#### 1

# Education Policy & Leadership

# SCHOOL MENTAL HEALTH: THE IMPACT OF STATE AND LOCAL CAPACITY-BUILDING TRAINING

SHARON STEPHAN
University of Maryland School of Medicine
CARL PATERNITE
Miami University
LINDSEY GRIMM
University of Maryland School of Medicine
& LAURA HURWITZ
Children's Hospital of Chicago

**Abstract:** Despite a growing number of collaborative partnerships between schools and community-based organizations to expand school mental health (SMH) service capacity in the United States, there have been relatively few systematic initiatives focused on key strategies for large-scale SMH capacity building with state and local education systems. Based on a framework of ten critical factors for capacity building, as well as existing best practices, two case studies were utilized to develop a replicable capacity-building model to advance interagency SMH development. Seventy education and mental health stakeholders from two selected states participated in baseline assessments of skill competency and critical factor implementation followed by two-day trainings (one in each state); 29 (41%) of the participants also completed a six month follow-up assessment. Targeted competencies increased significantly for participants from both states, with large effect sizes (d = 2.05 and 2.56), from pre- to post-training. Participant reports of critical factor implementation increased significantly for one of the two states (t[15] = -6.40, p < .001, d = 1.77). Results inform specific training recommendations for stakeholders and collaborative teams, as well as policy implications to support future development of SMH service capacity.

Keywords: School mental health; Workforce development

Sharon Stephan, Carl Paternite, Lindsey Grimm, & Laura Hurwitz (2014). School Mental Health: The Impact of State and Local Capacity-Building Training. *International Journal of Education Policy & Leadership* 9(7), Retrieved from www.ijepl.org.

# School Mental Health: Workforce Development

Youth spend roughly half of their waking hours in school settings, where it is essential that educators provide engaging and supportive learning environments to promote student academic success (CDC, 2009; Dinkes, Kemp, & Baum, 2009). However,

effectively attending to the multitude of students' interrelated academic, social—emotional, and behavioral needs and meeting mandated academic benchmarks pose difficult challenges for school professionals. Specifically, one in five school-age youth experience emotional and behavioral problems (Rones & Hoagwood, 2000), and roughly three-fourths of schools identify social, interpersonal, and familial problems to be common concerns among







their students (Foster et al., 2005). These realities highlight the importance of schools' being equipped with the fundamental infrastructure, policies, and supports to systematically address student wellbeing, including their academic, social–emotional, and behavioral needs. The current case studies focused on how two states, West Virginia and Utah, implemented a strategy to systematically strengthen the capacity of local and state level education and community partnerships to improve school mental health (SMH) programs and services.

# Importance of SMH Programs and Services

Among both education and public health researchers and practitioners, there is increasing awareness of the critical role of schools in addressing youth mental health, which, as noted above, is inextricably linked to academic success (Doll, Spies, & Champion, 2012; Rones & Hoagwood, 2000). However, schools are challenged by an overarching mandate to raise academic standards, and it is quite easy for SMH programs and services to be construed as "addons" that are not vital to the central academic mission of the educational system. One explanation for this problem is that educational administrators and teachers often do not feel adequately resourced in terms of funding, personnel, or programs to provide the mental health supports needed by students in their schools (Foster et al., 2005; Weist, Paternite, Wheatley-Rowe, & Gall, 2009). Moreover, there is a continuing need for development and dissemination of effective youth-focused mental health practices, and there continues to be a tremendous gap between the development and dissemination of evidencebased mental health practices and the training, supervision, and infrastructure necessary to implement these effective practices in schools (Ringeisen, Henderson, & Hoagwood, 2003; Weist et al., 2009).

There are a growing number of collaborative partnerships between schools and community-based health and mental health organizations that are expanding service capacity and making optimal use of schools as entry points for an integrated system of mental health supports for youth and families. These collaborative efforts benefit schools and their partnering community agencies through the pooling of resources and expertise, movement toward robust systems of care, and the development and implementation of integrated strategies to ensure comprehensive learning supports and to reduce academic and non-academic barriers to learning (Weist, Evans, &

Lever, 2003). Evidence of these collaborations includes the fact that more than half of schools in the United States report having partnered, to some degree, with community-based organizations to provide mental health services (Foster et al., 2005). Despite the growing emphasis on such collaborative partnerships, numerous challenges to successful partnerships remain (Hooper & Britnell, 2012), and there are relatively few studies focused on key strategies for large-scale SMH capacity building with state and local education systems.

