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Universal Prevention to Support Children's Mental Health in Schools (2016)

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Universal Prevention to Support Children's Mental Health in Schools

As documented in chapters throughout this book, many promising and well-established interventions have been developed for treating even the most burdensome and debilitating mental health problems experienced by youth. Two overlapping realities, however, can interfere with the success of these interventions: (1) schools and communities rarely have enough resources to identify and provide intensive services for the large number of youth who experience severe emotional and behavioral problems; and (2) many youth who would benefit from early interventions to reduce risk go unnoticed and do not receive any services at all (see Herman, Merrill, Reinke, & Tucker, 2004; Reinke, Herman, & Tucker, 2006). It is exciting to have strategies that can help individuals overcome mental health problems. Without a broader approach, however, individual or group interventions will not impact the population health or reduce the incidence or prevalence of these conditions (Biglan, 1995).

A public health approach provides a framework for influencing population health outcomes (Reinke et al., 2006). Although elements of a public health framework applied to children's mental health—including the idea of conceptualizing health promotion, prevention, and treatment along a continuum—have appeared in several prominent reports (National Research Council and the Institute of Medicine; NRC & IOM, 2000; 2004; 2009), the application of fully integrated models remains challenging. In particular, universal approaches to mental health promotion and prevention are often foreign to mental health providers who have been trained to deliver services to individuals or small groups.

In this chapter, we define universal prevention and situate it within a public health perspective. Next, we describe how this approach fits along a continuum of supports for students, ranging from minimal to intensive services, and show how this framework not only can reduce

the number of students who will need intensive supports but also can help identify those most in need. We then describe examples of universal prevention models in school settings. We conclude with a discussion of barriers to universal prevention, potential solutions, and future directions.

Definitions and Rationale

The NRC and the IOM (1994; 2009) have been at the forefront of efforts to define prevention-related activities related to mental health. Modern definitions of prevention situate it along a continuum of activities ranging from prevention to treatment and maintenance. Prevention includes three levels characterized by increasing intensity of interventions: (1) universal prevention which includes services or strategies delivered to an entire population without regard to risk status; (2) selective prevention which targets specific subgroups based on the presence of an identified risk factor for the disease or outcome of interest; and (3) indicated prevention which is delivered to persons showing early signs or symptoms that do not yet meet the threshold for a given disease or disorder (Stormont, Herman, & Reinke, 2010). The modern language of prevention parallels and replaces prior public health terminology which included primary, secondary, and tertiary prevention.

Tiered response models have been developed in educational settings that align with these different prevention activities. Some fundamental premises of the tiered prevention approach to youth mental health problems are that (a) all children can benefit from universal supports; (b) risk of progressing to more intensive service needs can be mitigated for many children by intervening earlier with less intensive supports; and (c) non-response to less intensive services can help better identify those most in need of intensive support (Thompson, Reinke, & Herman, in press).

In particular, a universal prevention framework offers strategies to reduce negative emotional and behavioral outcomes and increase positive mental-health outcomes for entire populations (NRC & IOM, 2009). The goal of universal prevention is to address risk and protective factors that contribute to problems on a wide-scale basis, regardless of an individual's risk in the population (Split, Koot, & Van Lier 2013). Universal prevention activities often involve indirect services and activities such as consultation to promote healthy social environments, system-wide interventions and supports, media campaigns, or public policy changes.

Key Etiological Dimensions and Best Practices for Assessment and Identification

A key element of successful application of tiered response models is to have efficient data collection systems to monitor and quickly identify risk and protective factors as well as youth response to each tier of services. In public health and epidemiology, surveillance systems provide continuous, systematic data streams to help plan, implement, and evaluate practices (World Health Organization, 2012).

