Issues in Clinical Child Psychology

Steven W. Evans
Julie Sarno Owens
Catherine P. Bradshaw
Mark D. Weist *Editors*

Handbook of School Mental Health

Innovations in Science and Practice

Third Edition

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Issues in Clinical Child Psychology

Series Editor

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Steve
To my late parents Mel and Donna who gave me the foundation upon which everything else followed.

Julie
Dedicated to the educators, students, and families who make our research possible.

Catherine
I would like to dedicate this book to my daughter, Sophia Lucille McCaughey, who has gracefully navigated a tough few years; despite that, she has continued to be a source of support, strength, and inspiration to me regarding the importance of promoting balance and mental health – both at home and in my work.

Mark
For Amber.

Contents

Part I State of the Science for School Mental Health Interventions

1 How Do We Know If a School Mental Health Intervention Is Effective: An Introduction to the Section on the State of the Science for School Mental Health Interventions 3
Steven W. Evans and R. Elizabeth Capps

2 Universal, School-Based Social and Emotional Learning Interventions and Their Potential to Improve Students' Mental Health 9
Neil Humphrey

3 School-Based Interventions for Students with Anxiety 21
Golda S. Ginsburg and Isaac C. Smith

4 Interventions for Students with Depression 39
Prerna G. Arora, Olivia Khoo, Kayla M. Parr, and Karissa Lim

5 Interventions for Students with Social Impairment 57
Amori Yee Mikami, Caroline E. Miller, and Hongyuan Qi

6 Interventions for Students Exposed to Trauma 73
Sandra M. Chafouleas, Farzana Saleem, Stacy Overstreet, and Taylor Thorne

7 Interventions for Students Who Exhibit Bullying or Aggressive Behavior 91
Dorothy L. Espelage, Luz Robinson, and Alberto Valido

8 School Mental Health Interventions and Assessment for Students with Attention-Deficit Hyperactivity Disorder 103
Steven W. Evans and Darcey Allan

9 School-Based Mental Health Interventions for Autistic Youth: Current Practice and Promising Future Directions 121
Alexandra Sturm and Connie Kasari

Part II Promoting Meaningful Engagement and Leadership by Diverse Stakeholders

10 Enhancing Stakeholder Engagement, Collaboration, and Family–School–Community Partnerships in School Mental Health 145
Mark D. Weist, Ariel M. Domlyn, and Darien Collins

11 Advancing Research to Improve Family–School Collaboration in School Mental Health 153
S. Andrew Garbacz, Devon R. Minch, Katherine L. Lawlor, and Caleb Flack

12 Assessing and Evaluating Family–School Collaboration in Schools 169
Devon Minch, Andy Garbacz, Laura Kern, and Emily Baton

13 Students as Co-creators of Educational Environments 187
Christina M. Pate, Angela Glymph, Treasure Joiner, and Reanna Bhagwandeen

14 Interprofessional Social Capital in Expanded School Mental Health 201
Naorah C. Rimkunas and Elizabeth A. Mellin

15 Advancing School Mental Health Quality Through National Learning Communities 215
Shawn Orenstein, Elizabeth Connors, Paula Fields, Katherine Cushing, Jordy Yarnell, Jill Bohnenkamp, Sharon Hoover, and Nancy Lever

16 Leveraging Community-University Partnerships to Build Capacity for Effective School Mental Health 233
Katelyn Wargel-Fisk, Amy Kerr, Jack Baker, and Paul Flaspohler

17 Leading Systems Change to Support Autistic Students 251
Ryan J. Martin, Whitney L. Kleinert, Sarah A. Weddle, Daniel Martin, and Cynthia M. Anderson

18 Cultural Competence and Cultural Humility as Foundations for Meaningful Engagement Among an Educational System of Care for School Stakeholders 265
Caroline S. Clauss-Ehlers and Erica R. Garagiola

Part III Training, Coaching and Workforce Development

19 Helping School-Based Professionals Make a Difference 285
Julie Sarno Owens and Freddie A. Pastrana Rivera

20 Unifying the Field: Challenges and Best Practice Recommendations for Preparing School Mental Health Practitioners 299
Michael S. Kelly, Brandon D. Mitchell, and Andy J. Frey

21 Preparing School Mental Health Providers for Practice in Rural Communities 313
Kurt Michael, Anna Yaros, Jennifer Counts, and Jacqueline Hersh