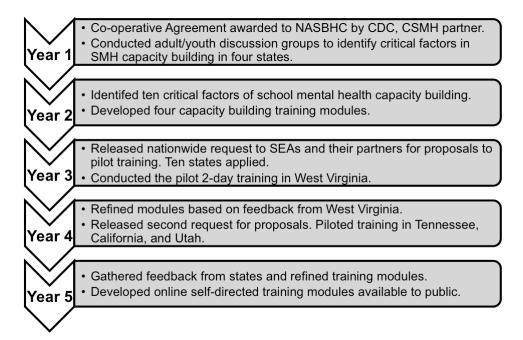
## Principles of SMH Capacity Building

Stephan, Hurwitz, Paternite, and Weist (2010) addressed this gap—that is, the lack of examination of key strategies—through research undertaken by the School Mental Health-Capacity Build Partnership (SMH-CBP). This work was part of a larger project and co-operative agreement between the National Assembly on School-Based Health Care (NASBHC) and the Center for Disease Control Division of Adolescent Health (CDC-DASH; see Figure 1 for SMH-CBP timeline). As defined by the CDC, capacity building means enabling an organization to operate in a more comprehensive, responsive, and effective manner via the provision of training, technical assistance, information sharing, materials development, technology transfer, or funding (CDC, 2000). SMH-CBP activities targeted capacity building of local and state education authorities via these mechanisms, with a strategic focus on sustainability, as reflected in Flaspohler and colleagues' (2008) definition of capacity building as the "dissemination of innovations and [the] sustainability of those innovations once they are implemented" (p. 183).

The purpose of the initial SMH-CBP work was to inform the development of a model for SMH capacity building by conducting site visits in four states. The site visits concentrated on how SMH initiatives are developed and implemented at state and local levels. Maryland, Missouri, Ohio, and Oregon were selected based on their track records of success in relation to SMH policies and effective SMH practices. For these four states, several key aspects of their success were quite evident, including strong state level leadership, success in securing federal funding, demonstrated cross-agency collaborations, and broad, diverse stakeholder investments in advancing statewide SMH initiatives.

Three focus groups were conducted in each of the four states and included 119 participants, representing education leaders, mental health/health system

Figure 1. School Mental Health Capacity-Building Partnership Timeline



leaders, youth development leaders, and family advocates. Based on structured, iterative content analysis of the focus group data, 10 critical factors for capacity building were identified:

- Establish a unified, cohesive, and compelling vision and a shared agenda with stakeholders one that can inspire local action.
- 2. Establish a centralized organizational infrastructure and accountability mechanisms to ensure implementation of the vision and action agenda.
- 3. Create feasible and sustainable funding models for comprehensive SMH initiatives, including early intervention and prevention.
- 4. Promote an understanding among state and local education leaders of the critical links and associations between student academic success and mental health.
- Meaningfully engage diverse family members and youth in SMH policy and program development.
- 6. Recognize the needs of culturally diverse populations and take steps to reduce disparities in access to effective SMH programs and services.
- 7. Implement pre-professional and in-service training for educators and SMH professionals related to youth development, youth mental health, and best practices in SMH.

- 8. Provide support for practitioners in using evidence-based SMH strategies.
- 9. Co-ordinate equitable distribution of resources and services across schools related to ensuring student academic success, mental health, and well-being.
- Focus on continuous quality improvement by collecting and using outcome data to inform decision making at the local school, school district, and state levels.

# Purpose of the Current Case Studies

With the ten critical factors of Stephan et al. (2010) as a framework, the purpose of the current case studies was to fulfill the primary goal of the NASBHC/CDC-DASH co-operative agreement: that is, to develop a capacity-building model that could be replicated by states seeking to advance or build cross-agency, systemic SMH efforts. A secondary goal was to examine the impact of a two-day training strategy on participants' reports of their ability to build capacity in SMH. It was hypothesized that participants' self-rated abilities related to SMH capacity building would significantly increase from pre- to post-training, across training modules. Moreover, the trainers were interested in the relation between participants' perceptions of the training as related to the implementation of the 10 critical factors six months after training. It was hypothesized that par-

ticipants' baseline critical factor implementation scores, self-rated abilities across training modules, perceived impact of training, and planned use of training material would significantly predict their mean critical factor implementation scores at the six month follow-up. Given that data collected in the study is exploratory in nature, we argue that the results should be viewed in that context, with an understanding that future work is critical to further develop and test the framework and training.

#### Method

# Development of Capacity-Building Training Modules

Using the ten critical factors as a guide for determining training content, the SMH-CBP developed a capacity-building model that built on existing best practices, addressed system-level needs, and was relevant to diverse stakeholders. Since developing a training component on each of the ten factors was not feasible, the SMH-CBP team posed three fundamental questions to help home in on specific areas of need: (1) Has relevant content on best practices already been developed? (2) Is there a critical gap in content that needs to be filled? (3) What content is absolutely necessary for any state to begin their SMH capacity building work?

Based on these criteria, four modules for capacity-building training were developed and utilized: (1) Overview and Fundamentals of SMH (e.g., defining SMH, learning benefits of SMH, understanding the connection between SMH and academic success); (2) Marketing SMH to School Administrators (e.g., identifying steps in social marketing, developing key messages about the importance of SMH); (3) SMH Quality Improvement (e.g., learning steps in quality assessment process, discovering how to develop assessment team); and (4) Statewide SMH Planning (e.g., identifying 10 critical factors for advancing SMH, prioritizing and identifying action steps for state-wide planning). These four key domains of training were chosen because they cover necessary content for any collaborative teams of educators and community partners embarking on SMH efforts, including basic information about the SMH field (Module 1), social marketing content often not addressed in existing SMH training and technical assistance efforts (Module 2), training content that emphasizes and encourages the use of best practices and data-based decision making (Module 3), and information and strategies essential to building a sustainable capacity-building process (Module 4).

