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Editors' Corner

Advancing School Behavioral Health

Addressing Unmet Emotional/ Behavioral Health Needs of Youth

In the United States and in the southeastern region of the country, emotional/behavioral (EB) problems represent one of the most significant unmet healthcare needs of children and youth, with one in five students presenting challenging problems but fewer than half of them receiving services (Burns et al., 1995; Merikangas et al., 2010; President's New Freedom Commission, 2003). Additionally, student behavioral issues result in one in six students being suspended from school nationally, with the rate in the southeastern United States being as high as one in four. There is increasing awareness of the harm done to students by these exclusionary responses to student behavior (U.S. Department of Education, 2014).

Within schools, initiatives such as Positive Behavioral Interventions and Supports (PBIS) and expanded School Mental Health (SMH) can greatly assist in addressing unmet needs. Unfortunately, clinicians, counselors, researchers, and administrators have generally operated separately from one another and have missed opportunities for more coordinated and comprehensive intervention and research efforts.

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For the past eight years, researchers and policy leaders have been working to join together school mental health and behavioral health initiatives through the Interconnected Systems Framework (ISF) for SMH and PBIS, including developing and widely disseminating an explanatory monograph (Barrett et al., 2013) and

in April 2016. Communities of practice set the stage for progress in research, practice, and policy in communities by enhancing relationships and mutual support, providing convening functions, and helping diverse stakeholders come together to move from discussion to dialogue to genuine collaboration in addressing educational and public

and the faith and business communities, with outreach efforts made to all 46 counties in South Carolina and, in the past year, to neighboring southeastern states including Florida, Georgia, Kentucky, North Carolina, Tennessee, and Virginia. These outreach efforts facilitated the ability of major partners, the University of South Carolina, and the South Carolina Association for Positive Behavioral Supports, to apply for and receive a grant from the Patient-Centered Outcomes Research Institute (PCORI) to significantly enhance diverse stakeholder involvement in driving connected practice, research, and policy on advancing effective SBH in the region. We share PCORI's vision of having "patients and clinicians meaningfully involved in developing and sustaining a thriving school behavioral health network." Our overarching goals are to enhance the infrastructure for diverse stakeholder engagement, to disseminate research-based practices for students and families experiencing EB problems, and to cultivate a research environment that values input from all stakeholders and respects their perceptions of the relevance and accessibility of research.

In April 2016, families and youth receiving care for emotional/behavioral challenges and stakeholders from diverse disciplines and youth-serving systems participated in and presented at the Third Annual South Carolina School Behavioral Health Conference, held in Myrtle Beach, with more than 40 of the attendees participating in a research pre-conference that involved the

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conducting more than 50 training events to promote a more coherent, coordinated, and comprehensive system of behavioral health services for youth (Monahan et al., 2014; Splett et al., 2014).

In addition, in South Carolina, and now expanding to the southeastern United States, a community of practice (CoP) has used the ISF as an anchoring framework for three conferences on advancing school behavioral health (SBH), held in Columbia, South Carolina (SC), in April 2014; in Charleston, SC, in April 2015; and in Myrtle Beach, SC,

health concerns and advancing prioritized agendas (Cashman et al., 2014; Wenger et al., 2002).

Developing a Community of Practice on SBH in the Southeastern United States

In developing the community of practice, purposeful efforts have been made to reach out to diverse stakeholders, including staff and leaders in education, mental health, child welfare, juvenile justice, disabilities, primary health care, allied health services,

REPORT ON

Emotional & Behavioral Disorders in Youth™

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identification and discussion of five key themes for advancing school behavioral health. These themes were:

1. Supporting family, youth, and stakeholder partnerships;
2. Developing effective school-wide approaches;
3. Promoting cultural responsiveness and humility;
4. Improving the quality of services and increasing evidence-based practices; and
5. Improving implementation support for evidence-based practices.

These will also be the main themes at the forthcoming conference in April 2017. Per the CoP strategy (Wenger et al., 2002), practice groups have formed around each of these topics, with practice group facilitators helping to review paper proposals and shape the 2017 conference program. In addition, a research pre-conference will again be held, and diverse stakeholders will be able to react to findings from qualitative research forums held around the state on each of the five themes, with a view toward the development of an exemplary and high-impact framework for school behavioral health for the region.

In this issue of *EBDY*, we elaborate on key concepts driving our work to advance school behavioral health in the southeastern region of the United States. We first review foundational developments for this work in the fields of Positive Behavioral Interventions and Supports (PBIS) and expanded School Mental Health (SMH) and then discuss the merging of these two through an Interconnected Systems Framework (ISF). Some background on PBIS, SMH, and ISF follows.

Positive Behavioral Interventions and Supports (PBIS)

Positive Behavioral Interventions and Supports (PBIS) is a holistic, multitiered, evidence-based approach for preventing and reducing acting out and other problem behavior in school through the implementation of universal prevention (Tier 1) for all children; targeted interventions (Tier 2) for children at risk or showing early signs of problems; and intensive interventions (Tier 3) for children and youth with significant problems (Sugai & Horner, 2006). A growing evidence base supports PBIS as a foundation for effective academic instruction (McIntosh et al., 2006) and documents its effectiveness in increasing

parent involvement (Ballard-Krishnan et al., 2003), improving student behavior (Bradshaw et al., 2012), decreasing student discipline referrals (Anderson & Kincaid, 2005), decreasing suspension rates (Frey et al., 2008), and improving student academic performance (Kincaid et al., 2002), along with providing benefits to schools and staff such as reduction in staff turnover, improved organizational efficiency, increased perception of teacher efficacy, and improved quality of life for students (Kincaid et al., 2002).

In the United States, the implementation of PBIS has shown significant growth, from

Weist, 1997). In recognition of these barriers, there is a significant national movement toward moving community-based mental health services to youth *where they are*, in the schools (Evans et al., 2007; Weist et al., 2014). These expanded SMH services have been shown to significantly improve access to care and to enable early identification and intervention (Atkins et al., 2006; Catron et al., 1998). Further, when done well, these services are associated with positive outcomes for students (Botvin, 2000; Catalano et al., 2003; Center for Health and Health-care in Schools, 2014). However, SMH services lack a delivery structure (as exists

There is increasing recognition that many barriers get in the way of children and youth receiving services in traditional settings such as community mental health centers or local hospitals. . . . In recognition of these barriers, there is a significant national movement toward moving community-based mental health services to youth where they are, in the schools.

about 2,400 schools in 2000 to more than 21,000 schools in 2016 (www.PBIS.org). No other program seeking to affect individual outcomes is implemented as broadly in the public sector as PBIS (Fixsen et al., 2013). However, in most school districts, PBIS programs at Tiers 2 and 3 are very limited (or nonexistent), and PBIS emphasizes *behavior* and may pay little attention to other emotional/behavioral challenges in students, such as “internalizing” problems like depression, anxiety, and trauma (Barrett et al., 2013).

Expanded School Mental Health (SMH)

There is increasing recognition that many barriers get in the way of children and youth receiving services in traditional settings such as community mental health centers or local hospitals. These barriers include stigma, past negative experiences in youth-serving systems, poor knowledge of mental health and mental health services, predicted negative experiences of services, and experienced and perceived barriers to care, including time, scheduling hassles, transportation problems, payment challenges, and others (Evans et al., 2007;

in PBIS) and, as a result, are implemented in a variable, ad hoc manner in many school districts, operating in isolation from other team efforts, failing to use data for decision making, and lacking support for the implementation, refinement, and improvement of evidence-based practices (Barrett et al., 2013; Weist et al., 2014).

The Interconnected Systems Framework (ISF) for PBIS and SMH

The Interconnected Systems Framework (ISF) addresses the limitations of PBIS and SMH in addressing emotional/behavioral problems and, in a widely distributed monograph (Barrett et al., 2013), provides specific guidance on their systematic interconnection. Key domains for interconnection address the limitations mentioned above and emphasize:

- Effective interdisciplinary collaboration;
- The positive functioning of teams;
- Improving data-based decision making; and
- Improving the selection and implementation of evidence-based practices toward increased effectiveness of

prevention and intervention targeting emotional/behavioral problems.

The ISF capitalizes on the strong implementation infrastructure and universal prevention strategies of PBIS, as well as on enhanced depth of services in Tiers 2 and 3 through SMH to provide a comprehensive continuum of evidence-based prevention, early intervention, and treatment. Since 2007, Mark Weist, numerous other colleagues (e.g., Susan Barrett, Lucille Eber, Kelly Perales, Bob Putnam, Joni Splett, Robert Stevens, Ashley Quell), and federally funded centers for PBIS (The Technical Assistance Center on Positive Behavioral Interventions and Supports; www.pbis.org) and SMH (The Center for School Mental Health; <http://csmh.>

School Mental Health Is Not Just for Students

The first article, by Nancy Lever and colleagues, examines the high levels of stress experienced by school staff and the reasons for this stress (e.g., difficult teaching climate, poor work conditions, under-resourced classrooms) and reviews a range of strategies for promoting wellness among educators and school staff from other youth-serving systems who work in schools.

Salient Classroom Management Skills

The second article, by Nicholas Gage and Ashley MacSuga-Gage, underscores the complex skills required for teachers to engage in effective instruction while

your efforts to reduce barriers to learning and to improve student functioning in your communities.

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We hope you will find this issue and the next three issues of EBDY—all focused on advancing school behavioral health—informative in your efforts to reduce barriers to learning and to improve student functioning in your communities.

umaryland.edu) have been working to develop the ISF, and it is currently featured prominently by both centers. The ISF has been the focus of more than 50 training events (and a current national webinar series), as well as the subject of numerous academic publications.

The Southeastern School Behavioral Health Community (SEBHC) is building on recognition of unmet emotional/behavioral needs of children and youth, the value of PBIS and SMH in meeting these needs, and the synergies and economies of scale that result in improving programs and increasing the likelihood of positive student, family, and school outcomes by systematically joining PBIS and SMH through the ISF. In addition, research forums and conference events will shed light on ways to further improve this framework to maximize effective School Behavioral Health (SBH) programs, a term selected purposefully to reflect PBIS and SMH efforts working in unison in schools. In this winter issue of *EBDY*, we include the following three articles developed from presentations at the Annual South Carolina Behavioral Health Conference held at Myrtle Beach in 2016.

also promoting student engagement and positive behavior. The authors review three evidence-based classroom management skills and present research findings on the critical role of behavior-specific praise in improving student behavior.

Adverse Childhood Experiences and School Behavioral Health

Finally, Melissa Strompolis and colleagues provide a comprehensive review of adverse childhood experiences (ACEs) and their significant negative impact on a range of aspects of functioning among children, youth, and adults. School behavioral health strategies to address ACEs, including using media, are discussed, citing examples of ACE-SBH integration from the southeastern United States and from western Australia.

These three papers provide just a sample of the range of topics relevant to improving school behavioral health efforts; building relevant research, practice, and policy agendas; and promoting interconnections in innovation across these realms. We hope you will find this issue and the next three issues of *EBDY*—all focused on advancing school behavioral health—informative in

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A Note From the Publisher

Mark D. Weist, Ph.D., is a professor in the Department of Psychology at the University of South Carolina. Prior to joining USC, he was on the faculty of the University of Maryland School of Medicine, where he helped to found and direct the Center for School Mental Health, one of two national centers providing leadership for the advancement of school mental health (SMH) policies and programs in the United States. Dr. Weist has published and presented widely in the SMH field and has edited or coedited nine books.

Robert Stevens, Ph.D., is an adjunct professor at Winthrop University and director of the South Carolina Association for Positive Behavior Support Network. Professor Weist will lead the School Behavioral Health Dissemination and Engagement Project within the School Mental Health Team (SMHT) of USC's Department of Psychology, with co-director Stevens providing leadership of the project through his role as director of the South Carolina Association for Positive Behavior Support Network. The Civic Research Institute is pleased to welcome Professors Weist and Stevens as coeditors of this issue and the next three issues of *EBDY*.