22 District-Level School Mental Health Workforce Development: Lessons Learned from Methuen Public Schools 329
John Crocker, Sara Whitcomb, April Megginson, and Melissa Pearrow

23 Innovative Approaches to Coaching Teachers in Implementing Tier 1 and Tier 2 Classroom Interventions 343
Elise T. Pas, Lauren Kaiser, and Julie Sarno Owens

24 Preparing the School Mental Health Workforce to Engage in Partnership Approaches to Address Children's Needs 357
Amanda L. Witte, S. Andrew Garbacz, and Susan M. Sheridan

25 Practice-Based Teacher Education for the Preparation of Teacher Candidates to Use High-Leverage Practices to Promote the Inclusion of Students with Disabilities 375
Jennifer R. Ottley, Sloan O. Storie, Christan G. Coogle, and Sara L. Hartman

26 Understanding Readiness to Implement as Determinants of Teacher Adoption of Evidence-Based Universal Programs and Practices 391
Clayton R. Cook, Madeline Larson, and Yanchen Zhang

Part IV Innovations in Scaling-up and Implementation Science

27 Leveraging Implementation Science to Improve the Scale-up of School Mental Health Programming 409
Catherine P. Bradshaw

28 Supporting Implementation of Evidence-Based Practices in Schools: A Focus on Linking Implementation Strategies, Determinants, and Outcomes 419
Madeline Larson and Clayton R. Cook

29 Improving School Climate to Optimize Youth Mental Health: Implications for Increasing the Uptake and Outcomes of Evidence-Based Programs 439
Catherine P. Bradshaw, Jonathan Cohen, Dorothy L. Espelage, and Maury Nation

30 Optimizing Implementation of School-based Programing by Leveraging Motivational Interviewing 451
Andy J. Frey, Elise T. Pas, Keith C. Herman, and Jason R. Small

31 Scaling-up Screening of Students' Behavioral and Mental Health Needs 467
Wendy M. Reinke, Keith C. Herman, and Aaron Thompson

32 MATCHing Treatment to the School Context: School-Based Implementation of Transdiagnostic, Modular Psychotherapy . . 481
Sherelle Harmon, Maggi Price, Melissa Wei, and John Weisz

33 Adapting Evidence-Based Professional Development Models for Online Delivery and Scale-up to Practitioners in Applied Settings 493
Lydia A. Beahm and Catherine P. Bradshaw

34 Best Practices in Online Delivery of Mental Health Programs and Practices to Children and Youth. 513
Melissa E. DeRosier, Deb Childress, Kimberly Pifer, and Suzanne Messina

35 Supporting Scale-up of Positive Behavioral Interventions and Supports: A National Technical Assistance Model 531
Timothy J. Lewis, Brandi Simonsen, Kent McIntosh, and Heather Peshak George

36 Estimating the Cost of School Mental Health Programming to Increase Adoption and Scale-up of Evidence-Based Programs and Practices 547
Sarah Lindstrom Johnson, A. Brooks Bowden, and Catherine P. Bradshaw

37 Supporting the Scale-up of School Mental Health Systems Through Evidence-Based Policy 559
Brandon Stratford, Deborah Temkin, and Lauren Supplee

Index. 575

Part I

State of the Science for School Mental Health Interventions

1 How Do We Know If a School Mental Health Intervention Is Effective: An Introduction to the Section on the State of the Science for School Mental Health Interventions

Steven W. Evans and R. Elizabeth Capps

There are a variety of reasons why students are provided with interventions for emotional and behavioral problems at school. Some of the reasons are related to distress. Very frequently the distress is that of a teacher. A student's misbehavior can make it very difficult for a teacher to teach and if the teacher's attempts to manage the student's behavior fail, teachers often become frustrated and refer a student for services. Parents may follow a similar path to requesting services stemming from their frustration trying to effectively parent a child. Most often these caretakers (parents and teachers) want the student to be successful but are frustrated in their attempts to help the child achieve that goal. A student's own distress can also lead to the initiation of interventions. Self-referrals tend to be more common in secondary schools than elementary schools but relieving a student's distress may also be an intention of services. This is most common when the presenting problems are related to depression, anxiety, victimization, and trauma. These common scenarios suggest two purposes for intervening. The first involves helping the student be successful and the second involves reducing the distress of the student, teachers, and parents.