Separate workgroups were formed to develop each of the four training modules. SMH-CBP steering committee members and other individuals with expertise outside of the steering committee (e.g., social marketing) participated in the workgroups. Each workgroup included at least one family member and one representative each from the fields of mental health and education. Workgroups met virtually and in person for several months to develop and refine training content. Training modules were piloted in various technical assistance activities and were also presented for feedback at national conferences. Evaluation results from these activities were used in refining each module.

## Request for Applications (RFA) Process

Building on lessons learned from the previously described site visits in Maryland, Missouri, Ohio, and Oregon, and from consideration of the ten critical factors, a capacity-building model was developed that involved provision of one year of technical assistance with a State Education Agency (SEA) and its collaborating local agencies (the two-day SMH capacity-building training was embedded early in the year of technical assistance). In order to pilot the model, the SMH-CBP developed a Request for Applications (RFA) to solicit applications from state departments of education and their partner organizations<sup>1</sup>. The RFA was sent to state departments of education, and nine states submitted applications; however, the four "early adopter states" included in earlier SMH-CBP site visits were ineligible to apply. A review committee comprised of SMH-CBP steering committee members reviewed and scored the applications, using the following scoring criteria: existing statewide capacity for SMH (20 points); commitment from SEA to advance SMH (15 points); readiness to co-ordinate a training initiative (15 points); intent to implement SMH capacity-building activities in the future (20 points); demonstrated commitment from partner agencies (15 points); and overall merit, quality, and feasibility of the application (15 points). All reviewers submitted scores for all states, and after the scores were openly discussed and reviewed by the team, the state with the highest average total score was selected for participation.

# Implementation and Testing of the SMH Capacity-Building Model and Modules

West Virginia training. Based on being scored highest in the RFA review, West Virginia was selected to participate in the pilot initiative. The application was submitted by the West Virginia Department of Education Office of Healthy Schools in collaboration with several partner agencies and organizations, including the Bureau for Behavioral Health and Health Facilities; Bureau for Public Health; School Health Technical Assistance Center at Marshall University; West Virginia School Based Health Assembly; and the Family Advocacy, Support, and Training program. Following selection, West Virginia leaders participated in a series of planning calls with NASBHC staff to organize logistics, develop a list of invitees, shape the training curriculum and identify co-facilitators for the statewide planning process. The training took place on May 13–14, 2009, in Charleston, West Virginia (WV). Six national experts facilitated and delivered the training to a total of 40 SMH stakeholders from a variety of agencies and disciplines, including family advocacy, education, health, and mental health.

Based on the results of the training in WV, several modifications were made to the training curriculum and materials. Experiences and lessons learned from the two-day training in WV were built into a second RFA announcement presenting a model that incorporated adaptability to local circumstances and needs in selecting training modules. Specifically, the RFA specified: (a) that the training could take place in one day (with an optional second day); (b) that the SEA, in consultation with the SMH-CBP, would have the option of selecting specific modules; and (c) that the SEA would be required to cover travel costs and training stipends for the SMH-CBP facilitators.

Utah training. Two years after submitting their initial application, Utah responded to the second RFA, requesting to receive training and technical assistance from the SMH-CBP using their own funds. They requested a two-day training curriculum, in fact, with all four training modules. Their RFA application was submitted by the Utah State Department of Education in partnership with Utah School Based Behavioral Health Alliance (USBBHA), Utah Division of Substance Abuse and Mental Health (DSAMH), Utah Parent Center, National Alliance for the Mentally Ill, Allies with Families, and New Frontiers for Families, as well as other with local

school and family partnerships committed to children's mental health. The training took place on March 10 and 11, 2011, in Salt Lake City, Utah (UT). Two national experts facilitated the workshop, and a total of 35 SMH stakeholders attended the two-day training.

### **Participants**

SMH stakeholders participating in the West Virginia and Utah trainings completed an evaluation at the end of their two-day trainings and were invited to complete evaluations six months after the training ("follow-up"). A total of 40 participants in West Virginia and 31 participants in Utah completed the initial evaluations during the training (pre and post). Using a repeated measures design, 13 West Virginia participants from the original sample completed the six-month follow-up evaluation, and 16 Utah participants completed the six-month follow-up evaluation. All evaluations were anonymous, and follow-up data were matched to participants' initials and date of birth.

#### Measures

**Evaluation of training at baseline.** To assess the effectiveness of the capacity-building training, attendees were asked to complete short paper-and-pencil surveys rating their knowledge of and satisfaction with the two-day training event across multiple domains.

Training module skills. Nineteen items measured participants' self-reported abilities pre- and post-training in each of the four training modules (i.e., Overview and Fundamentals of SMH, SMH Quality Assessment and Improvement, Marketing SMH to School Administrators, and Statewide Planning). Responses were rated on a six-point Likert scale ranging from 1 (not able) to 6 (totally able). For more information on the specific content presented in each module, see NASBHC's website for detailed information and trainer materials (www.sbh4all.org).