From the Editors

Work on this four-issue volume of the *Report on Emotional & Behavioral Disorders in Youth* (Winter, Spring, Summer, Fall 2017) is supported by a grant from the Patient-Centered Outcomes Research Institute (PCORI) through the Eugene Washington Conference Award for the School Behavioral Health Dissemination and Engagement Project (#EAIN 2874; 2016–2018). We also convey our appreciation to the South Carolina Department of Mental Health and to the South Carolina Department of Education for their support of the community of practice and conference, and for efforts to link together education and mental health priorities and strategies through well-executed SBH programs. Finally, thanks are extended to Josh Bradley, Allison Farrell, Lee Fletcher, Elaine Miller, and Ashley Quell of the University of South Carolina School Behavioral Health Team, and to the Civic Research Institute for the opportunity to publish these four consecutive issues of *EBDY*.

School Mental Health Is Not Just for Students: Why Teacher and School Staff Wellness Matters

Nancy Lever, Erin Mathis, and Ashley Mayworm*

Workplace Stress

The term “school mental health” is typically used to discuss the mental health and wellness of students. However, school mental health also includes promoting the well-being of school-based educators, administrators, and mental health workers. Although the workplace wellness literature predominantly focuses on health-related programs to support well-being in more traditional business settings, it offers foundational knowledge for the emerging school staff wellness field. Experiencing significant levels of stress in the workplace is common not only in schools, but in a wide array of work settings. According to the American Psychological Association’s

has documented some best practices and strategies that can help reduce the extent and impact of stress.

Work-Related Stress for Educators

Individuals working in school settings are particularly vulnerable to work-related stress. Data from the 2013 *Gallup-Healthways Well-Being Index* found that 46% of teachers in K-12 settings report high levels of daily stress during the school year. This level of stress is similar to that of nurses (46%) and physicians (45%) and is the highest (along with nurses) among the 14 professional categories included in the study (Gallup, 2014). Furthermore, the American Federation of Teachers (2015)

in the education field. Studies suggest that some of the most common sources of teacher stress include:

- High-stakes testing;
- Large class sizes;
- Student behavioral challenges;
- Inadequate resources;
- Poor physical space;
- Bureaucracy;
- Workload;
- Paperwork;
- High responsibility for others;
- Perceived inadequate recognition or advancement; and
- The gap between preservice training expectations and actual work experiences (Dworkin, 2001; Fisher, 2011; Kokkinos, 2007; Travers & Cooper, 1996).

Additionally, lack of autonomy is a significant contributor to teacher burnout and stress; teachers who do not feel that they have autonomy over their classroom or that they have a collective influence over school policy are more likely to experience job dissatisfaction (Ingersoll, 1996, 2001). Research from the 2012 *Gallup Daily Tracking Poll* (Gallup, 2014) showed that when compared to 12 different occupational groups, teachers are the least likely to state that they agree with the statement: “At work, my opinions seem to count.”

Educators and other school-based staff can experience the stress of compassion fatigue and/or vicarious traumatization (also known as secondary traumatic stress; Hydon et al., 2015), which is defined as “the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other—the stress resulting from helping or wanting to help a traumatized or suffering person” (Figley, 1993, as cited in Figley, 1995, p. 7). Compassion fatigue can be the result of experiencing one traumatic case, or a cumulative impact over time (Hydon et al., 2015). As explained by the National Child Traumatic Stress Network (NCTSN, 2011, pp. 2–3): “Any professional who works directly with traumatized children . . . is at risk of secondary traumatic stress.”

Eighty-nine percent said they had been enthusiastic about teaching when they started the profession, but only 15% reported being enthusiastic at the time they completed the survey.

annual *Stress in America* survey, 60% of individuals residing in the United States in 2014 reported that work was a top source of stress in their lives (APA, 2015). Further, the APA’s Center for Organization Excellence found that approximately 33% of Americans reported having chronic work stress (APA, 2013). This is a concerning statistic, because stress-related disorders are costly for employers (e.g., through absenteeism and lost productivity; DHHS, 1999) and are associated with numerous negative mental and physical health outcomes for workers (APA, 2015). Although all stress cannot be eliminated in the workplace, research

found that 78% of teachers reported feeling physically and emotionally exhausted at the end of the day. The stress that educators experience affects their enthusiasm about the profession and longevity in the field. For example, a survey of 30,000 teachers revealed that 89% said they had been enthusiastic about teaching when they started the profession, but only 15% reported being enthusiastic at the time they completed the survey. The stress of the education field is further illustrated in the high rates of teacher turnover; 10% of teachers leave after one year, and 17% of teachers leave within five years (Gray & Taie, 2015). Turnover rates are much higher in urban districts, where up to 70% of teachers leave within the first year (Gray & Taie, 2015). This issue is not limited just to new teachers; many experienced teachers leave the profession because they feel unable to deal with the myriad challenges of modern teaching (Byrne, 1998; Taylor et al., 2005).

There are a multitude of factors contributing to the high rates of stress and burnout

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Although compassion fatigue has traditionally been discussed as being a secondary effect for individuals providing clinical services to traumatized clients, it also has an impact on teachers and other school staff who work closely with youth who have experienced adverse experiences. The impact of compassion fatigue may be particularly acute for teachers working in poor, underresourced urban and rural communities, where students may have been exposed to community and family violence and traumatic experiences.

Teachers and other school staff who experience exhaustion and burnout related to their work are likely to have a number of negative physical and psychological symptoms and consequences, including:

- Emotional numbing;
- Feeling “shut down”;
- Loss of enjoyment;
- Lack of energy;
- A sense of cynicism or pessimism;
- Increased illness or fatigue;
- Aches and pains;
- Increased absenteeism and “sick days”;
- Greater problems with boundaries; and
- Difficulty making decisions or making poor decisions (Saakvitne et al., 2000).

Educator and school staff stress and burnout affects not only the adult professionals but also the students with whom these professionals interact. For example, teacher burnout is predictive of student academic outcomes, including being correlated with lower levels of student effective learning and lower motivation (Zhang & Sapp, 2008). Additionally, teacher burnout appears to affect the stress levels of the students they teach; a recent study found that teacher burnout level explained more than half of the variability in students’ levels of cortisol (a stress hormone) when evaluated in the morning (Oberle & Schonert-Reichl, 2016).

Despite the strong evidence for the existence of work-related stress, only 36% of respondents from all fields to the APA (2015) *Stress in America* survey stated that their employers provide the resources they need to effectively manage their work-related stress. The numbers are even weaker in the education field, with only 25.5% of schools offering stress management education to staff (DHHS, 2015). Although comprehensive programs are recommended to address staff wellness, many schools and school systems have limited programs, and school staff may have exposure only

to professional development and basic resources. Thus, although school employees throughout the United States are clearly affected by work-related stress, they often lack the programs, resources, and tools needed to support their management of that stress and the promotion of overall wellness. This article demonstrates the value of school staff wellness and highlights unique aspects of the job that should be taken into consideration when addressing the well-being of school-based staff. It shares key findings from the literature and discusses how to best measure and implement effective staff wellness programs in schools. Finally, it summarizes best practices in the

nutrition/weight (79%), smoking (77%), or fitness (72%), with about one-half focusing on alcohol/drug abuse (52%) and stress management (52%), and about one-third focusing on health education (36%). Workplace wellness programs generally fall into three categories: (1) screening activities, (2) preventive interventions, and (3) health promotion activities.

Screening activities focus on identifying health risks in employees and may include measuring weight, completing a health risk questionnaire, and taking other biometrics (e.g., cholesterol level). The RAND Employer Survey found that about 65% of employers with wellness programs

Although school employees throughout the United States are clearly affected by work-related stress, they often lack the programs, resources, and tools needed to support their management of that stress and the promotion of overall wellness.

school staff wellness field and highlights exemplary programs.

Employee Wellness Programs

Wellness is defined by the National Wellness Institute as “an active process through which people become aware of, and make choices toward, a more successful existence” (NWI, n.d.). Thus, wellness is not merely the absence of illness. NWI explains that among professionals and researchers in the wellness field, there is general agreement that wellness is an evolving and self-directed process in which an individual is working to achieve his/her fullest potential and which may include mental, physical, and/or spiritual well-being. The multidimensional components of wellness vary across different theories of wellness and wellness programs but often include medical, emotional, environmental, occupational, physical, intellectual, spiritual, social, and financial components (NWI, n.d.). Despite this multidimensional understanding of wellness, wellness programs in the workplace often focus on only the physical and medical dimensions (Parks & Steelman, 2008).

About 50% of all employers with 50 or more employees in the United States have wellness promotion initiatives (Mattke et al., 2013). Among employers offering a wellness program, the majority focus on

conduct health risk questionnaires with their employees.

Preventive interventions are programs that are implemented to help employees make positive changes in their health behaviors, such as health education classes, individual health counseling, or step-counting programs. Approximately 77% of employers with a wellness program offer prevention interventions.

Health promotion activities are those that promote healthy lifestyles for all employees, such as offering healthy meals in the cafeteria or providing subsidized gym memberships. These types of activities are present in about 40% of workplaces (including those without a formal employee wellness program). Most employee wellness programs tend to be a combination of these three types of approaches to wellness, with combined screening and intervention approaches being the most common (Mattke et al., 2013).

Impact of Wellness Programs on Employee Outcomes

Although there has been some criticism of wellness programs in the workplace, suggesting that they are ineffective and/or too expensive, a meta-analysis conducted by Parks and Steelman (2008), found that participation in wellness programs is related to several positive outcomes. Specifically, participation in organizational wellness

programs is associated with higher job satisfaction and lower absenteeism. Results of the RAND Employer Survey found that participation in wellness programs was related to greater gains in weight loss, smoking cessation, and exercise, but not to lowered cholesterol levels (Mattke et al., 2013). However, the sample size in the RAND study was small and may have been affected by the specific types of wellness activities employed. Nonetheless, a meta-analysis of occupational stress management programs finds that there is an overall medium to large effect for participation in each individual intervention on a variety of outcomes. Outcomes include improved mental and physical health, decreased anxiety and stress, and an increase in mindfulness (Richardson & Rothstein, 2008).

helpful for employee wellness and morale, but are also smart financial decisions.

Employee Wellness in Schools

The research literature clearly points to the benefits of quality employee wellness programs. Additionally, educators are in a profession with a uniquely high level of stress and burnout, suggesting that they would benefit from wellness programming. Nonetheless, implementation and evaluation of such programs is low and could benefit from additional studies. To better understand the current state of research on teacher wellness, the current authors conducted a search on PsycINFO for “wellness” and “teacher.” The search found 64 peer-reviewed results published between 1984 and 2015. Although there has been a

results needed to be included in the registry, although they are likely to be added in time. Taken together, the results of this literature search suggest that evidence-based teacher and school staff wellness programs have not been widely developed or studied and that there are significant opportunities to expand this field in the future.

Core Wellness Components/ Recommended Wellness Standards

Although the research related to evidence-based school staff wellness programs is in its early stages, there are a number of core wellness components and standards that have been established specifically for educator wellness initiatives.

The Coordinated School Health Model. In 1987, Allensworth and Kolbe greatly influenced the field of school health (Lohrmann, 2008) by creating a comprehensive model of school health called the Coordinated School Health Model. In Allensworth and Kolbe’s (1987) model, there are eight components to school health, which include content areas such as physical education and school health services for students but that go beyond previous models by also emphasizing “school site health promotion of faculty and staff.” The model theorizes that by promoting staff health behaviors, employees will improve their health and cognitive performance, which will then affect student health and educational outcomes (Lohrmann, 2008). The eight-component Coordinated School Health Model has since been adopted and adapted by the Centers for Disease Control and Prevention (CDC).

The Whole School, Whole Community, Whole Child Model. Currently, the CDC promotes the Whole School, Whole Community, Whole Child (WSCC) Model, which focuses on a 10-component health model with associated student learning objectives. Under this program, the CDC (2014b) states that school employee wellness should include “a coordinated set of programs, policies, benefits, and environmental supports designed to address multiple risk factors [e.g., lack of physical activity, tobacco use] and health conditions [e.g., diabetes, depression] to meet the health and safety needs of all employees.” However, the CDC does not give guidelines about what specifically should be included in school employee wellness programming.