Effective and efficient surveillance systems require the identification of intended outcomes along with corresponding etiological factors. Social ecological models provide a useful framework for considering risk and protective factors associated with negative mental health outcomes. These models suggest that emotional and behavior problems are embedded within a series of interacting contextual systems from broader social and cultural systems (schools, families) to internal, within person systems (perceptual, biological and genetic) (Herman et al., 2004). Traditionally, interventions to alleviate social emotional symptoms have focused on systems that are more proximal to the individual, particularly within person factors, by providing skills training, individual therapy, or medication. Research has shown that successful youth

interventions often require intervention in family and/or school subsystems that surround the youth. These interventions are grounded in the assumption and empirical research showing that youth problems often originate in pathogenic interactions with their social environment, and thus altering these environments can alleviate symptoms (Biglan, Flay, Embry, & Sandler, 2012). A corollary of this assumption, also supported by evidence, is that altering these social environments prior to the emergence of youth symptoms can prevent problems from emerging in the first place (NRC & IOM, 2009).

A recent theory of nurturing environments proffered by Biglan and colleagues (2012) suggests that most major youth social and emotional problems can be traced at least in part to problems in several environmental circumstances: toxic life events, limited opportunities to learn and practice prosocial behaviors and socioemotional skills, and an absence of adult supervision (Biglan et al., 2012). In contrast, nurturing environments help optimize child mental health outcomes by reducing toxic life events such as maltreatment and physical injury; providing abundant opportunities to learn self-awareness, emotional regulation, and social skills; and monitoring youth activities. Biglan and colleagues provided an extensive review of literature, including a series of comprehensive reviews by the NRC and IOM (2000; 2004; 2009), to support the importance of each nurturing environment domain.

A surveillance approach to identifying risk and protective factors involves continual monitoring of these environmental risk and protective conditions as well as student behaviors and outcomes indicative of unsuccessful/successful adaptation. In school settings, nurturing environments requires that students feel safe, physically and socially; expectations are clear and reasonable; students receive higher rates of more positive than negative attention from adults and peers; consequences are predictable; and social, emotional, and academic competence is fostered.

Continuous data streams can be gathered from systematized school records (e.g., office discipline referrals (ODRs), absences), student surveys/ratings, and teacher reports (McIntosh, Reinke, & Herman, 2010). These data are then used to guide local decision-making about student responsiveness to intervention (e.g., a student with 2 or more ODRs may be identified as not responding to universal school-wide supports and in need of selective or intensive supports) and areas for school improvement.

Examples of Universal Supports in Schools

Schools are composed of multiple subsystems that can be the targets of universal supports. These include school-wide or setting-specific systems (playground, classroom, cafeteria, hallways, etc.). Rather than reviewing all available universal interventions that have been developed for each of these systems, here we describe exemplars within three key school subsystems: school-wide, classroom, and student level supports.

School-Wide

School-wide programs and practices attempt to alter broad social systems and interactions so that they are more nurturing and likely to promote positive youth development and reduce known ecological risk factors. School disorder characterized by punitive adult interactions, limited adult supervision, aversive peer interactions, and little support for student autonomy and competence undermines youth development and contributes to risk for most major youth mental disorders (Herman et al., 2004; Reinke & Herman, 2002). For instance, although externalizing disorders can often be traced to early pathogenic family environments, school environments often exacerbate and accelerate these early symptoms (Reinke & Herman, 2002). Patterson and colleagues (1992) cascade model includes a clear description of how the coercive cycle at home that contributes to early-onset antisocial behaviors often is repeated with adult

interactions at schools (Reinke & Herman, 2002). Additionally children with these behaviors are often rejected by peers at school, encounter learning difficulties, and ultimately drift to delinquent peer groups which further reinforce their behavior patterns. In a similar manner, school environments can contribute to risk for internalizing symptoms and disorders (Herman et al., 2004).

School-wide Positive Behavior Interventions and Supports (SW-PBIS) is a proactive behavior support model that was developed two decades ago as a public health approach to reduce school disorder and promote positive student outcomes (Sugai, Horner, & Gresham, 2002). Since 2000, nearly 20,000 schools in the US have implemented SW-PBIS; in ten states, over 40% of the schools use the approach (Horner, 2013). On a school-wide level, PBIS involves having school staff develop clear behavior expectations in all school settings; model, teach, and practice the expectations; provide higher rates of positive than negative attention for meeting these expectations; and collect systematic data of behavior infractions including type, location, time, and other descriptors. The data is then used by school-based teams to make decisions about how well the universal system is working and to identify areas of improvement (e.g., if a high number of infractions occurs on the playground the team would decide how to reduce the problem perhaps by reteaching expectations, increasing adult supervision, and/or increasing positive attention rates). Additionally, tools are used to monitor the fidelity of implementation of PBIS to ensure desire outcomes are achieved.

