Typically, Development and Innovation researchers incorporate multiple methodological approaches to determine the feasibility and usability of the program, practice, or policy in the intended setting and to determine its potential impact on targeted student outcomes. Information

on the acceptability, usability, and feasibility of implementing programs, practices, and policies can be used to make adjustments to improve future scaling. The SEER standard for *Scaling* recommends that researchers conduct their work in settings and with student populations that can inform the reach of promising interventions. Researchers should explore factors associated with the intervention and its implementation that can inform the efficacy and sustainability of the intervention at scale, such as its affordability and feasibility. Researchers should also develop materials that facilitate replication and scaling of an intervention by others, such as manuals, toolkits, or implementation guides. In particular, when modifying or developing an intervention, researchers need to collect data to decide if it is a good fit for the setting in which it is being implemented.

Determining Promise for Student Outcomes

The final step in IES Development and Innovation research is a carefully designed pilot study of the program, practice, or policy to determine if it is associated with hypothesized improvements in education outcomes for students. There is a strong preference that researchers use a research design that is eligible to meet current WWC design standards (What Works Clearinghouse, 2022). When possible, IES recommends using randomized controlled trials (RCTs) because they have the strongest internal validity for causal conclusions. However, given limitations on time and funding in a Development and Innovation project, we recognize that RCTs are not always the best design choice. IES expects that researchers will propose the most rigorous research design possible given the specific intervention, who the end users and beneficiaries are, and under what conditions it will be implemented, to determine intervention promise. We also expect researchers to justify what can be learned about the potential benefits

for student outcomes given limits on statistical power due to budgetary constraints of time and money for Development and Innovation research.

IES considers feasibility and pilot testing as critical to assessing whether a newly developed or refined intervention is worth a future investment to test its efficacy, and to provide valuable information to better prepare for a larger scale study. While the pilot study is an important first step in determining whether an intervention might change student outcomes, a fully powered causal study using a WWC design, such as through our *Impact project type* (see ALN 84.305A and ALN 84.324A), provides the strongest evidence to motivate changes in practice or policy.

Conclusion

IES offers funding under our Development and Innovation project type that can be used in support of the development or refinement and pilot testing of usable, feasible, and affordable approaches (practices, programs, or policies) to help schools meet the mental health needs of their students and staff. Through IES Development and Innovation research, school-based mental health interventions can be developed or refined to be contextually appropriate, implemented with high fidelity, and more likely to produce equitable outcomes than current practice.

Compliance with Ethical Standards

The authors declare that we have no conflicts of interest. The authors also declare that we do not report research involving the participation of human subjects in this paper, and that as a result, there was no process for informed consent needed.

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