The Healthy Schools Program Framework. The Alliance for a Healthier Generation, an organization focused on promoting health and wellness for children and

The model theorizes that by promoting staff health behaviors, employees will improve their health and cognitive performance, which will then affect student health and educational outcomes.

In addition to the physical, social, emotional, and behavioral impacts of wellness programs, there are also economic benefits. Research suggests that participation in a wellness program over five years leads to lower health care costs and decreasing health care use (Mattke et al., 2013). This is relevant because healthcare expenditures are nearly 50% greater for workers who report high levels of stress (DHHS, 1999). A meta-analysis conducted in 2010 found that workplace wellness programs affect medical costs and absenteeism substantially. More specifically, for every \$1.00 spent on wellness programs, medical costs fall \$3.27 and absenteeism costs fall \$2.73 (Baicker et al., 2010). Findings corroborate an earlier meta-analysis that found that employee wellness programs are cost-effective; on average, they achieve a \$5.81 to \$1.00 return on investment (Chapman, 2005). Chapman’s (2003) review of 42 published worksite health promotion programs showed that companies with effective wellness programs had, on average, a 28% reduction in sick days, a 26% reduction in health costs, and a 30% reduction in workers’ compensation and disability management claims. Results of these comprehensive studies suggest that employee wellness programs are not only

significant increase in publications recently, especially in the last five years, the school staff wellness topic is still a fairly new area within the mental health literature. The trend in publication numbers suggests that the topic of teacher wellness is only beginning to receive more intensive research attention. The research that has been published to date has focused on a range of subjects, including the relation between teacher wellness and child outcomes (e.g., academic achievement), the role of teacher wellness in promoting child-school connectedness, teacher burnout, teacher efficacy, and the measurement of wellness.

In an effort to better understand the number and types of evidence-based wellness programs for school staff, a search of SAMHSA’s *National Registry of Evidence-based Programs and Practices* was conducted using the key word “wellness.” The search yielded 17 programs. Three programs focused on students in grades K through 12, two programs focused on college students, one program focused on students in grades 3 through 12, and the rest focused on other populations, but none specifically targeted school staff. Although there are school wellness programs that target school staff (see MSBR, CARE, and CALM programs discussed below), they do not currently have the number of trials and

adolescents, has created the Healthy Schools Program Framework (HSPF). The HSPF outlines best practices for creating and sustaining a healthy school environment, organizing these practices into bronze, silver, and gold standard tiers (Alliance for a Healthier Generation, 2016). One aspect of this framework focuses on health promotion for school staff. The framework highlights the types of activities and standards that should be implemented in schools to promote staff health at each level (i.e., bronze, silver, gold; see Table 1 for a summary of the HSPF school staff standards). Whereas these HSPF standards provide more specific information about the types of activities to

include in employee wellness programming, they are exclusively focused on physical health, including nutrition, exercise, and modeling of healthy behaviors for students rather than a more comprehensive model of employee wellness (Alliance for a Healthier Generation, 2016).

The DHPE Standard. The Directors of Health Promotion and Education (DHPE, 2005) created a more comprehensive standard for school employee wellness that is focused solely on staff members. This school employee wellness guide is a comprehensive resource that discusses the need for school employee wellness programs, key principles, steps for establishing a program, funding

for programs, as well as useful tools and resources (e.g., Employee Wellness Interest Survey, sample letter of invitation). The DHPE identifies eight different components that should be included in a comprehensive school employee wellness program:

1. Health education and health-promoting activities tailored to the needs of employees;
2. Safe, supportive social and physical environments;
3. Integration of program into the school/district structure;
4. Linkage to other related programs (e.g., employee assistance programs);
5. Worksite screening programs and follow-up care as needed;
6. Individualized interventions to support employee behavior change;
7. Education focused on helping employees make health care decisions; and
8. An evaluation and improvement process to help the programs improve their effectiveness (DHPE, 2005).

This eight-component model focuses on more than just increasing nutrition and exercise in employees and emphasizes the importance of creating safe environments, promoting education, individualizing interventions, and evaluating programming to ensure that it is working. See Table 2 for a review of these eight components and examples of programs/activities that address each component. A model that fulfills these DHPE guidelines is a gold standard of programming, but implementing such a comprehensive model requires an effective implementation process; it is recommended that individuals and organizations that hope to begin this type of program follow the nine-step implementation process outlined by DHPE (2005).

Validated Wellness Measures

In order to develop and implement teacher and school staff wellness programs, it is important to gather data on staff wellness before, during, and after program implementation. Validated measures of wellness can help to assess staff needs, determine target populations for programs, and measure change in wellness following program participation.

The Interpersonal Mindfulness in Teaching Questionnaire. The only measure in the literature that was specifically designed to measure wellness in teachers is the Interpersonal Mindfulness in Teaching Questionnaire (IMT; Frank

Table 1: HSPF Standards for Health Promotion for Staff

Bronze	Silver	Gold
Health assessments for staff, once per year; Physical activity programs for staff; Modeling of healthy eating and physical activity behaviors through five or more strategies (e.g., encourage staff to eat healthy foods at school, provide information about using physical activity in the classroom)	Meets bronze standards, plus: Uses three or more methods to encourage staff to participate in health promotion programs; Provides staff with free or low-cost healthy eating/weight management programs or classes	Meets silver standards, plus: Follows USDA's Smart Snacks in School nutrition standards, including at staff meetings and lounge areas

Table 2: Components of a Comprehensive School Employee Wellness Program

Component	Sample Activities
1. Health education and health-promoting activities tailored to the needs of employees	Workshops or school-sponsored activities focused on employee-desired skill development or lifestyle behavior change
2. Safe, supportive social and physical environments	School sets expectations for healthy behaviors and implements policies to promote health and reduce risk of disease
3. Integration of program into the school/district structure	Provide time for employees to attend workshops and activities; provide incentives to participate in wellness programs
4. Linkage to other related programs	Linkages to employee assistance programs or programs aimed at helping employees balance work and family life
5. Worksite screening programs and follow-up care as needed	Screening programs linked to employee's medical care so participation and follow-up treatments are seamless
6. Individualized interventions to support employee behavior change	Individual health counseling or step-counting programs
7. Education focused on helping employees make health care decisions	Health education classes related to topics such as weight loss, diabetes, and healthy heart management
8. Evaluation and improvement process	Collect data before, during, and after program implementation. Data collection can include cost, compliance, and outcome measures.

Source: Adapted from DHPE (2005) and Partnership for Prevention (2010).

et al., 2016). The measure focuses on two distinct factors: (1) teacher intrapersonal mindfulness and (2) teacher interpersonal mindfulness. The measure has been validated through confirmatory factor analysis and has good test-retest reliability for both scales in the medium-large range (Frank et al., 2016).

The Teachers' Sense of Efficacy Scale. The Teachers' Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk-Hoy, 2001) is a measure of what teachers view as the most difficult aspects of their teaching activities and how much power they think they have in resolving those challenges. Items ask teachers to indicate "how much they can do" in response to various

the stress management education provided in the schools affects teacher or student outcomes. However, evidence indicates that change is possible even in programs of relatively short duration. For example, in a 10-week health promotion program for employees in the Dallas Independent School District, with a focus on exercise and physical fitness, the following impressive improvements were found: 44% of teachers changed their overall lifestyle, 68% changed their diet, 26% who had not exercised began vigorous programs, and 18% quit smoking. Overall, this program led to 1.25 days less of absenteeism for those teachers who were exercising. This is equal to a savings of \$149,578 for the district (DHPE, 2005).

Results of the study suggested that teacher participants had improvements in self-regulation, self-compassion, mindfulness, and sleep quality.

classrooms and instructional challenges. The questionnaire measures three dimensions: instructional strategies, classroom management, and student engagement.

The Professional Quality of Life Scale. One validated measure of employee wellness more generally (not specifically for school employees) is the Professional Quality of Life Scale (ProQOL; Hudnall Stamm, 2009). Although this measure is not specifically for school staff, it is particularly appropriate for employees in the helping professions because the measure focuses on compassion satisfaction (the positive emotional effect of helping others) and compassion fatigue (burnout and secondary traumatic stress). It is a well-validated, self-report measure of the positive and negative aspects of caring and can be given individually or in groups.

The Worksite Health Score Card. In addition, the Centers for Disease Control and Prevention (CDC, 2014a) offer a Worksite Health Score Card that allows employers to assess their evidence-based health promotion interventions. The program helps to identify gaps in health promotion programs as well as to prioritize high-impact strategies in the program. It is available at no cost to employers.

Exemplary Programs

The curriculums provided as part of wellness programs in many schools are often not evidence based. Little is known about how

There are several comprehensive teacher wellness programs that are setting the foundation for school staff wellness research. The following programs have been studied for evidence of effectiveness and have shown some promising results.

Washoe County School District (Nevada) Wellness Program. The Washoe County School District started an optional wellness program for its 6,246 employees, which was evaluated over a two-year period (Aldana et al., 2005). The program was aimed at reducing two-year health care costs and absenteeism. When considering (as covariates in statistical analyses) baseline health claims, absenteeism in three years prior, age, gender, job classification, and years in school district, the program found no significant differences in direct health care costs. However, there were significant differences in absenteeism. Participants had an average of three fewer missed days than non-participants, which equals a cost saving of \$15.60 for every dollar spent on the program.

Mindfulness-Based Stress Reduction (MBSR). MBSR is a mindfulness training that is shown to reduce stress, depression, and anxiety. It was created to address chronic pain but is useful for a variety of physical and mental health problems. MBSR is included in SAMSHA's *National Registry of Evidence-based Programs and Practices*. Two different research groups have adapted MBSR for teachers. Flook and colleagues (2013) studied the

use of MBSR with 18 elementary school teachers. They incorporated MBSR with specific school-related activities and practices. The program took place over eight weeks for 2.5 hours per week and one day-long immersion program (six hours). Results of the study showed that teachers who participated had reductions in psychological symptoms and burnout, improvements in observer-rated classroom organization, and an increase in self-compassion. In a second study, Frank and colleagues (2015) conducted an MBSR training with 36 high school teachers. The program involved group discussions on the application of mindfulness in daily life, including in the classroom. Teachers were taught how to introduce mindfulness practice to their students. The sessions were for two hours a week for eight weeks and also included home practice. Results of the study suggested that teacher participants had improvements in self-regulation, self-compassion, mindfulness, and sleep quality.

Cultivating Awareness and Resilience in Education (CARE). CARE is an evidence-based professional development program designed to reduce stress and improve teachers' performance. The program focuses on three main content areas: (1) emotion skills instruction, (2) mindfulness/stress reduction practices, and (3) caring and listening practices (Jennings et al. 2011). In a randomized control trial of CARE, with a waitlist control group, 53 teachers in urban and suburban schools participated in five full-day sessions over eight weeks and three 20-minute phone coaching sessions. Results showed improvements in well-being, teacher efficacy, burnout, and mindfulness (Jennings et al., 2013). Future research is still needed to assess CARE's effect on classroom and student outcomes.

Community Approach to Learning Mindfully (CALM). CALM is a daily school-based intervention designed to promote and improve social-emotional competencies, stress management, well-being, teaching, and health. The intervention included yoga and mindfulness practices. Participants practiced skills four days a week for 16 weeks (64 sessions total). Study results showed that CALM was related to significant improvements in mindfulness, emotional functioning, positive affect, distress tolerance, efficacy in classroom management, as well as to decreases in physical symptoms, blood pressure, and cortisol levels (Harris et al., 2016).