*Impact of training.* Seven items measured participants' perceptions of the training event outcomes related to specific goals (e.g., "Better understanding of how to build capacity in SMH at all levels [building, local, state]"; "Strengthened my current relationships with SMH partners"). Response options ranged from 1 (goal not at all met) to 6 (completely met).

Integration of training materials. Four items assessed participants' perceptions of potential opportunities to integrate training material in the future. Questions included, for example, "Do you see opportunities to integrate material into... (1) developing policies, (2) planning efforts, (3) professional development, and (4) advocacy/legislative efforts?" For each item, participants marked "yes" or "no." A count variable was created, with higher numbers indicating they were likely to integrate materials into more professional areas.

Ten Critical Factors. To measure current implementation in each state (WV and UT) of the 10 critical factors identified by Stephan et al. (2010), participants were asked to rate the degree to which each factor was currently being implemented in their state. Response options ranged from 1 (not in place) to 6 (fully in place). See Stephan et al. (2010) for detailed description of the 10 critical factors.

Evaluation of training at follow-up. Participants were asked to complete a six-month follow-up online evaluation assessing their perceived use and value of the information and materials presented in the two-day capacity-building training. Project directors from each state emailed training participants asking them to complete the brief, anonymous survey. The only items used from the six-month follow-up survey were participants' ratings on the 10 critical

factors. Participants were asked to rate the degree of implementation from 1 (not in place) to 6 (fully in place) of the 10 critical factors in their state since the two-day baseline training.

### **Data Analysis**

Separate analyses were conducted for West Virginia and Utah data. To examine participants' selfreported ability across all four training modules both prior to the training and after the training, pairedsamples t-tests were conducted using baseline data (West Virginia n = 40, Utah n = 30). Likewise, paired-samples t-tests were conducted (West Virginia n = 13, Utah n = 16) to examine if there were significant differences in state-wide implementation scores of the 10 critical factors from baseline to follow-up. Lastly, a linear stepwise regression was conducted to assess if participants' perceptions of the baseline two-day training predicted the mean number of critical factors in place six months later. Independent variables included in the regression equation included mean critical factor score at baseline, mean self-rated abilities across training modules directly post-training, mean impact of training, and mean integration of material.

Table 1. West Virginia Participant Mean Competency Pre- and Post-Baseline Training (n = 40)

	Pre-training competency	Post-training competency	_	
	M (SD)	M (SD)	t(39)	d
Module 1. Overview and Fundamentals of SMH	2.89 (1.36)	4.36 (0.88)	-10.67**	1.28
Module 2. Marketing SMH to School Administrators	2.85 (1.19)	4.49 (0.75)	-9.02**	1.65
Module 3. Quality Assessment and Improvement in SMH	2.33 (1.16)	4.42 (0.73)	-13.37**	2.16
Module 4. Statewide SMH Planning	2.48 (1.04)	4.61 (0.70)	-13.97**	2.40
Modules 1–4: Total Mean Score	2.74 (1.01)	4.50 (0.69)	-15.58**	2.03

#### Results

## West Virginia

Significant differences were found for participants' mean self-rated abilities across Modules 1–4 between pre-training (M = 2.74, SD = 1.00) and post-training (M = 4.50, SD = 0.69): t(39) = -15.58, p < .001. The effect size was also quite large (d = 2.05), indicating that participants' knowledge base for SMH capacity building was significantly impacted by the training. See Table 1 for mean comparisons of West Virginia participants' self-rated abilities pre-and post-training (n = 40).

For all four modules, there was significant positive change in participants' self-rated abilities preand post-training. An examination of the effect sizes for each training module showed that the largest changes were seen in participants' ability to monitor effectiveness of SMH programs (Module 3, d = 2.16) and develop strategies for partnering with various stakeholders to plan for SMH programming (Module 4, d = 2.40) (see Table 1 for all effect sizes).

There were no significant differences in participants' overall state-wide implementation scores of the 10 critical factors between baseline (M = 2.70,

SD = 0.47) and follow-up (M = 3.13, SD = 0.91): t(11) = -1.87, p = .089. However, the effect size was moderate (d = 0.59), suggesting this null finding may be related to the small sample size. The majority of the 10 critical factors were rated as being slightly higher at six-month follow-up, but not significantly different from participants' rating at baseline. However, t-tests revealed significant changes in implementation of the following critical factors from baseline to six months: Factor 4 (connection between SMH and academic outcomes), Factor 6 (recognizing the needs of diverse populations), and Factor 8 (monitoring SMH best practices). Interestingly, for Factor 1 (development of shared SMH agenda), mean scores slightly decreased at the six-month follow-up assessment. Similarly, for Factor 10 (collecting data on SMH outcomes), participants' mean scores were identical at baseline and at six months. Table 3 shows mean comparison for participants' ratings of the 10 critical factor scores at baseline and at six-month follow-up assessment.