SW-PBIS is not a curriculum or a packaged program. Rather it is a framework and set of strategies for building more nurturing environments in schools. Abundant resources are available for schools to use as they implement the model including national and state technical assistance centers and web resources (see www.pbis.org).

Many single subject studies have supported the impact of PBIS in reducing problem behaviors in school specific settings (see Reinke et al., 2006). More recently, two randomized trials have augmented these smaller, less rigorous studies and found that PBIS implementation was associated with improvements in school safety, academic achievement, positive student behaviors, and school climate compared to control schools (Bradshaw, Koth, Thornton, & Leaf, 2009; Bradshaw, Mitchell, & Leaf, 2010; Bradshaw, Wassdorp, & Leaf, 2012; Horner et al., 2009).

Classroom

Several examples of classroom level universal prevention exist. The exemplars in this category train all teachers, regardless of risk, to provide effective classroom behavior management skills. Much like the literature showing the importance of effective parent behavior management skills in fostering healthy child adaptation, much research shows the value of clear and predictable, supportive classroom environments in supporting positive youth development (Biglan et al., 2012).

The Good Behavior Game (GBG) is probably the most studied intervention in this category. Developed in the late 1960s by a classroom teacher, the GBG is a method for inhibiting student misbehavior in the classroom through social contingencies (Barrish, Saunders, & Wolf, 1969). Through a systematic process teachers are taught to play the game by dividing the class into teams, setting clear expectations, tracking behavior infractions, and rewarding the team with the fewest infractions at intervals throughout the day. The research-base in support of the GBG is fairly remarkable with over 20 randomized trials supporting its effects in reducing adverse youth outcomes, prompting Embry (2002) to label it as a “behavior vaccine.” More recent studies have shown that the protective social and emotional health benefits from even a single year exposure

to GBG during first grade persist into adulthood (Bradshaw, Zmuda, Kellam, & Ialongo, 2009; Kellam et al., 2008; Kellam, Wang, et al., 2014). Moreover, early exposure to GBG improves educational outcomes through high school including persistence and graduation (Bradshaw et al., 2009).

The Incredible Years Teacher Classroom Management (IY TCM) program, a companion to the well-established IY Parent program, is a 5 or 6 session full day workshop training series with ongoing coaching focused on equipping elementary school teachers with effective classroom management skills. Skills are organized in a hierarchy, conceptualized as a Teaching Pyramid with foundation skills and practices focused on establishing positive relationships with youth and clear expectations and higher level skills that are used less frequently including strategies for setting limits consistently (e.g., ignoring, logical consequences, time out) (see http://incredibleyears.com/download/resources/teacher-pgrm/teacher-program-pyramid.pdf). A unique aspect of IY TCM is that teachers are also taught how to "coach" social and emotional skills in school settings by modeling the skills and prompting their use throughout the school day. Several prior RCTs in Head Start and elementary school settings have shown the promise of IY TCM in fostering effective teaching practices including increasing teachers' use of praise, consistent consequence, and nurturing interactions (Webster-Stratton et al., 2004; see Webster-Stratton & Herman, 2010). Additionally children in IY TCM classrooms have been found to have lower levels of observed aggression and higher rates of on-task and prosocial behaviors. Additionally, Raver and colleagues (2008) found strong effects ($d = 0.52$ to 0.89) for a multi-component intervention that included the IY TT program on classroom climate and teacher behaviors in 36 Head Start classrooms (602 students). All of these prior studies, however, had

included IY TCM has part of a multi-component intervention (either combined with IY Parent, or IY Child or both).