Recommendations and Next Steps

Wellness programs that focus on a broad array of wellness components such as nutrition, physical activity, and stress management have been shown to increase teacher morale, improve perceptions of being able to handle job stress, reduce absenteeism, and result in higher levels of overall well-being. Furthermore, in addition to the positive benefits of improved teacher job satisfaction, health, and well-being, there are documented cost savings and impacts on student outcomes related to having healthy teachers and school staff. Based on a review of the literature in workplace wellness and the evolving school staff wellness fields, the following recommendations are suggested for schools that intend to implement school staff wellness promotion programs:

- Tailor the program to the needs and interests of employees to promote motivation to participate;
- Target multiple components of wellness rather than just one or two components (e.g., physical health, mindfulness and stress reduction, positive behavior change, health education trainings);
- Incorporate the wellness program into the structure and the culture of the work environment by allowing employees time to participate in the wellness program (e.g., have wellness activity as part of already scheduled faculty meetings, integrate stress management practice into morning announcements that can be heard by students and staff);
- Incorporate and foster open and frequent communication between teachers and administrative staff to problem solve how to address and help reduce the stress experienced by school staff;
- Be mindful of the periods of increased stress for teachers (e.g., time leading up to standardized testing, the weeks leading up to a school vacation) when wellness program activities may be particularly needed;
- Leverage technology (e.g., mobile apps, virtual groups) to reach a broader audience and to increase participation;
- Integrate staff, student, family, and community wellness strategies and supports, when possible, to promote overall well-being in the school setting;
- Provide no-cost or low-cost wellness programming options for school staff; and
- Include screening and ongoing measurement opportunities to help document individual and group needs and progress.

In summary, the workplace wellness literature, when combined with the growing research literature in school staff wellness supports the idea that school employee wellness programs can promote improved physical, social, and emotional well-being in school staff while having a positive impact on student success and school climate, particularly as it relates to improved teacher attendance and, thus, improved academic continuity for students. The research also supports the economics of encouraging staff wellness and offers justification for the investment in wellness programs. Although there is much promise for the

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In addition to the positive benefits of improved teacher job satisfaction, health, and well-being, there are documented cost savings and impacts on student outcomes related to having healthy teachers and school staff.

future of school staff wellness research, it is imperative that funders and school administrators recognize the importance of, and dedicate time and resources to, supporting school staff wellness. The field would benefit from an increased number of randomized controlled trials and from targeted funding opportunities to specifically support the well-being of school-based staff. As the research advances, it will be important to translate the research into effective frontline application and to be able to identify evidence-based programs as well as essential core elements of wellness program so as to maximize their impact and fiscal investment.

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Salient Classroom Management Skills: Finding the Most Effective Skills to Increase Student Engagement and Decrease Disruptions

by Nicholas A. Gage and Ashley S. MacSuga-Gage*

Classroom Management and Student Achievement

Effective teaching requires a complex skill set. Teachers must deftly deliver academic instruction while maintaining efficiently managed classrooms to ensure student engagement and few disruptions. The bottom line is that students cannot learn if they are not engaged and paying attention to instruction. Therefore, successful classroom instruction is contingent upon effective classroom management to maintain appropriate student behavior, engagement, and, subsequently, academic achievement (Evertson & Weinstein, 2006). In a recent study of elementary teacher effectiveness based on value-added models, classroom management was the only significant predictor of difference between the top-quartile and bottom-quartile teachers (Stronge et al., 2011), supporting the contention that effective teachers are effective classroom managers.

A growing empirical research base supports the direct relationship between classroom management and reduction of disruptive behavior. Oliver, Wehby, and Reschly (2011) completed a meta-analysis on the impact of classroom management on disruptive and aggressive behavior for the Campbell Collaborative (<http://www.campbellcollaboration.org>). Their findings indicate that high-quality classroom management has an average effect of 0.80 ($p < 0.05$), almost a full standard deviation reduction of classroom disruptive and aggressive behavior. An earlier meta-analysis by Marzano, Marzano, & Pickering (2003) also found a large average effect size

for classroom management on the reduction of disruptive and aggressive behavior ($d = 0.90, p < 0.05$) but also found a significant and positive effect size of 0.52 ($p < 0.05$) for academic achievement. Taken together, it is clear that classroom management is a critical component of effective instruction (Scott, 2017).

Although the evidence supports the impact of classroom management on student outcomes, research also indicates that many teachers struggle to implement successful classroom management. For example, teachers indicate that they consider classroom management to be the most challenging aspect of their job (Barrett & Davis, 1993; Reinke et al., 2011), that they receive very little training in classroom

peers academically. This issue has been noted as a major concern by the U.S. government. In July of 2015, the U.S. Departments of Education and Justice hosted superintendents, principals, and teachers from across the country to a day-long “Rethink Discipline” conference focusing on the reduction of the well-documented overuse of school suspension and expulsion (<http://www.ed.gov/news/press-releases/educators-gather-white-house-rethink-school-discipline>). Research suggests that the first step to reducing suspensions and increasing access to classroom instruction for students with EBDs is universal implementation of high-quality, evidence-based classroom management (Evans et al., 2013). Further, high-quality, effective classroom

Teachers must deftly deliver academic instruction while maintaining efficiently managed classrooms to ensure student engagement and few disruptions.

management (Freeman et al., 2014; Oliver & Reschly, 2010), and that many exiting the teaching profession within their first five years indicate that classroom management is their primary reason for leaving (Wei et al., 2010). In addition, direct observation research has found, based on more than 3,000 teacher observations, that most teachers do not demonstrate the skills necessary to effectively manage their classrooms (Scott et al., 2011).

Limited training and demonstration of evidence-based skills in classroom management is germane for all students, but particularly for students with, or at-risk for, emotional and/or behavioral disorders (EBDs). Research has established that students exhibiting elevated levels of behavioral problems in the classroom are regularly excluded from classroom instruction, either by being sent to the office (Sugai et al., 2000) or being placed in restrictive settings (McLeskey et al., 2012), and that they continue to fall further behind their

management has been noted as a core component for establishing a multitiered Interconnected Systems Framework (ISF; Barrett et al., 2013), a model for integrating positive behavior supports and mental health interventions to significantly improve outcomes for students with EBDs.

A handful of systematic reviews of the literature has identified a number of classroom management skills (CMS) that have sufficient evidence to support their effectiveness. These skills include antecedent-based, instruction-based, and consequence-based skills (Conroy et al., 2013; Oliver et al., 2011; Scott & Anderson, 2011; Simonsen et al., 2008). Simonsen and colleagues (2008) identified 20 classroom management skills that have evidence of effectiveness and aggregated them into five domains that: (1) maximize structure and predictability; (2) post, teach, review, monitor, and reinforce expectations; (3) actively engage students in observable ways; (4) use a continuum of strategies to

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acknowledge appropriate behavior; and (5) use a continuum of strategies to respond to inappropriate behavior. Lewis and colleagues (2004) identified evidence-based classroom management skills that directly affect students with, or at-risk for, EBDs, including (1) teacher praise, (2) high rates of teacher-directed opportunities to respond during instruction, and (3) clear instructional strategies (i.e., direct instruction). Across all of these (see Conroy et al., 2013 for a review), three classroom management skills were consistently noted:

- Individual and group teacher-directed opportunities to respond (TD-OTR);
- Praise and behavior-specific praise (BSP); and
- Prompting for expectations, including pre-corrections.

Although these three skills do not encompass all classroom management skills, they have an ever-growing evidence base. It is also worth noting that these skills are typically incorporated into most evidence-based classroom management interventions and programs, including the Good Behavior Game (Barrish et al., 1969), the Responsive Classroom (<https://www.responsiveclassroom.org>), BEST in CLASS (Vo et al., 2012), and the Incredible Years Teacher Classroom Management (Reinke et al., 2014).

Study Purpose

Although evidence-based classroom management skills have been delineated in the literature, the most salient among them have not been identified. Certainly all three should be in place to effectively manage classroom behavior, but identification of the most effective classroom management skills can inform professional development efforts targeting single classroom management skills to increase the likelihood that they are implemented at a priori determined levels with fidelity (Gage et al., 2016). This study therefore examines direct observation data of teachers' implementation of classroom management skills across 25 consecutive school days. Specific research questions asked were:

- What classroom management skills significantly predict student engagement during large group instruction?
- What classroom management skills significantly predict student disruptive behavior during large group instruction?

Study Setting and Sample

We recruited 12 elementary school teachers from two elementary schools in

the southeastern United States. One school was a university laboratory school serving students in grades K-12 in which approximately 80% of those students performed at or above state benchmarks in reading and math. The second school was a Title I elementary school (K-5), in which 84% of the students received free or reduced lunch, 70% of the students were black, and fewer than 40% of the students were at or above state benchmarks for reading and math. The teachers at the university lab school requested classroom management assistance from the second author of this article, and the assistant principal at the Title I elementary school reached out to the first author for classroom management professional development.

Eight of the 12 teachers taught kindergarten or first grade; two taught third grade; one taught second grade; and one teacher taught fifth grade. All but one teacher was Caucasian and the average years of experience were 5.5 years (range 1:17 years). Eight of the 12 teachers had a master's degree in education; one teacher was dual certified to teach special and general education. Most (54%) reported receiving classroom management training during their preservice coursework.

We randomly observed three different students during each observation to capture an estimate of overall class-wide performance. Data collectors were instructed to choose three students at random at the beginning of each observation and to exclude students who had been observed during the previous observation. The data collectors would observe the teacher and the first student for the first five minutes of the observation, followed by the second student and the third. No student-level characteristics were collected. Overall, we collected 195 observations of teachers and students.

Study Measures

Teacher Behaviors. We collected frequency data on teachers' use of the three classroom management skills identified across the classroom management literature reviews. The operational definitions for individual and group TD-OTR, BSP, and prompting for expectations are provided in Table 1. Operational definitions were congruent with those used in two large-scale direct observation studies of teachers' class management behavior (Kern et al., 2015; Scott et al., 2011).

Student Behaviors. In addition to collecting teacher data, we noted the duration of time that students were academically

engaged and the frequency of disruptions during each observation. Academic engagement was defined as follows:

Target student is engaged with instructional content via choral response, raising hand, responding to teacher instruction, writing, reading, or otherwise actively completing an assigned task (e.g., typing on computer, manipulating assigned materials) or the student is passively attending to instruction by orientation to teacher, peer, or materials if appropriate but is not required to do anything other than listening or observing.

Disruptions were defined as follows:

Student displays behavior that does or potentially could interrupt the lesson in such a way that it distracts the teacher and/or other students (e.g., out of seat, makes noises, talks to peer, makes loud comments, and makes derogatory comments). Behaviors can range from low intensity (distracting another student by whispering something to him/her) to high intensity (making threatening statements or destroying property).

Study Procedures

Following institutional review board approval, we invited all kindergarten and first-grade teachers at the university lab school and five teachers requesting classroom management professional development at the Title I school to participate in the research study during a faculty meeting. All teachers invited consented to participate by completing and returning a written consent form after the meeting. The teachers were informed that a trained data collector would observe their instruction daily for up to three months in order to validate the direct observation system and that, based on their data and need, professional development would be provided in the fall.

Direct Observation Procedures. We collected 15-minute direct observations of each teacher during large group instruction, defined as the teacher leading direct instruction for all students in a class at the same time. Each teacher was asked to identify a 20-minute time period when she consistently provided large group instruction in either reading or mathematics. A trained graduate research assistant or hired hourly data collector (undergraduate or graduate student) would stand near the rear of the classroom and quietly observe the teacher without distracting from instruction. Data collectors used Dragon Touch I8 8" Quad

Table 1: Operational Definitions of Classroom Management Skills

Classroom Management Skill	Operational Definition
Group opportunity to respond (OTR)	Teacher provides class group with an opportunity to respond to a question or request related to the lesson. The required response to questions can be verbal or gestural (e.g., thumbs up). All OTRs must be related to the academic or behavioral curriculum. Rhetorical questions that are not meant to solicit a student response are not OTRs.
Individual opportunity to respond (OTR)	Teacher asks a question related to the lesson directed at an individual student. The required response to the question(s) can be verbal or gestural. All OTRs must be related to the academic or behavioral curriculum. Rhetorical questions that are not meant to solicit a student response are not OTRs.
Behavior-specific praise (BSP)	Teacher gives an individual student or whole class behavior-specific praise. Behavior-specific praise is a contingent verbal statement that communicates positive feedback to a student <i>and</i> explicitly tells student(s) what they did right (e.g., "Good job, I like that you raised your hand.")
Prompting for expectations	Prompts and pre-corrections are specific cues that provide students with information about the behavior desired in specific situations. Teacher-delivered prompts may be verbal, nonverbal, or both. For example, a teacher may prompt students to raise their hands by raising his or her hand (a nonverbal model) and saying: "Remember how to get my attention appropriately during a lesson." For a teacher-delivered cue to serve as a prompt for social behavior, it must be presented before the behavior is expected (rather than after), and it must specify the desired social behavior. A pre-correction is defined as an antecedent instructional event designed to prevent the occurrence of predictable problem behavior and to facilitate the occurrence of more appropriate replacement behavior. Pre-corrections consist of verbal reminders, behavioral rehearsals, or demonstrations of rule following or socially appropriate behaviors that are presented in or before settings where problem behavior is likely. For example, if students predictably enter the classroom from recess shouting at each other and running into the classroom, a pre-correction might consist of a brief role play of walking into class and using a quiet voice before the students begin recess.