Table 3. West Virginia (n = 13) and Utah (n = 16) Mean Implementation of Critical Factors at Baseline and Six Months

	West Virginia			Utah		
Critical Factors	Baseline M (SD)	6-month M (SD)	t(12)	Baseline M (SD)	6-month M (SD)	t(15)
Factor 1	3.50 (0.91)	3.33 (1.44)	0.39	2.44 (1.15)	4.06 (1.29)	-5.67**
Factor 2	3.33 (1.50)	3.58 (1.44)	-0.46	1.88 (0.74)	3.88 (1.13)	-7.75**
Factor 3	2.00 (0.85)	2.25 (1.06)	-0.638	1.75 (0.86)	3.38 (1.31)	-4.78**
Factor 4	3.08 (0.79)	4.17 (1.03)	-4.17**	2.69 (1.14)	5.06 (1.12)	-6.33**
Factor 5	2.33 (0.78)	2.50 (1.24)	-0.48	1.56 (0.51)	3.06 (1.34)	-3.98*
Factor 6	2.20 (0.45)	3.60 (1.14)	-1.43*	2.81 (0.91)	3.94 (1.44)	-3.74*
Factor 7	1.82 (0.75)	2.46 (1.21)	-1.47	1.94 (0.85)	3.50 (1.59)	-3.65*
Factor 8	2.82 (0.94)	3.83 (1.27)	-2.57*	3.13 (1.36)	4.31 (1.45)	-3.14*
Factor 9	2.42 (0.79)	3.17 (1.03)	-2.14	2.00 (0.89)	3.25 (1.48)	-3.73*
Factor 10	2.82 (1.17)	2.82 (1.08)	0.00	2.40 (1.35)	3.13 (1.46)	-1.59
Total Mean Score	2.70 (0.47)	3.13 (0.91)	-1.88	2.26 (0.54)	3.75 (1.06)	-6.39**

Table 2. Utah Participant Mean Competency Pre– and Post–Baseline Training (n = 31)

	Pre-training competency	Post-training competency		
	M (SD)	M (SD)	t(30)	d
Module 1. Overview and Fundamentals of SMH	3.53 (1.29)	4.88 (0.75)	-8.22**	1.28
Module 2. Marketing SMH to School Administrators Module 3. Quality Assessment and Improvement in SMH Module 4. Statewide SMH Planning	2.13 (0.96)	4.34 (0.80)	-15.14**	2.50
	2.97 (1.19)	4.83 (0.73)	-9.46**	1.88
	1.97 (1.04)	4.78 (0.74)	-15.64**	3.11
Module 1–4: Total Mean Score	2.66 (0.92)	4.74 (0.67)	-15.53**	2.58

*Note.* Paired-samples *t*-tests were conducted on baseline sample (n = 31) and are presented in column 3. Cohen's *d* effect sizes are presented in column 4. \*\* p < .01

#### Utah

Similar to West Virginia, there were significant differences in Utah participants' mean self-rated abilities across Modules 1–4 between pre-training (M = 2.67, SD = 0.92) and post-training (M = 4.74, SD = 0.68): t(29) = -15.53, p < .001. The effect size was also quite large (d = 2.56), indicating that participants' knowledge base across all four capacity-building modules was impacted by the training. Table 2 depicts Utah's baseline participants' (n = 31) comparison of training module means at pre- and post-training assessment.

Across all four training modules, significant differences emerged in participants' skill ratings preand post-training. Effect sizes showed that most notable growth was in quality assessment and improvement (Module 2, d = 2.50) and statewide SMH planning efforts (Module 4, d = 3.11).

Significant differences were also found in Utah participants' overall statewide implementation scores of the 10 critical factors at baseline (M = 2.26, SD = 0.54) versus follow-up (M = 3.75, SD = 1.06), such that participants tended to rate more critical factors

being in place six months after the training: t(15) = -6.40, p < .001. The effect size of 1.77 further indicates that the training had a large impact on participants' critical factor scores over time. In contrast with West Virginia data, participants reported significant improvements in critical factors in their state for all but one factor, Factor 10 (collecting data on SMH outcomes), which did not significantly change. Table 3 shows mean comparison for participants' ratings of the 10 critical factors scores at baseline and at six-month follow-up assessment.

Results of the linear stepwise regression revealed that participants' ratings of Utah's 10 critical factors were negatively predicted by their integration of training materials: F(1,12) = 7.83, p < .05. Specifically, higher participants' reports for planning on integrating training materials into their professional work predicted lower ratings of the 10 critical factors. Interestingly, participants' mean score for the 10 critical factors at baseline (p = 0.25), post-training mean scores on the four training modules (p = 0.06), and mean impact of training (p = 0.16) were not significantly related to how many critical factors participants perceived to be in place in their state.

#### Discussion

At the local level, there is increased emphasis on collaborative partnerships between schools and mental health provider organizations to make optimal use of schools as entry points in an integrated system of mental health care for school-aged youth (Kazak et al., 2010; Shapiro, DuPaul, Barnabas, Benson, & Slay, 2010). These collaborative efforts benefit schools and the collaborating community agencies through the pooling of resources and expertise, movement toward true systems of care, and the development and implementation of integrated strategies to reduce academic and non-academic barriers to learning for students (Bringewatt & Gershoff, 2010; Cappella, Frazier, Atkins, Schoenwald, & Glisson, 2008; Weist, Evans, & Lever, 2003). Yet, such collaboration is not consistent at the school building, school district and/or state levels. The current case studies provide a framework for how state and local education agencies (SEAs and LEAs) can build capacity for a full continuum of mental health promotion, prevention, and intervention programs and services offered in schools, facilitated by statewide trainings. Key implications for policy makers, policy implementers, SEAs, and LEAs, as well as lessons learned from the initiative are described below.