Many times, achieving these two goals can be accomplished fairly easily if one is focused on achieving short-term success and immediate reduction of distress for all involved. For example, let us consider the situation of Greg who is in seventh grade and has been a reasonably well-behaved student who earns grades in the B and C range. In seventh grade, he is encouraged to take a foreign language. He enrolls in Spanish, encounters difficulty with the subject, and comes to despise the class. He does not complete his work, is disruptive in class, and does not like the teacher. Greg does reasonably well in his other classes, completes work, and is not disruptive. The simplest "intervention" for Greg's problem is to remove him from Spanish class. From a short-term perspective, this immediately relieves the distress of Greg, his parents, and his teacher. The "intervention" is easy to provide, and improvement is instantaneous. In contrast, from a long-term perspective, this "intervention" failed miserably. First, if it is important for Greg to learn Spanish or even how to cope with academic challenges, this opportunity was removed. Second, Greg learned that being disruptive and uncooperative are effective approaches for dealing with situations that are difficult and distressing.

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Additionally, let us consider the situation of Neveah who is in fourth grade, behaves well in school, and earns A's and B's. Recently, Neveah began to experience intense anxiety at school, throwing tantrums when her mom takes her to school, complaining of stomach aches when she wakes up for school, and begging her mom to let her stay home. For Neveah, the simplest intervention may be allowing her to stay home and perhaps looking at online school options. In the short term, this immediately reduces Neveah's and her mom's distress. In the long term, staying home from school could present other problems for Neveah's mom (e.g., legal, financial). In addition, staying home from school and pursuing online school removes an opportunity for Neveah to learn how to cope with her anxiety and connect with teachers and peers in person. This intervention also teaches Neveah that avoidance of anxiety-provoking situations is an effective way to relieve distress.

This approach could be very problematic for Greg and Neveah in the future. Interventions such as remedial instruction, tutoring, organization, and study-skills training that could have helped Greg be successful in Spanish were ignored. Interventions such as cognitive behavioral therapy and exposure could have helped Neveah learn to identify her emotions and cope in helpful ways while still being in school. Providing these interventions over the time needed for Greg and Neveah to be successful requires substantial effort and change will likely be slow and inconsistent. During this time, persistent academic struggles may lead them to become disengaged with school. Those involved could have argued that the amount of effort needed for Greg to achieve success in an elective course was not worth the time and effort of an intervention, especially when Greg could reconsider taking the course in later grades. Or it could be argued that a temporary removal to online school for Neveah could help her get through immediate distress and still come back to school later. In these contexts, it may be understandable to remove the child from the problematic situation; however, unfortunately, this approach is often taken when the long-term costs are much greater. Opportunities for students to learn how to independently meet age-appropriate expectations, how to persist in the face of challenges, and how they can leverage their skills to face challenges are skipped and instead the challenging expectations of the student are reduced or eliminated. Further, equipping students with the skills required to meet age-appropriate expectations encourages students to engage with school, connecting them with interventionists who aid their skill development and encourage participation in rather than avoidance of some of their challenges. A complete reliance on reducing expectations has the potential to lead to further disabling a student and failing the mission of parents and educators to prepare the child for a successful transition to adulthood.

The Life Course Model (LCM; Evans et al., 2014) addresses these two approaches to intervening. The model is based on the premise that professionals providing services to students with emotional and behavioral problems should prioritize those services that are most likely to help students independently meet age-appropriate expectations. Thus, interventions that enhance competencies should be prioritized over those that reduce expectations. For example, one common service for secondary students with attention deficit hyperactivity disorder (ADHD) is to provide them with a copy of the teacher's notes or a peer's notes so they are not expected to take them. This is intended to give the target student access to the content of the class discussion given that their disability interferes with their ability to take notes. This approach eliminates the need for the student to meet age-appropriate expectations (i.e., taking notes). According to the LCM, the preferred approach is to train the student with ADHD to take accurate notes as initial evaluations of note-taking training indicate that students with ADHD can learn to do this (Evans et al., 1995). If this training is effective, then the student is able to independently take notes and this provides the student with access to the content of the class discussion. Training a student to efficiently take accurate notes takes time and effort on the part of a teacher and the student, but choosing to provide notes for the student requires

very little effort and immediately reduces impairment. The long-term payoff is that the student who completes the training has a skill set that can be used in many other classes across their schooling and the need for services diminishes. This represents an investment in the student, who learns to approach challenges by gaining skills rather than avoiding life's challenges. The student who is provided copies of notes will need this approach in all or almost all subsequent classes and will leave high school without this skill set.