Core Windows Tablet PCs loaded with the Lily data collection application, part of the Multi-Option Observation System for Experimental Studies (MOOSES; Tapp et al., 1995). MOOSES is a direct observation system for collecting real-time event recordings of teacher and student behaviors on either a frequency or duration scale. All data collectors received a two-hour group didactic training and conducted periodic observer drift checks to ensure the accuracy of the observations.

Inter-Observer Agreement Procedures. We collected inter-observer agreement (IOA) data for 52% of all observations. The two observers stood near each other but did not talk or interact during the observation except to start the observation at the exact same time. Inter-observer agreement was calculated in MOOSES using the point-by-point method with a three-second window. Across all classroom management skills and student behaviors, the average IOA was 90.1% (range from 82% to 97%).

Data Analysis

In analyzing the data, we first summed the individual and group TD-OTR frequencies together for each observation so that we had a total number of TD-OTRs per observation. Next, we divided all four classroom management skill values by the number of minutes the teacher was observed (i.e., 15 minutes) so that the scale of each variable

was rate per minute. We followed the same procedure to calculate the rate of disruptive behavior per minute. To address the two research questions, we estimated a series of three-level random-effects models—also known as hierarchical linear models (HLMs; Raudenbush & Bryk, 2002)—to evaluate the relationship between teachers' rates of classroom management skills and student behavior. We used three-level models to estimate student behavior nested in time (repeated observations) nested in teacher. First, we estimated a fully unconditional (null) model to calculate the intra-class correlation coefficient (ICC) for time and teacher. The ICC is the percentage of variance in student behavior attributable to time and to teacher. Next, we modeled full models with teachers' classroom management skills predicting students' percentage of time academically engaged and their rate of disruptive behavior. All analyses were conducted in the lmer4 package (Bates et al., 2015) in R (R Core Team, 2013) and estimated using restricted maximum likelihood (REML).

Study Results

Descriptive Statistics. Prior to modeling, we examined the descriptive statistics for the full sample and for each teacher across all classroom management skills and student behaviors (see Table 1). The average rate of TD-OTR was approximately

2 per minute during large group instruction. Although the full sample average was close to recommended TD-OTR rates (i.e., about 3 per minute during large group direct instruction; MacSuga-Gage & Simonsen, 2015), there was considerable variability among teachers, with a range of average rates between 0.76 per minute and 5.12 per minute. The average rate of BSP per minute was 0.44, whereby teachers delivered approximately 6 BSP statements per 15-minute observation. Again, there was significant variability among teachers, evidenced by the standard deviation value greater than the sample average. Lastly, the average rate of prompting for expectations, including pre-corrections, was 0.22, or about 3 per 15-minute observation.

Across all observations and teachers, students were academically engaged 80% of the time. Similar to the teacher classroom management skills, there were large differences between teachers in the average percentage of time students were academically engaged. Two teachers' students were academically engaged, on average, 68% of the time, while one teacher's students were academically engaged only 48% of the time. Disruptive behavior was not frequent, with an average of just under two disruptions per observation per teacher. A few teachers had almost no disruptions, although one teacher had an average of almost six disruptions per observation.

Table 2: Descriptive Statistics for the Full Sample and for Each Teacher

	Teacher Classroom Management Skills						Student Behavior			
	Teacher-Directed Opportunities to Respond		Behavior-Specific Praise		Prompt for Expectations		Academic Engagement		Disruption	
	M	SD	M	SD	M	SD	M	SD	M	SD
Full Sample	1.96	1.83	0.44	0.53	0.22	0.22	80.58	20.29	0.12	0.23
Teacher 1	1.29	0.57	0.46	0.22	0.32	0.19	91.37	5.73	0.03	0.06
Teacher 2	1.77	1.23	0.29	0.19	0.37	0.28	85.90	13.35	0.08	0.21
Teacher 3	1.00	0.74	0.37	0.31	0.13	0.12	68.03	25.39	0.21	0.29
Teacher 4	1.77	0.68	0.38	0.22	0.17	0.12	85.88	13.89	0.13	0.20
Teacher 5	2.35	1.47	0.33	0.15	0.12	0.15	89.01	13.94	0.09	0.16
Teacher 6	0.76	0.77	0.56	0.65	0.11	0.09	75.13	21.88	0.12	0.16
Teacher 7	0.77	0.76	0.43	0.51	0.05	0.09	48.31	29.42	0.39	0.53
Teacher 8	1.03	0.49	0.25	0.18	0.42	0.27	81.36	15.14	0.02	0.06
Teacher 9	5.12	2.98	0.30	0.22	0.35	0.23	82.22	11.30	0.04	0.13
Teacher 10	2.68	1.06	1.86	0.82	0.08	0.11	91.43	14.18	0.05	0.12
Teacher 11	1.76	0.57	0.28	0.18	0.24	0.17	84.63	14.67	0.08	0.19
Teacher 12	0.77	0.60	0.13	0.13	0.11	0.11	68.08	27.10	0.23	0.26

Three-Level Random-Effects Models.

We estimated four three-level random-effects models, two for each student behavior, to identify the most salient classroom management skills. The ICC results for the academic engagement model suggest that only 2% of the variance was attributable to time, indicating that there was very little variability across time. However, 30% of the variability was within teacher within time, suggesting that there was some variability by time and teacher, supporting the use of the three-level model. The ICC results for rates of disruptive behavior were the same for time, but much smaller for teacher (ICC = 0.13), indicating that the rate of disruptive behavior was consistent within time and within time by teacher.

Next, we estimated fully conditional models to identify the most salient of the three evidence-based classroom management skills. The average percentage of time a student was academically engaged, assuming the three classroom management skills were zero, was 76%. Of the three classroom management skills included in the models, only BSP was statistically significant and positive, suggesting that increased use of BSP had a corresponding positive impact on student engagement. Results for students' rates of disruptive behavior were similar,

Table 3: Three-Level Random Effects Model of Teacher Classroom Management Skills Predicting Student Behavior

Parameters	Student Engagement		Student Disruptions	
	Estimate	SE	Estimate	SE
Fixed effects				
Intercept	0.76***	0.04	0.13*	0.05
TD-OTR	0.01	0.01	0.00	0.01
BSP	0.07***	0.03	-0.09*	0.04
Prompt expectations	-0.08	0.06	0.11	0.08
Random effects				
Time	0.001		0.001	
Teacher	0.013		0.007	
Residual	0.030		0.046	
Fit				
ICC (Residual)	0.68		0.85	
ICC (Time)	0.02		0.02	
ICC (Teacher)	0.30		0.13	
AIC	-92.59		-17.83	
BIC	-69.68		5.08	
Deviance	-106.60		-31.83	

Notes: Significant estimates are in boldface, with $p < 0.05^*$, $p < 0.01^{**}$, and $p < 0.001^{***}$; 195 observations, 25 time points, 12 teachers.

with an average rate of 0.13 disruptions, assuming the three classroom management skills were at zero. Again, BSP was the only significant predictor, with a negative coefficient indicating that more BSP was predictive of fewer student disruptions.

Study Findings

Classroom management is a critical component of effective instruction and a prerequisite for classrooms hoping to successfully include students with, or at-risk for, EBDs. Classroom management is also a foundational and critical component of effective multitiered school behavior models, including school-wide positive behavior support and the ISF (Barrett et al., 2013). Without classroom management, implementation of evidence-based behavioral and mental health interventions for students with EBDs is less likely to be successful or to generalize to their general education classrooms. Although myriad classroom management skills and practices have been developed, researched, and reviewed, three skills have been identified as evidence-based and are typically included in most classroom management interventions and programs: (1) teacher-directed opportunities to respond (TD-OTR); (2) behavior-specific praise (BSP); and (3) prompting for behavioral expectations, including pre-corrections. This study has sought to identify which of these three classroom management skills was most salient so as to inform both practice and professional development models about which skill to focus on first. Essentially, our goal was to determine which of the three is the most effective at increasing appropriate classroom behavior during large group instruction. Results from both the academic engagement and rate of disruptive behavior models suggest that BSP was the only classroom management skill that significantly predicted positive student behavior.

Based on the descriptive statistics, the sample of teachers in this study appeared to implement the three classroom management skills at rates greater than those in other studies. For example, Scott, Alter, and Hirn (2011) found that teachers delivered less than one TD-OTR per minute and that their rates of positive feedback were less than 0.1 per minute. In fact, the teachers in this study implemented both TD-OTR and BSP at rates near those recommended in the literature, i.e., 3 TD-OTR per minute during direct instruction (MacSuga-Gage & Simonsen, 2015) and approximately 6

BSP statements per 15-minute observation (Simonsen et al., 2016). However, there was significant variability across the teachers, particularly between the two schools. Teachers in the university lab school had an average TD-OTR rate of 2.4 per minute, and the teachers at the Title I schools had an average TD-OTR rate of 1.2 per minute. Results were similar for BSP, with an average of 7.5 BSP statements per 15-minute observation at the university lab school compared with 4.7 BSP statements per 15-minute observation at the Title I school. Yet, the average rates of classroom management skills in the Title I school were still much larger than those found by Scott and colleagues (2011).

because teachers may see greater increases in engagement and decreases in disruptive behavior as a result of increased BSP.

Study Limitations

Although all efforts were made to ensure the accuracy and reliability of study results, a number of limitations should be mentioned. First, the study does not include all potential classroom management skills identified in the literature. Based on prior reviews, we included TD-OTR, BSP, and prompting for expectations, because they appeared to be the most common and widely researched. However, other relevant skills include error correction, general praise, decreases in negative feedback, high

Results of this study indicate that behavior-specific praise was the only significant predictor of student performance after controlling for the other classroom management skills.

Results of this study indicate that BSP was the only significant predictor of student performance after controlling for the other classroom management skills. This finding does not indicate that increased TD-OTR and prompting for expectations, including pre-corrections, are not important. Other research has confirmed that each classroom management skill has a positive effect on student classroom behavior (see MacSuga-Gage & Gage, 2015). However, the results do suggest that, for the students in this study, BSP appeared to have a positive and statistically significant effect that was greater than that of the other classroom management skills. Therefore, when teachers are considering which classroom management skills they should focus on increasing, BSP is an ideal choice.

Similarly, a recent professional development model using a multitiered system of professional development (MTS-PD) has been developed, which focuses on teaching teachers to implement a single classroom management skill to an a priori level before teaching another classroom management skill. Prior research using the MTS-PD has focused on both TD-OTR (MacSuga-Gage, 2013) and BSP (Gage et al., 2016; Simonsen et al., 2016). The findings of this study suggest that starting with BSP may be the best approach to increase teacher buy-in

structure, and posting behavioral expectations, as well as behavior intervention systems, including token economies and self-management systems. Therefore, future research should evaluate the relative influence of BSP when other classroom management skills and programs are present.

Second, the authors did not follow individual students across the observations or target students with EBDs. The measured student behaviors represent the classroom average using three five-minute observations of random students per observation. Future research should examine the influence of evidence-based classroom management skills on students with EBDs. We believe implementation of high-quality classroom management is a prerequisite to increase the likelihood that students with EBDs can remain in the general education classroom, but we also know that classroom management alone may not be enough and that additional function-based interventions will be necessary for those students to remain in the classroom. We believe that a continuum of classroom management, function-based interventions, and mental health services leveraging the ISF framework (Barrett et al., 2013) may be the most effective approach to ensure that students with EBDs remain in the general education classrooms.

Last, our statistical models were limited by sample size and inclusion of student and teacher characteristics. Future research should leverage larger samples and include both teacher and student characteristics, including gender, ethnicity, years of experience, and other related variables to increase the precision and accuracy of the model parameters.