# Implications for Statewide Capacity-Building Trainings

In addition to the four states that participated in the pilot focus group study preceding the current case studies, ten states submitted applications for the twoday capacity-building training. Thus, it appears that there is a growing interest at the state level for this type of professional training. The current case studies represent one of the first statewide initiatives to be systematically implemented and evaluated. In general, participants reported that the training positively impacted their ability to build capacity in SMH, helped build and strengthen their relationships with SMH partners, and increased their commitment to SMH services across the state. Notably, the two most impactful aspects of the training were: (1) identifying assessment tools that measure organizational change and quality improvement in SMH programs (Module 3), and (2) understanding how to engage in system-level planning (Module 4). These finding fit with and highlight the relevance of prior research suggesting that ongoing data-based decision-making is needed when making large-scale organizational changes (Fixsen, Blase, Horner, & Sugai, 2009; Hoyle, Samek, & Valois, 2008; Rossi, Lipsey, & Freeman, 2004). Based on the current findings, stakeholders are encouraged to integrate quality assessment evaluation tools throughout the planning, organization, and benchmarking processes. A variety of tools are available to assist in this evaluative process, and a combination of these may prove the most useful for understanding progress at different stages of the change process. For instance, collaborative teams can use the Organization Readiness for Change Assessment (Lehman, Greener, & Simpson, 2002) during the planning stage, the Strengthening Partnerships: Community School Assessment Checklist (Blank & Langford, 2000) to assess project stakeholders' investment, and the Mental Health Template Planning Evaluation (see www.nasbhc.org) to systematically evaluate the quality of SMH services across levels.

As noted previously, significant positive changes were seen in participants' knowledge of the 10 critical factors for advancing SMH. However, it remains unclear whether the knowledge gained during the training significantly impacted the state's implementation of these critical factors. West Virginia participants' implementation ratings of the 10 critical factors were not significantly different between baseline and the six-month follow-up, though numerical changes were noted for several individual critical factors. Conversely, Utah participants' scores significantly increased across all domains except for Factor 10. In addition, West Virginia participants tended to perceive their state to have more of the 10 critical factors in place at baseline as compared to Utah, and there was a relatively small number of West Virginia follow-up respondents, both of which could account for the null finding. Future evaluation of similar statewide training efforts may benefit from mixedmethod designs incorporating focus groups and/or key informant interviews to further inform the findings. For instance, it would be helpful to understand from respondents what strategies were successful in advancing the critical factors and, conversely, what obstacles impeded progress. In addition, the variability between states/districts in baseline responding on the 10 critical factors speaks to the need to individualize the training process. Although the team set out to create a "standardized" set of training modules, it was always with the understanding that certain modules and even components of modules may be more relevant for some states/districts than others, and therefore should be applied accordingly. This, in fact, is how the framework and materials have been used to date.

## **Implications for Policy Makers**

The current case studies have implications for policy makers at the local, state, and federal levels. Research has shown that school-based health and mental health services enhance access to mental health care for students (Keeton, Soleimanpour, & Brindis, 2012), help reduce stigma (Nabors & Reynolds, 2000), and are associated with several positive youth outcomes, including improvements in emotional functioning, decreases in functional impairment, and the potential to improve academic performance (Kutash, Duchnowski, & Green, 2011). However, little research has been done on how states can build capacity to foster these initiatives. As outlined by Stephan et al. (2010), building SMH capacity across systems is a multifaceted and often overwhelming task for stakeholders. The two-day trainings detailed in the current case studies streamlined the capacitybuilding process for participants by offering training and resources in areas identified as critical by other leading states, and then having participants systematically identify their existing resources (e.g., leaders in their state, infrastructure, existing partnerships) and potential challenges (e.g., lack of funding, poor buy-in) before embarking on a statewide action planning process. The State Implementation and Scaling-up of Evidence-based Practices (SISEP) Center identified similar areas of need for states when developing plans for comprehensive change. Specifically, the SISEP research team suggests that states consider and understand the risks and benefits required from changes, create clear communication and avenues for feedback across partners, and initiate on-going training and professional development to support teachers and staff (Fixsen et al., 2009).

The current case studies, and the SMH-CBP more broadly, reflect the growing trend for federal agencies to favor programs that embed crosscollaborative partnerships as a key element. For example, the Centers for Disease Control and Prevention (CDC) and Division of Adolescent and School Health (DASH) have continuously supported the Co-ordinated School Health (CSH) approach, a guiding framework for school health care delivery and one that highlights the importance of system integration. Recent research has supported the CSH model, with findings showing gains in academic achievement (Rosas, Case, & Tholstrup, 2009), enhanced collaboration across disciplines (Berzin, O'Brien, & Tohn, 2012), and improved school health infrastructure (Stoltz, Coburn, & Knickelbein, 2009). Strong support for a multi-disciplinary, crossagency approach to SMH is also found in influential reports from the Office of the Surgeon General and President George W. Bush's New Freedom Commission on Mental Health, which affirmed the unmatched ability of public schools to provide an access point for recognizing and addressing students' mental health needs (U.S. Department of Health and Human Services, 1999; New Freedom Commission on Mental Health, 2003). By bringing together a multi-disciplinary group of stakeholders from across each participating state, the capacity-building process ensured a diversity of perspectives and resources, with the ultimate goal of fostering a richer and more meaningful statewide agenda with crossagency investment. Of note, despite having statewide family advocacy organizations at the capacity-building trainings, leaders from one participating state did not have the continued family engagement they had hoped for, and have since been actively working to foster System of Care principles of family-driven care into all of their continued SMH planning efforts.