A more recent trial with 105 classrooms and 1818 students in K-3rd grade from a large urban district randomly assigned to IY TCM or to a wait-list control showed moderate effects on teacher behaviors (e.g., use of proactive teaching strategies) and small but significant effects on student prosocial behaviors and self-regulation skills (Reinke, Herman, & Dong, 2014). Small effects are expected from universal preventive interventions given that they are delivered to entire populations without regard to risk (i.e., many individuals would not develop disorders even without the intervention); yet even very small effects on a population level can result in dramatic improvements in public health outcomes (NRC & IOM, 2009). Additional training programs using similar practices and procedures have been developed for secondary teachers (Allen et al., 2011; Herman et al., 2014).

Universal Student Skill Training

More direct universal services to promote student mental health involve explicit social and coping skills instruction. Many such programs have been developed for application in schools. Most of these programs involve teaching specific skills in the classroom (either by the teacher or other school profession) and are tailored to different developmental levels.

Social emotional programs—such Promoting Alternative Thinking Strategies (PATHS) and Second Step (SS)—build upon decades of prevention and intervention science guided by the integration of social learning and information processing theories and applied research findings from studies on empathy training and cognitive behavioral interventions. Considered “best practices” by the U.S. Centers for Disease Control (Thornton, Craft, Dahlberg, Lynch, & Baer, 2000) and “evidence based programs” by the Substance Abuse and Mental Health Services

Administration's National Registry of Evidence-based Programs and Practices (http://www.nrepp.samhsa.gov/AboutNREPP.aspx), programs such as PATHS and SS include comprehensive curricula that aim to improve short-term social and emotional knowledge and skills.

PATHS (Greenberg, Kusche, Cook, & Quamma, 1995) targets youth ages 0-5 (preschool) and 6-12 (elementary) using over 100 lessons designed to be delivered by classroom teachers to increase emotional self and social awareness, self-management, problem solving, and relationship skills. SS (Frey, Hirschstein, et al., 2005; Grossman et al., 1997) is a classroom-based social emotional skills program for youth ages 4-14 (preschool through middle school) that aims to increase social competencies and prosocial behaviors while reducing impulsive and aggressive behaviors. Though there are many social emotional programs to choose from, these programs target similar mechanisms and are widely believed to be effective at influencing a host of desirable student and school level outcomes. Though mixed, the balance of findings from early efficacy trials, systematic reviews, and more recent effectiveness studies in both the U.S. and Europe suggest that social emotional learning programs produce mild but significant effects for important student and school level outcomes (Durlak et al., 2011; Heckman & Kautz, 2012).

Integrating Universal with Selective and Indicated Interventions

Recent efforts have focused on integrating prevention programs to determine if even stronger effects can be observed in combination than with a single program. Potential advantages of integrated approaches include the possibility of targeting multiple risk factors simultaneously, the potential for additive or even synergistic effects, and the broader reach of combined approaches (Domitrovich et al., 2010).

Domitrovich and colleagues described two types of integrated models: horizontal and vertical. Horizontal approaches combine preventative interventions within the same risk category such as integrating two or more universal prevention approaches. Vertical integration combines preventive interventions across risk levels such as combining a universal and a selective intervention. Several examples of vertical integrations exist including school-wide programs like SW-PBIS which have tiered response frameworks embedded within them. Common selective components in SW-PBIS include small group social skills training and a group level program called the Behavior Education program or Check-in Check-out system; indicated interventions in the PBIS framework usually involves functional behavior assessment and behavior support planning (Reinke et al., 2006).

Barriers and Solutions

While universal school-based prevention approaches hold great promise for preventing negative mental health outcomes among youth on a large scale, several barriers can impede implementation in school settings. The first set of barriers concern the practical implementation challenges that any type of social, behavioral, and educational intervention needs to consider. In schools, these barriers include limited resources and infrastructure to support high quality implementation over time (Gottfredson & Gottfredson, 2002). Most public schools in the U.S. have many competing education priorities and pressures, often changing year to year, which limit the attention and resources that can be given to social and emotional health promotion and mental health prevention (Botvin, 2004).