Conclusion

Implementation of high-quality, evidence-based classroom management is critical for the success of all students, but particularly for students with EBDs. We sought to identify the most salient single

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Implementation of high-quality, evidence-based classroom management is critical for the success of all students, but particularly for students with EBDs.

classroom management skill in order to inform practice and professional development models as to which classroom management skill to target first. Our results suggest that BSP may be the most effective classroom management skill to increase engagement and decrease disruptive behavior. That being said, there is no doubt that BSP alone cannot and will not change all students' behavior in the classroom. Instead, BSP can be used as a first target for improving classroom management and for, ideally, increasing the likelihood that all students, and particularly students with EBDs, will be engaged with instruction.

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Perspectives From the United States and Australia on Adverse Childhood Experiences and School Behavioral Health

by Melissa Strompolis, Jennifer Payne, Aylin Ulker, Lee Porter, and Mark D. Weist*

Adverse Childhood Experiences

Adverse childhood experiences, or ACEs, a term coined by Drs. Vincent Felitti and Robert Anda, is used to describe traumatic events that occur during a child's life. During the mid-1980s, Dr. Felitti was employed as a specialist in preventative medicine at Kaiser Permanente in San Diego, California (Anda & Felitti, 2003). During this time, he was assisting obese adults with weight loss through the Positive Choice program. He was perplexed that persons who were successfully losing weight were also most likely to drop out of the program. Upon further investigation, Dr. Felitti discovered that many of these patients reported abuse during their childhoods and were likely using obesity as a defense against further unwanted sexual attention or physical aggression. His clients also reported excessive use of alcohol, tobacco, and other drugs (Anda & Felitti, 2003).

To further examine the relationship between adversity in childhood and adult outcomes, Dr. Felitti partnered with Dr. Robert Anda, a researcher at the Centers for Disease Control and Prevention (CDC), in Atlanta, Georgia. Dr. Anda had particular interest in the broad impact of childhood adversity on subsequent social and public health outcomes. Together, Drs. Felitti and Anda designed the first ACE questions and added them to a comprehensive health survey that was administered to more than 17,000 adults aged 18 to 94 who were enrolled in the Kaiser Permanente health insurance plan in the early 1990s. The ACE questions assessed the presence of

childhood abuse (emotional, physical, and sexual), neglect (emotional and physical), and household dysfunction (battered mothers, criminal behavior, parental divorce or separation, mental illness, and substance abuse). Additionally, the survey also included health behaviors, disease and disease risks, mental health and substance issues, and other health and social problems (Felitti et al., 1998).

This effort became known as the ACE Study, and the data supported three important conclusions. First, ACEs were common. Although the study included participants with health insurance who were mostly

mental health, and medical problems for adults with multiple ACEs and also for their children having multiple ACEs and poor adult outcomes (Anda et al., 2006). Because of the interrelatedness of ACEs, Drs. Felitti and Anda developed the ACE Score (i.e., a count of the number of categories of ACEs that a person reports) to examine the relationship of cumulative exposure to childhood adversity and negative health and social outcomes.

Given the impact of the original ACE Study on medical and public health research and practice (Felitti et al., 1998), the CDC continues to follow the original study

Upon further investigation, he discovered that many of these patients reported abuse during their childhoods and were likely using obesity as a defense against further unwanted sexual attention or physical aggression.

well-educated middle class whites, two-thirds of those surveyed reported at least one ACE. The most commonly reported ACE was physical abuse (28%) followed by substance abuse (27%), parental divorce or separation (23%), sexual abuse (21%), mental illness (17%), emotional neglect (15%), battered mothers (13%), emotional abuse (11%), physical neglect (10%), and criminal behavior (6%).

Second, ACEs were interrelated, tending to cluster in predictable patterns. For participants who had at least one ACE, 87% reported at least one additional ACE, 70% reported at least two additional ACEs, and 52% reported at least three additional ACEs. These multiple ACEs tended to occur within interrelated clusters; for example, the presence of domestic violence increased the risk of all forms of childhood abuse (Dong et al., 2004).

Third, ACEs were powerful, having a cumulative impact on the risk of social,

participants to track incidence of risk factors, health outcomes, and mortality (CDC, 2016). The idea of trauma-informed approaches to healthcare is beginning to take hold in many clinics and centers (Machtinger et al., 2015; Muskett, 2014), and interest in replications and extensions of the original ACE Study continues to grow. Currently, efforts to replicate the ACE Study or use the ACE questions are underway in Canada, China, Jordan, Norway, the Philippines, and the United Kingdom (CDC, 2016). Similarly, many U.S. states are beginning to research the impact of ACEs.

In 2010, five states collected ACE data through the CDC's national Behavioral Risk Factor Surveillance System (BRFSS; CDC, 2014). As of 2015, the number of states that have collected ACE data increased to 31 plus the District of Columbia. For a more detailed review of the BRFSS, see Morse and Strompolis (2016). A sampling of states that have created initiatives to understand

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and respond to ACEs includes, but is not limited to, the following: Alaska, California, Illinois, Iowa, Maine, Minnesota, Nebraska, New York, Pennsylvania, South Carolina, Tennessee, Vermont, Washington, and Wisconsin.

In South Carolina, the Children's Trust of South Carolina, a nonprofit focused on the prevention of child maltreatment and injuries, has spearheaded the dissemination of ACE information and data. The Children's Trust ACE Initiative has four components:

1. ACE data collection and dissemination;
2. ACE Interface® Master Training (to equip ACE presenters across the state);

ACEs affect numerous dimensions of child and adolescent functioning that directly relate to their connection to and potential benefit from SBH programs and services.

3. Development of the South Carolina Prevention Framework (a tool to guide local communities in developing their own response plans to ACE data); and
4. ACE legislative policy (Children's Trust of South Carolina, 2015).

Currently, South Carolina has 50 certified ACE Interface Master Trainers who conduct ACEs prevention-focused trainings throughout the state.

The purpose of the ACE Interface® Master Training is to disseminate information about the original ACE Study, brain development and neurobiology, the impact of ACEs on individuals and communities, and broad strategies for prevention and promotion. Although this training is not a prescription for preventing ACEs or mitigating their impact, it does serve as a bridge to connect disparate groups and disciplines with a shared understanding and lexicon around childhood adversity. The power of the ACE Interface® Master Training lies in the ability to integrate ACE information into preexisting frameworks and structures. The content empowers communities, programs, and services to examine and change how they support children and families and how they operate. For example, given the impact of ACEs on mental health and the relationship between ACE exposure and poor educational outcomes, ACEs information and knowledge could benefit school-based

initiatives to improve the mental health of students and their educational outcomes.

School Behavioral Health

Weist and Stevens (2017) have noted that school mental health (SMH) programs help to bridge the gap between youth who need, and youth who actually receive, mental health services (Weist, 1997); they present a range of advantages in reducing barriers to care (e.g., transportation, child care, stigma) and in enabling promotion, prevention, early intervention, and treatment in a setting encountered by almost all youth (Stephan et al., 2007). In recent years, there has been growing emphasis on joining SMH with

Positive Behavioral Intervention and Supports (PBIS), a three-tiered education-based framework. PBIS focuses on improving data-based decision making, implementing evidence-based practices, emphasizing positive and reducing punitive approaches, and providing implementation support for effective promotion/prevention at Tier 1, early intervention at Tier 2, and intervention at Tier 3 (Sugai & Horner, 2002). PBIS has scaled up to more than 21,000 schools in the United States (U.S. Office of Special Education Programs [OSEP] Technical Assistance Center on PBIS, see www.pbis.org). Mark Weist and numerous collaborators have been working for a number of years to systematically join SMH and PBIS efforts through an Interconnected Systems Framework (ISF) to enable greater depth and quality in Tiers 1, 2, and 3 of the multi-tiered system of support (Barrett et al., 2013; Monahan et al., 2014). The term "school behavioral health" (SBH) is used to convey SMH and PBIS efforts working together as in the ISF and is the focus of the SBH community driving the work highlighted in this issue of *EBDY*.

ACEs, Child and Adolescent Functioning, and School Behavioral Health

ACEs affect numerous dimensions of child and adolescent functioning that

directly relate to their connection to and potential benefit from SBH programs and services. For example, school attendance is a significant predictor of academic success (Zubrick, 2014). Youth with increased ACEs often experience family and life stressors that can make school attendance and participation difficult, including early childbirth or fathering a child (Hillis et al., 2004), periods of homelessness and running away from home to a youth shelter (Farber et al., 1984), and juvenile justice involvement (Kohlenberg et al., 2013). In addition, youth with increased ACEs experience much higher rates of school absences, suspensions, and expulsions than same-age peers (Cheung et al., 2012; Eckenrode et al., 1993; Ferguson & Wolkow, 2012; Flynn et al., 2012; Harper & Schmidt 2012) and are more likely to drop out (Kohlenberg et al., 2013).

Further, ACEs have been consistently linked to psychiatric difficulties in children and adults (Harkness & Lumley, 2008; Widom, 2000; Wolfe, 1999; Wolfe et al., 2001). Risk for mental health problems rises dramatically for youth with progressively more ACEs. In one study, only 11% of those with no ACEs had a mental health problem, compared to 44% of youth with five or more ACEs (Lucenko et al., 2012). ACEs are also associated with aggression, disruptive behaviors, inappropriate sexual behavior, and hyperactivity (Australian Institute of Family Studies, 2010; Ethier et al., 2004; Mills, 2004; Shaffer et al., 2008) as well as suicidal ideation and attempted suicide (Brodsky & Stanley, 2008; Evans et al., 2005; Miller et al., 2013).

Connecting ACEs and School Behavioral Health: *Paper Tigers*®

The integration of ACEs and SBH is exemplified in the documentary *Paper Tigers*®, directed by James Redford. Set in Lincoln High School, an alternative high school in Walla Walla, Washington, *Paper Tigers*® documents the changes that occur when school leaders and staff embrace ACEs as a framework for understanding the external behaviors and school performance issues of their students. The film captures the positive evolution of the school's culture, the improvements in school attendance and academic achievement, and the reduction in problem behaviors and school suspensions.

Under the leadership of then-principal Jim Sporleder, Lincoln High School transformed into a trauma-informed school by changing school processes and policies to better meet the needs of students who

had experienced (or were experiencing) adversity. After learning about ACEs, Principal Sporleder supported and led internal changes that reflected the recommendations referenced above by:

- Reducing practices that could be trauma-inducing or retraumatizing;
- Providing appropriate supports within the school itself from staff who were trained in understanding ACEs; and
- Providing services consistent with trauma awareness.

Essentially, Lincoln High School integrated one of the key cultural shifts highlighted in the ACE Study—reframing questions about student behavior and performance from “What’s wrong with you?” to “What happened (is happening) to you?” Lincoln staff also enabled students to build their own self-awareness around ACEs. For example, the documentary begins with a science teacher’s efforts to relate brain development to early adversity and then connect that learning to his students’ behaviors, experiences, emotions, and academics.

Paper Tigers® captured additional substantive changes that Lincoln staff made in supporting students more appropriately. Staff used early intervention strategies when students showed signs of stress, assessed students’ decision-making abilities and emotional state prior to having difficult conversations with them, and focused conversations at staff meetings on how to support students and their families as opposed to student discipline. Guidance staff regularly conducted home visits to encourage attendance and deepen the understanding of students’ home environments. A new in-school suspension environment was created to provide students with emotional and academic support and to reduce out-of-school time. One of the most significant service delivery changes was the creation of a health center within the school campus where students could receive health and mental health assistance (Redford & Pritzker, 2015).

The film follows the academic year of a number of students and staff where the changes in the school community are made evident. One of many examples of the transformative nature of the mindset shift that occurred at Lincoln High School was captured in an interaction between Principal Sporleder and a student, Steven. The interaction was described from the perspective of both parties around an incident that occurred when Steven was violating

a school safety policy. Steven was using a lighter inside the school building and was asked by Sporleder to turn over the lighter. After refusing to turn over the lighter several times, Steven left campus. In the pre-ACE Lincoln world, this type of behavior would have resulted in an automatic suspension; however, Sporleder called Steven’s home and learned that Steven’s mother had abandoned him. After learning this information, the principal asked Steven’s father to ensure that Steven returned to school the very next day, where Sporleder was able to provide emotional support to Steven during this difficult time. This event radically changed

trauma and the impact of trauma, to improve implementation of services and programs, and to reduce harm.