#### Limitations

There are several important limitations to note regarding the current findings. For one, data are based on participants' self-reports, so social desirability or other biases may have influenced responses. Although steps were taken to ensure de-identification of data, and to encourage participants to be honest in their responses in order to fully inform a quality improvement process, it is reasonable to consider that responding may have been biased due to the fact that the trainers were also collecting the data. Second, rating scales included compilation of single-item indicators previously used in implementation research, resulting in essentially an index of selected items. Thus, additional research is needed to examine the validity, reliability, and factor structure of these indices to better understand the strength of their psychometric properties as scales. Third, there was a large attrition rate for both states between baseline and follow-up assessment, with only 33 percent of the West Virginia sample and 53 percent of the Utah sample responding to the six-month follow-up survey. It is possible that participants who felt strongly about the training, either positively or negatively, responded to the follow-up survey request. Thus, the data should be interpreted with caution. Fourth, the case studies and associated data reflect only two states involved in the capacitybuilding training, so responses may not generalize nationally across all states. In sum, these data are

exploratory, based on two state-level case examples examining the process and outcomes involved in building their SMH capacity. Additional research is needed to further examine the impact of capacitybuilding trainings on participants' abilities to develop and sustain SMH programs across their state. Finally, it is important to note that while training is important for developing and enhancing state and local capacity to achieve quality school mental health, there are certain factors within the framework that will be less impacted by such training efforts, at least within the time frame of the current study. For example, although training in system planning may help stakeholders become more aware of their needs, without the provision or reallocation or funds, the training alone will not create a feasible and sustainable funding model.

#### Conclusion

The task of capacity building in an effort to create systemic change within an organization, especially a school setting, can be an arduous task for educators and policy makers alike, as it often requires crosssystem collaboration, organizational readiness for change, and the mobilization of innovation. The nested nature of schools (i.e., students nested within classrooms within schools embedded in communities) requires program stakeholders to be proactive and take a wider lens when developing an integrative and innovative capacity-building model (Cosner, 2009; Massell, 2000). Yet, there is a paucity of research identifying the key components of schoolbased capacity building as it specifically relates to children's mental health in educational settings. The current case studies contribute to a needed area of research by illustrating how comprehensive training in SMH capacity building can positively affect statewide implementation of needed SMH programs. In the interest of supporting feasible local and state SMH capacity-building efforts, all materials developed as part of these case studies, within the context of the larger SMH-CBP initiative, have been designed as self-directed modules and are available of charge (see www.sbh4all.org csmh.umaryland.edu).

#### Note

1. Follow-up interviews with focus group participants subsequent to the site visits to the early adopter states revealed that just the process of bringing together stakeholders to share perspectives on

SMH had a benefit both to the individuals who participated and to the states' efforts as a whole. Therefore, mirroring the site visit process, an expectation of the selected state was to convene a diverse range of stakeholders from key state and local agencies (i.e., departments of education, mental health/human services, physical health) and from child-serving organizations, as well as youth and their families, to participate in the two-day SMH capacity-building training.

#### References

- Berzin, S., O'Brien, K., & Tohn, S. (2012). Working on what works: A new model for collaboration. *School Social Work Journal*, 36(2), 15–26
- Blank, M.J., & Langford, B.H. (2000). Strengthening partnerships: Community school assessment checklist. Washington, DC: Coalition for Community Schools. Retrieved from www.communityschools.org/CCSDocuments/ assessmentnew.pdf
- Bringewatt, E., & Gershoff, E. (2010). Falling through the cracks: Gaps and barriers in the mental health system for America's disadvantaged children. *Child Youth Services Review*, 32, 1291–1299.
- Cappella, E., Frazier, S.L., Atkins, M.S., Schoenwald, S.K., & Glisson, C. (2008). Enhancing schools' capacity to support children in poverty: An ecological model of school-based mental health services. *Administration and Policy in Mental Health*, 35, 395–409.
- Centers for Disease Control and Prevention (CDC). (2000). Building capacity—technology transfer efforts and sustainability for HIV prevention. [Program briefing]. Atlanta, GA: National Center for HIV, Viral Hepatitis, STD, and TB Prevention.
- Centers for Disease Control and Prevention (CDC). (2009). School connectedness: Strategies for increasing protective factors among youth. Atlanta, GA: U.S. Department of Health and Human Services.
- Cosner, S. (2009). Building organizational capacity through trust. *Educational Administration Ouarterly*, 45(2), 248–291.