Notably, the pragmatic concerns of solving immediate crises in school settings often leaves little time for considering alternative approaches that are needed to prevent the problems in the first place. A major tenet of a universal prevention approach is that if the prevalence of a

targeted behavior (such as office discipline referrals in schools) in a given setting (school, neighborhood, community, etc.) exceeds 15-20%, resources are better devoted to bolstering the universal supports in that setting rather than to providing more direct clinical services (Reinke et al., 2006). The rationale is that such high rates of disorder indicate that most youth in that setting are not being provided the basic supports needed for successful adaptation. Communities and schools will simply never have enough resources to provide intensive supports and direct services to such large segments of their population. Higher quality universal prevention strategies reduces the number of youth in need of services.

Unfortunately, most school professionals are unaware of the evidence-based prevention practices or the guiding conceptual framework described in this chapter (Stormont et al., 2011). Although most school professionals identify managing student disruptive behaviors as the most challenging aspect of their jobs (Reinke et al., 2011), the reactive and punitive approaches that many schools use to address these problems usually makes them worse (Atkins et al., 2001). Thus, disseminating training and skill development in evidence-based preventive approaches is a key priority to overcoming many of these implementation barriers. Incorporating training in these methods in teacher preparation and school psychology/counseling/child clinical training programs is an obvious first step. Additionally, national and state-wide technical assistance models that have been used to support the wide-spread dissemination of SW-PBIS (see www.pbis.org) provide an instructive model for how to reach the legions of school professionals currently in practice.

Tools for monitoring the fidelity of implementation to these practices are also needed. Again, SW-PBIS serves as a model in this regard. The School-wide Evaluation Tool (SET) is a measure that is used to monitor fidelity and give feedback to schools about the quality of

implementation (Horner et al., 2004). Research supports the use of this tool and includes minimal benchmarks that align with desired impacts on student behaviors. Additionally, tools and strategies for monitoring classroom level interventions like IY TCM have been developed and described (Webster-Stratton et al., 2011).

A final barrier to consider pertains to cultural and professional ideologies that may conflict with a prevention-oriented approach (Shadish, 1984). Although the concept of prevention is intuitively appealing, commitment to actions that are necessary for prevention practices to occur requires a certain set of beliefs and values that may not align with individual or national identities. Investment in universal prevention activities often contradicts beliefs associated with individualistic cultural values such as self-determination and meritocracy (Gregory, 2001). Additionally, prevention activities may conflict with the professional identities of clinically oriented psychologists, counselors, and educators, many of whom have been trained to conceptualize pathology within individuals and deliver services to clients one person at a time rather than intervening in broader systems. Thus, widespread implementation of effective prevention practices requires confronting and altering aspects of these cultural or professional ideologies (see Herman et al., 2004).

Summary and Future Directions

The progress in preventing major mental health symptoms and syndromes provides much reason for optimism about the continued development of effective universal prevention practices. Innovations in system level interventions and multi-tiered supports will continue to bolster efforts to impact population mental health and not just individuals. Future research will need to examine essential mechanisms of these models, particularly school-wide models, and examine

their effects in reducing the incidence of disorders in addition to their known effects on symptoms.

Take Home Points

- Without a public health approach, individual or group interventions will not impact the population health or reduce the incidence or prevalence of these conditions.
- A key element of successful application of universal prevention models is to have efficient data collection systems to monitor and quickly identify risk and protective factors as well as youth outcomes.
- A nurturing environment perspective is useful for understanding factors that foster or hinder youth development.
- Schools are composed of various subsystems including school-wide, classroom, and individual student levels that can be the target of universal prevention activities.
- A strong evidence-base supports the success of universal prevention activities in schools to reduce problem behaviors and promote healthy student development.
- Successful adoption and widespread dissemination of universal prevention requires confronting conflicting cultural and professional ideologies as well as providing necessary training to support high quality implementation.

Resources: *National Positive Behavior Interventions and Supports Technical Assistance Center*: www.pbis.org; *Incredible Years*: incredibleyears.com; *My Teaching Partner*: http://www.mtpsecondary.net/ ; *CHAMPS*: http://www.safeandcivilschools.com

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