Raising awareness of the effects of ACEs and childhood trauma by school staff is a critical strategy for recognizing and responding to trauma-related behaviors and is a precursor to implementing evidence-based interventions (Taylor & Seigfreid, 2005). For example, there is evidence that increased understanding of trauma and its impact on the brain can have a positive influence on the climate within residential treatment settings (Perry, 2015). The Australian Childhood Foundation therefore

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Steven’s view of the principal and also provided Principal Sporleder with the background information needed to understand Steven’s behavior which, as Sporleder states in the film, “had nothing to do with the lighter.” Some of the significant outcomes that this trauma-informed school approach has yielded include 60% fewer referrals, 75% fewer fights, 90% fewer suspensions, a 55% increase in math assessment scores, a fivefold increase in graduation rates, and a threefold increase in seniors accepted to college (Redford & Pritzker, 2015).

Integration of ACEs and SBH in Australia

Many countries, especially the United States, have undertaken research studies to examine the prevalence and impact of ACEs, but our review found only one study with this emphasis from Australia (Rosenman & Rodgers, 2004). Although ACE research is more limited in Australia compared to other countries, many research investigations in the country have examined childhood trauma. Using the childhood trauma lens, work in Australia has linked the prevalence and impact of trauma and the need for trauma-informed care into its schools. For example, communities in Australia have integrated childhood trauma and SBH approaches to raise awareness of

offers Strategies for Managing Abuse Related Trauma (SMART; Australian Childhood Foundation, 2011), an online training aimed at increasing awareness by school staff of the impact of trauma on children and providing practical strategies for assisting these students in class. Several South Australian schools examined the impact of these strategies, with data showing a reduction in the number of violent incidences and student suspensions (Australian Childhood Foundation, 2011). Finally, the Department of Education in Western Australia has included mental health and well-being as strategic foci, with the intent of improving educational outcomes for students with ACEs (Department of Education, Western Australia, 2015). The strategic plan will include education on ACEs and the impact of trauma.

In Australia as in the United States, there is increasing recognition that schools are an ideal entry point for improving access to mental health services for children (Allensworth et al., 1997; Weist, 1997). Furthermore, delivering mental health services through the school system can address key barriers that often prevent students, especially those from lower socioeconomic backgrounds, from receiving mental health services (Garrison et al., 1999; Stephan et al., 2007).

Well-developed programs focused on student mental health can also help to shine a light on policies and practices that may be harmful to students. For example, with regard to students who have experienced ACEs:

The public institutions and service systems that are intended to provide services and supports to individuals are often themselves trauma-inducing. The harsh disciplinary practices in educational/school systems . . . can be re-traumatizing for individuals who already enter these systems with significant histories of trauma (SAMHSA, 2014, p. 2).

Schools in a number of Australian states are using PBIS as a framework for responding to student behavior, and there are also

to increase awareness of ACEs, facilitate student advocacy, build school-based and community capacity to prevent and address mental and behavioral health problems for students, and promote safer school settings and learning environments.

As noted by Weist and Stevens (2017), South Carolina and neighboring states are building the Southeastern School Behavioral Health Community, including training events showing the ACE–SBH connection. For example, at the 2016 conference held in Myrtle Beach, the *Paper Tigers*® documentary was shown to more than 50 participants, and a lively dialogue followed on the implications for improving school environments and programs. A number of plans to improve SBH policy and practice ensued, including

sensitive and that focus on reducing risk and enhancing protective factors among students within 12 elementary schools in the Pee Dee region of the state (Browne, 2014).

Conclusion and Future Directions

Reflecting a community-of-practice emphasis (Cashman et al., 2014; Wenger et al., 2002), collaborations regarding ACEs and SBH are occurring at multiple levels of scale; for example, within school buildings, within school districts, across counties in states, across states (see www.carolinanetwork.org), at national forums (see www.pbis.org, <http://csmh.umaryland.edu>), and across countries (see www.smhile.org). The authors for this article are involved in building a partnership between the southeastern region of the United States and the western region of Australia, including collaborating in building the ISF as applied to communities in the two countries and presenting on this work at representative national conferences in the late fall in the United States and in the summer in Australia. In this work, there is a particular emphasis on multitiered prevention, early intervention, and intervention for students who may be experiencing ACEs and presenting with internalizing problems such as depression, anxiety, social withdrawal, and trauma.

As mentioned, plans are in place to use the *Paper Tigers*® documentary to raise awareness of the emotional/behavioral needs of children and to assist school and community agency leaders and staff in moving from a traditional focus on discipline to a compassion-focused and trauma-sensitive approach. This is consistent with a growing emphasis in both countries on reducing student encounters with school discipline, which has increasingly been found to have toxic and damaging effects on children and youth and to contribute to the “school to prison pipeline” (see <http://www.ed.gov/news/press-releases/educators-gather-white-house-rethink-school-discipline>); Flannery, 2015).

All of this work prioritizes the involvement of all relevant stakeholders, including children and youth, families, and staff, and leaders from family advocacy, education, mental health, allied health services (e.g., occupational and speech therapy) juvenile justice, child welfare, disabilities, primary health care, and faith and business communities. Increasingly organizers of local, state, and national forums and conferences recognize that SBH, if well done, is a highly relevant agenda for all of these groups, necessitating diversity and inclusiveness in participants, which also assists in breaking

“The public institutions and service systems that are intended to provide services and supports to individuals are often themselves trauma-inducing.”

efforts to integrate with SMH as in the ISF. This approach is highly consistent with trauma-informed practices, with emphasis on educators’ understanding and meeting the needs of students, and redesigning the school environment to promote student success (Sugai & Simonsen, 2012). The use of PBIS as a guiding framework is a significant step forward in the reduction of the use of restrictive, punitive, or exclusionary practices known to be retraumatizing to students. Further, efforts are beginning in some western Australian schools to build from PBIS to implement the ISF to address concerns increasingly expressed by school and community members about students’ experience of ACEs and associated problems such as anxiety, depression, suicidality, and trauma. Although it is a new initiative, there is considerable enthusiasm for implementing the ISF to assist students experiencing ACEs, and a more formal evaluation of these efforts is targeted for completion within the next two years.

Integration of ACEs and SBH in the United States

Numerous research studies and community-based efforts are taking place across the United States to improve educational outcomes for children, including the integration of ACEs into these efforts. Within South Carolina, these efforts have mirrored work that is taking place in Australia

plans to show the documentary to South Carolina alternative school principals to raise awareness and increase support for trauma-sensitive and compassionate approaches to students’ emotional and behavior problems. In addition, a youth forum was held with more than 20 older youth (ages 18 to 25) who had experienced these problems and received mental health services, and a major recommendation from them was to expand and improve these approaches. Plans are in place to show the documentary and hold an additional youth summit at the next Southeastern School Behavioral Health Conference, to be held again in Myrtle Beach in late April 2017 (see www.school-behavioralhealth.org). In addition, led by the South Carolina Department of Mental Health (SCDMH), SBH programs in the state are expanding to elementary schools in areas characterized by high poverty, rurality, and elevated ACE experiences among students in families. In this initiative, termed Carolina CARES (Children and Resilience in Elementary Schools), the University of South Carolina School Behavioral Health Team has partnered with SCDMH and Children’s Trust of South Carolina to implement the ISF systematically augmented to include a focus on ACEs. For example, school and community-wide training events for diverse stakeholders on ACEs are scheduled, and interdisciplinary school teams will plan for and deliver programs that are trauma

down organizational silos between youth-serving systems (Lever et al., 2003).

The emphasis is also on removing and reducing barriers to learning for all students, including the many who have experienced or are experiencing ACEs. As discussions on ACEs increase in communities and states—for example, as sponsored by the Children's Trust of South Carolina—there is also an emerging theme of transparency in discussions as people openly acknowledge that they have experienced ACEs and have emotional/behavioral and other struggles in their lives. Importantly, such transparency helps to create a safe space to examine school policies and procedures that are detrimental to successful educational outcomes and builds energy to move toward more progressive and supportive policies and approaches.

Finally, numerous research opportunities exist to strengthen the integration of ACEs and SBH to positively affect educational outcomes. Important areas of inquiry include:

- The impact of ACE knowledge on school staff and student interactions, particularly for students with ACEs and/or emotional/behavioral issues;
- The effect of ACE knowledge on program and service implementation;
- Changes to perceptions of school safety and well-being; and
- The relationship of ACEs to immediate (e.g., standardized tests, grades) and long-term (e.g., middle/high school graduation, postsecondary attainment) educational outcomes.

For this article, our review found no empirical studies on ACE-SBH integration. We hope this article serves as an initial first step to develop this research avenue, along with needed developments in policy and practice.

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From the Literature: What's Hot . . . What's Not

by Michelle Charlin*

Autism and Exercise

Exercise, Autism, and New Possibilities

Geslak, D.S.

Palaestra

30(2): 32–36, 2016

Nearly a third of children with autism spectrum disorders (ASDs) are obese. Despite the fact that exercise could help them lose weight, improve academically, and decrease their behavioral issues, exercise is rarely included in their individualized education plans (IEPs). Challenges to their physical education (PE) can include environmental overwhelm, not enough PE staff, and differences in their needs and learning styles. Some children with ASD receive physical or occupational therapy, but it will cease at some point. Because physical education is not generally considered a form of therapy, it is not often recognized, even by parents, as an ongoing resource to be employed. To better serve students with ASDs, adapted physical education (APE) and PE teachers can enlist the help of those who know best what can upset or inspire individual children—the school support staff who daily assist them and their parents.

Support staff may be instructed by the PE staff or may receive professional training. Parents may be shown uncomplicated exercises they can do with their children at home. Visual supports can be used to explain exercises, engage students, and communicate needs and expectations. All students, “whether or not they are on the spectrum,” can benefit. Examples of visual aids include first-then boards, start-finish schedules, the iPad app ExerciseBuddy, and video modeling. For individuals with autism, watching videos of others or themselves performing exercises is associated with “positive gains in social-communicative skills, functional skills, perspective-taking skills, and problem behaviors.”

Geslak's own Exercise Connection program has adapted the traditional five components of physical fitness—body image, posture, motor coordination, muscular fitness, and cardiovascular fitness—to meet the needs of people with ASD. Before children can be taught an exercise, they must know the parts of their bodies. It is not uncommon for youngsters and adults with ASD to be unable to differentiate between their hands and feet. They may also confuse left and right. The body image component is also the segment of physical measurements and evaluations.

Both cognitive and gross motor development may be positively influenced by exercises that improve coordination, posture, and balance. Muscular fitness

Mania and Methylphenidate

Manic Symptoms Due to Methylphenidate Use in an Adolescent with Traumatic Brain Injury

Ekinici O., Direk M.C., Ekinici N., and Okuyaz C.