- Dinkes, R., Kemp, J., & Baum, K. (2009). *Indicators of school crime and safety: 2008*. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education; Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. NCES 2009–022/NCJ 226343.
- Doll, B., Spies, R., & Champion, A. (2012). Contributions of ecological school mental health services to students' academic success. *Journal of Educational and Psychological Consultation*, 22, 44–61.
- Fixsen, D.L., Blase, K.A., Horner, R., & Sugai, G. (2009). Scaling up brief 3: Readiness for change. Chapel Hill, NC: University of North Carolina, SISEP project, FPG Child Development Institute.
- Flaspohler et al. (2008). Unpacking Prevention Capacity: An Intersection of Research-to-practice Models and Community-centered Models. *American Journal of Community Psychology* 41. pp.182–196.
- Foster, S., Rollefson, M., Doksum, T., Noonan, D., Robinson, G., & Teich, J. (2005). School mental health services in the United States, 2002–2003. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration. DHHS Pub. No. (SMA) 05–4068.
- Hooper, L.M., & Britnell, H.B. (2012). Mental health research in K–12 schools: Translating a systems approach to university–school partnerships. *Journal of Counseling & Development*, 90, 81–90.
- Hoyle, T.B., Samek, B.B., & Valois, R.F. (2008). Building capacity for the continuous improvement of health-promoting schools. *Journal of School Health*, 78, 1–8.
- Kazak, A.E., Hoagwood, K., Weisz, J.R., Hood, K., Kratochwill, T.R., Vargas, L.A., & Banez, G.A. (2010). A meta-systems approach to evidence-based practice for children and adolescents. *American Psychologist*, 65, 85–97.
- Keeton, V., Soleimanpour, S., & Brindis, C. (2012). School-based health centers in an era of health care reform: Building on history. Current Problems in Pediatric and Adolescent Health Care, 42, 132–156.

Kutash, K., Duchnowski, A., & Green, A. (2011). School-based mental health programs for students who have emotional disturbance: Academic and social–emotional outcomes. *School Mental Health*, *3*, 191–208.

- Lehman, W.E.K., Greener, J.M., & Simpson, D.D. (2002). Assessing organizational readiness for change. *Journal of Substance Abuse Treatment*, 22, 197–209.
- Massell, D. (2000). *The district role in building capacity: Four strategies*. [Policy Brief]. Philadelphia, PA: Consortium for Policy Research in Education. ERIC Document Reproduction Service No. ED453575.
- Nabors, L. A., & Reynolds, M. W. (2000). Program evaluation activities: Outcomes related to treatment for adolescents receiving school-based mental health services. *Children's Services: Social Policy, Research, and Practice*, 3. pp. 175–189.
- New Freedom Commission on Mental Health. (2003). Achieving the promise: Transforming mental health care in America (Final report). Rockville, MD. DHHS Pub. No. SMA-03-3832. Retrieved October 13, 2014, from http://govinfo.library.unt.edu/mentalhealthcom mission
- Ringeisen, H., Henderson, K., Hoagwood, K. (2003). Context matters: Schools and the "research to practice gap" in children's mental health. *School Psychology Review*, 32, 153–168.
- Rones, M., & Hoagwood, K. (2000). School-based mental health services: A research review. *Clinical Child and Family Psychology*, *3*, 223–241
- Rosas, S., Case, J., & Tholstrup, L. (2009). A retrospective examination of the relationship between implementation quality of the coordinated school health program model and school-level academic indicators over time. *Journal of School Health*, 79(3), 108–115.
- Rossi, P.H., Lipsey, M.W., & Freeman, H.E. (Eds.). (2004). *Evaluation: A systematic approach*. Thousand Oaks, CA: Sage.
- Shapiro, E.S., DuPaul, G.J., Barnabas, E., Benson, J.L., & Slay, P.M. (2010). Facilitating school, family, and community partnerships: Enhancing student mental health. [Special Issue]. *School Mental Health*, 2, 45–51.

- Stephan, S., Hurwitz, L., Paternite, C., & Weist, M. (2010). Critical factors and strategies for advancing statewide school mental health policy and practice. *Advances in School Mental Health Promotion*, 3, 48–58.
- Stoltz, A., Coburn, S., & Knickelbein, A. (2009). Building local infrastructure for co-ordinated school health programs: A pilot study. *The Journal of School Nursing*, 25(2), 133–140.
- U.S. Department of Health and Human Services. (1999). Mental health: A report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- Weist, M.D., Evans, S.W., & Lever, N. (2003). Handbook of school mental health: Advancing practice and research. New York, NY: Kluwer Academic/Plenum Publishers.
- Weist, M.D., Paternite, C.E., Wheatley-Rowe, D., & Gall, G. (2009). From thought to action in school mental health. *International Journal of Mental Health Promotion*, 11, 32–41.

IJEPL is a joint publication of PDK International, the Faculty of Education at Simon Fraser University and the College of Education and Human Development at George Mason University. By virtue of their appearance in this open access journal, articles are free to use, with proper attribution, in educational and other non-commercial settings 90 days after initial publication. Copyright for articles published in IJEPL is retained by the authors. More information is available on the IJEPL Web site: <a href="http://www.ijepl.org">http://www.ijepl.org</a>