Clinical Psychopharmacology and Neuroscience

14(3): 314–317, 2016

Almost everyone is familiar with ADHD, but not secondary ADHD. The secondary form results from traumatic brain injury (TBI) and occurs in patients who had no previous symptoms of ADHD. Nearly one of every five children whose brains are

For individuals with autism, watching videos of others or themselves performing exercises is associated with “positive gains in social-communicative skills, functional skills, perspective-taking skills, and problem behaviors.”

encompasses muscular strength and muscular endurance. Dumbbells, exercise bands, and/or bodyweight activities may be introduced in this component. Dumbbells, in particular, may assist with sensory processing disorders. Cardiovascular fitness can be attained by slowly introducing circuit training that is fast-paced and involves several types of exercises. Potentially fascinating exercise bikes and treadmills are not necessary. Geslak proposes that exercise programs featuring “visual supports, structured routines, and compassionate staff” can prevent “maladaptive behavior.” He also suggests that everyone involved in special education should read the article by Mahoney and Perales “Using relationship-focused intervention to enhance the social-emotional functioning of young children with autism spectrum disorders” in *Topics in Early Childhood Special Education* (http://www.etc.com.org/dosyalar/Mahoney_x_Peralesx_2003.pdf).

injured are at risk for developing attention issues. Methylphenidate (MPH) is a stimulant commonly used to treat ADHD. However, it can cause hallucinations, mania, and psychosis. In this case study, a 17-year-old boy who had been a successful student developed slow speech, attention issues, and difficulties with his memory after being involved in a motor vehicle accident. He had had no symptoms of ADHD before the wreck. After a week of taking a daily dose of 18 milligrams of MPH orally (osmotic release oral system), he became more talkative, began speaking to himself, became delusional and irritable, and had difficulty sleeping. No one in his family had a history of mental illness. He was taken off MPH, and his mania symptoms resided after three days. It is likely that he experienced toxicosis. Had his psychotic or manic symptoms persisted, he might have been evaluated for bipolar disorder or schizophrenia. Research suggests that being male and experiencing a critical TBI puts one at greater risk of

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mania. Also, it is possible that the younger a person is, the greater the chance of becoming mentally ill after a TBI. In the instance of this patient, the parts of his brain that had been damaged are those known to be related to bipolar disorder in youth. Because these same areas are the “target regions of MPH,” this boy was more susceptible to a negative drug reaction. Therefore, it is extremely important to slowly titrate the dosage of MPH for children who have TBI and to monitor them closely.

and hospitalized children’s feelings. The researchers had hoped to learn about “maladaptive trauma-related appraisals” because being able to speak and think about what has happened is important to recovery. The authors speculated that a structured questionnaire might have been more effective in obtaining specific cognitions. To assist children, it is recommended that hospital staff remember to treat the whole child—not just the injury. Discussing feelings, procedures, pain management, and what

twice-weekly administration of aripiprazole is as efficient as daily dosage because the drug’s mean elimination half-life is between 47 and 75 hours. Ghanizadeh recommends that a larger trial that includes blood tests be conducted.

Using Electronic Personal Health Records

The Youth-Mental Health Engagement Network: An Exploratory Pilot Study of a Smartphone and Computer-Based Personal Health Record for Youth Experiencing Depressive Symptoms

Forchuk, C., Reiss, J., Eichstedt, J., Singh, D., Collins, K., Rudnick, A., Walsh, J., Ethridge, P., Kutcher, S., and Fisman, S. *International Journal of Mental Health* 45(3), 205–222, 2016

Although the American and Canadian health care systems are very different, this Canadian study provides information that American care providers and researchers may find useful. The Internet-based Lawson SMART record (LSR) allows the contents of electronic personal health records (ePHRs) to be accessed and updated by patients and medical professionals. The Mental Health Engagement Network (MHEN) project found that when adults with mental illness used LSR to monitor moods, keep track of appointments, and correspond with mental health care workers, they were less likely to be hospitalized or arrested. Because depression affects so many youth and they are not being assisted as early as they could be in ways they are able or willing to utilize, the researchers of the Youth-Mental Health Engagement Network (YMHEN) wondered what might encourage or discourage young people from using the ePHR, how usage might affect their typical care, and how the ePHR could be improved for their use. Nine professionals ranging from psychiatric nurses to a marriage and family therapist and 41 of their patients between the ages of 16 and 21 participated in the study. Most of the young people suffered with mood disorders and anxiety. Care providers were issued tablets; patients were given smartphones because most of them already use the devices.

Six themes were identified through focus groups. The severity of the illness and the intensity of treatment influenced how often the LSR was accessed. Patients used the LSR most often for tracking their

This trial is believed to be the first to determine that twice-weekly administration of aripiprazole is as efficient as daily dosage because the drug’s mean elimination half-life is between 47 and 75 hours.

Stress With Hospitalization

A Qualitative Analysis of Children’s Emotional Reactions During Hospitalization Following Injury

Ramsdell, K.D., Morrison, M., Kassam-Adams, N., and Marsac, M.L. *Journal of Trauma Nursing* 23(4): 194–201, 2016

Traumatic injury itself can lead to post-traumatic stress syndrome or disorder (PTSS/PTSD). Treatment in an emergency room and/or hospital can cause additional stress. Determining which children are highly stressed and intervening early can result in full recovery of the body and mind. This study investigated how children and parents perceived the stress of admission to a level 1 pediatric trauma center and how the children felt and thought about what was happening to them. Ten children between the ages of eight and 16 and an accompanying parent participated in semi-structured interviews. The children were asked what they were thinking and feeling when injured and how they felt about being in the hospital. The parents were asked what they thought their children might have been thinking or feeling. Five types of stressors were identified: (1) procedural concerns, (2) uncertainty, (3) sleep and nutrition challenges, (4) being confined to the hospital, and (5) home preparation. Despite being asked about thoughts, both the children’s and parents’ responses related to feelings. This study is believed to be the first to present parental impressions of injured

can be expected upon returning home can reduce fear. Distracting youth during treatment and teaching them relaxation methods can also be beneficial. Hobbies and visits with family and friends should be encouraged. Before discharge, parents should be provided with mental health information and resources.

Treating Tics

Twice-Weekly Aripiprazole for Treating Children and Adolescents with Tic Disorder, a Randomized Controlled Clinical Trial

Ghanizadeh, A. *Annals of General Psychiatry* 15(1): 21–29, 2016

Boys and girls age six to 18 who were being treated for the vocal and motor tics of Tourette’s syndrome in a specialty clinic in Iran were randomly assigned to two groups. Both groups were given a daily dose of aripiprazole (commonly known as Abilify) for 14 days. For the next 46 days, one group continued receiving the atypical antipsychotic daily while the other group received the medication only on Saturdays and Tuesdays. Information was analyzed for 34 patients. Motor and vocal tics were markedly reduced in both groups. Irritability was a common side effect of daily dosage. Both groups experienced increased appetite and fatigue. However, “drowsiness in the twice-weekly treatment group was half of the daily treatment group.” This trial is believed to be the first to determine that

symptoms. Usage increased patients' self-awareness and autonomy, sometimes helping them realize that sleep or eating patterns affected their moods. Changes in the therapeutic relationship were related to boundaries and communication. Because both parties could view or edit records around the clock, professionals could send messages of praise and alert patients about when to implement crisis plans. Scheduled visits became more focused because providers had often reviewed patient information in advance. Dialectical behavior therapy (DBT) and cognitive behavioral therapy (CBT) treatment requirements integrate easily with LSR usage. Patients almost always had their phones with them and could easily do their daily homework assignments such as DBT diary cards. The sixth theme, suggestions for personalization and simplification, showed that a solution created for adults should not be merely modified for children by, for example, adding a depression scale for the younger age group. Participants wanted to add pictures, play games to achieve their treatment goals, hide or move sections not relevant to their care, and expedite the login process. The LSR was well received by youth and could be adapted to better suit the population. Although the researchers did not measure treatment efficacy, health professionals advised "increased patient compliance" over paper-based systems.

Success With Activity Schedules

Using Activity Schedules to Increase On-Task Behavior in Children at Risk for Attention-Deficit/Hyperactivity Disorder

Cirelli, C.A., Sidener, T.M., Reeve, K.F., and Reeve, S.A.

Education and Treatment of Children 39(3): 283–300, 2016

Activity schedules reduce dependence on others for instruction and assist with focus by utilizing visuals or text to prompt a series of actions. These schedules are often used to assist people who have developmental disabilities. This study is believed to be the first to demonstrate that activity schedules can increase on-task behavior for children at risk for ADHD. The participants were two boys

enrolled in first- and second-grade classes in the New Jersey public school system. Neither was being treated with medication. The boys were taught how to use activity schedules during two sessions held in their classrooms when other students were away. The outside cover of their small folders showed the number of worksheets to be completed. A pocket on the left-hand side of the folder held a paper strip that was a copy of the top of the worksheet to be collected from a table. The pocket on the right-hand side contained a notice to put the finished worksheet and the matching strip inside it. The final message in the folder said, "Finished! Great job!" and

Wolff, N., Rubia, K., Knopf, H., Holling, H., Martini, J., Ehrlich, S., and Roessner, V. *Child and Adolescent Psychiatry and Mental Health*

10(24): 1–10, 2016

Methylphenidate (MPH) is a psychostimulant commonly prescribed to treat ADHD. Small doses of MPH may affect shortfalls of dopamine in the brain, and because the dopamine system and the opioid system are synergistic and the opioid system controls pain, it is likely that MPH can influence pain perception in those with ADHD. The authors reviewed

It was discovered that children whose ADHD symptoms are not treated by MPH do not feel pain as strongly/normally as their counterparts who are medicated.

instructed the students to take the folders to their teachers. As a reward for completing their work, the boys were allowed to choose books purchased for them after a preference assessment. Reading was already being used as a reward for all students during independent work time. On-task and on-schedule performance increased for both boys. It is supposed that a future cost-benefit analysis might show that the cost of assessment, training, materials, and books would be less than that of additional personnel and behavioral interventions. Social validity was determined by interviewing teachers beforehand and peers afterward. Classmates showed interest in the schedules and reward books, and one child wanted to use a schedule, too. One of the teachers reported that she wished the system had been in place earlier, and one mother requested that activity schedules be included in her son's IEP the following year.

Pain Perception in ADHD

Reduced Pain Perception in Children and Adolescents with ADHD Is Normalized by Methylphenidate

the 2003–2006 German Health Interview and Examination Survey for Children and Adolescents (KiGGS) and selected 260 youth from the nearly 18,000 who participated. Sixty-five took MPH for their ADHD symptoms, 65 did not, and the remainder were healthy controls. The parents of those who were between the ages of seven and 10 answered queries about their children's pain in the past three months; those who were 11 to 17 answered questions themselves. The authors note the limitations of parental responses. It was discovered that children whose ADHD symptoms are not treated by MPH do not feel pain as strongly/normally as their counterparts who are medicated. It is possible that "reduced pain perception as well as poor concentration and increased impulsivity" explain why those with ADHD who are not prescribed MPH are more likely to injure themselves badly enough to require emergency room visits. Treatment with MPH could reduce familial and personal distress, time spent in behavioral therapy, and medical costs related to "accident proneness." Neurofeedback and mindfulness training are suggested as alternatives to MPH. ■

Calendar of Events, January 2017 – March 2017

January

30-Feb 1 **American Council for School Social Work.** New Orleans, LA. Sponsor: ACSSW. Website: <http://acssw.org/>

February

16-19 **Learning Disabilities Association 54th Annual International Conference.** Baltimore, MD. Sponsor: LDA. Website: <https://ldaamerica.org/events/annual-conference/>

19-22 **2017 At-Risk Youth National FORUM.** Myrtle Beach, SC. Sponsor: National Dropout Prevention Center/Network at Clemson University. Website: <http://dropoutprevention.org/conferences/>

21-24 **National Association of School Psychologists Annual Convention.** San Antonio, TX. Sponsor: NASP. Website: <http://www.nasponline.org/>

March

2-4 **AASA Conference on Education.** New Orleans, LA. Sponsor: AASA. Website: <http://nce.aasa.org/>

5-8 **30th Annual Research & Policy Conference on Child, Adolescent, and Young Adult Behavioral Health.** Tampa, FL. Sponsor: Child and Family Studies, University of South Florida. Website: <http://cmhconference.com/index.php/registration>

22-24 **Dare to Dream, 28th Annual National Service-Learning Conference.** Anaheim, CA. Sponsor: National Youth Leadership Council. Website: <http://servicelearningconference.org/2017/>

22-25 **20th National School Social Work Conference.** San Diego, CA. Sponsor: SSWAA. Website: <http://www.sswaa.org/events/EventDetails.aspx?id=674195>

27-29 **Carnegie Foundation Summit on Improvement in Education.** San Francisco, CA. Sponsor: Carnegie Foundation for the Advancement of Teaching. Website: <https://www.carnegiefoundation.org/get-involved/events/summit-improvement-education/>

29-31 **Annual Ready by 21 National Meeting.** Austin, TX. Sponsor: Ready by 21. Website: http://www.readyby21.org/nationalmeeting?utm_source=2017+NM+Save+the+Date&utm_campaign=NM+2016&utm_medium=email



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