According to the LCM, there are some students who have multiple problems and there may not be adequate resources to provide interventions for all of the problem areas at once. It is recommended that a couple of the problem areas are prioritized for interventions (e.g., note-taking, cognitive behavioral therapy) and others are approached with reduced expectations (e.g., providing student with teacher's notes). As the interventions are successful, services for some of the other problem areas can be modified so they become interventions and are no longer accommodated.

Without a persistent approach to improving competencies through training, therapy, and remediation, educators and school mental health professionals (SMHPs) often feel left with very few options other than reducing expectations. This pattern of reducing expectations in response to problems can become part of the expectations of the students and parents. In other words, they may come to expect that when the child has problems, is in trouble, or fails at something, the expectations should be reduced due to the student's disability. Even if this approach may characterize the child's time in schools, it is a poor mindset for approaching adulthood because expectations for following rules, performance on a job, and interacting with others cannot simply be removed. Further, students who are used to having expectations reduced for them may come to refuse interventions designed to improve their ability to succeed independently (see example in Harrison et al., 2022). Too many students have had expectations reduced to the point that they are educated in alternative settings or online classes at home. This trajectory often leads to dropping out and a host of problems that often follow quitting school. For some students with emotional and behavioral problems, restrictive settings are certainly necessary; however, for some, it would be interesting to know if they would have needed such a setting if from the very beginning of their schooling people would have invested in them through interventions aimed at helping them independently meet age-appropriate expectations and the message that goes with that approach—that the student can find a way to be successful in spite of problems.

What Do We Want to Change?

When school mental health was first emerging as a practice and focus of research, I (Evans) worked with students in an inner-city middle school. One of the students was a male who had problems related to depression. As is often the case today, we did not diagnose the student with clinical depression, but it was clear that his problems were related to feeling depressed. As was common practice in many clinics, I asked the student to complete a self-report depression rating scale every couple weeks while I was working with him so I could track progress. The child study team at the school was scheduled to discuss the student at a meeting so I prepared a graph of the self-report data over time showing the student's progress. The discussion at the meeting was focused on problems the student was exhibiting at school, interactions with his mother, and serious behavior concerns expressed by one of his teachers. I shared my graphs and briefly described my work with the student. The others on the team politely listened, complimented the graphs, and then went back to their discussion of the real problems. I learned two lessons from that meeting. First, the individual sessions I was having with the student were only minimally relevant to the students' day-to-day problems. I had to better connect what I was doing with the student to his experiences. Second, measuring outcomes by assessing symptoms is secondary to addressing the concerns that school staff had about the stu-

dent. I had to find a way to connect gains made in reductions of depressive symptoms with the problems teachers were having with the student in class. This meeting substantially altered my approach to school mental health practice and research.

In contrast to the lessons learned from that meeting, a very large portion of the intervention evaluation research literature includes the assessment of symptoms of a disorder as a key outcome to determine if the intervention is effective. Although measuring symptoms has a place in determining the benefits of an intervention, the role for this is limited in school mental health. Measuring the school-related manifestations of symptoms or disorders is the priority. Effective interventions for students with emotional and behavioral problems in schools may or may not reduce symptoms, but they do improve functioning at school. Functioning at school includes how well a student interacts and forms relationships with peers and teachers (social functioning), how well the student learns from instruction and practice (academic), and how well the student completes assigned work, follows rules, and exhibits other behaviors that support learning (academic enablers).

In order for a school mental health intervention to benefit these areas of functioning, SMHPs need to be integrated into the school day and with school staff. In other words, effective SMHPs take advantage of the opportunities to observe students in situations that challenge social and academic functioning. They watch students attempt to use new strategies that they developed in sessions in the actual setting in which it is needed. Effective SMHPs collaborate with the educators working with the student to help them understand the target of the intervention in context. Collaboration with educators can also help to intervene through monitoring for specific behaviors, prompting coping strategies, and noticing clues about why problems occur. These resources are unique to school mental health services (as opposed to clinic-based care) and offer important benefits that can enhance the effectiveness of services. Importantly, these resources expand the network of support for a student by involving multiple school staff that can help connect the student to school and increase their success. Unfortunately, too many SMHPs still rely on individual meetings with students as the entirety of their intervention and thus, they remain isolated from much of the school and minimally relevant to care.

In addition, effective school-based interventions can also take advantage of integrating parents and caregivers into intervention that occurs in and outside of school. Just because school mental health interventions are situated in schools does not mean parents and caregivers are necessarily absent from intervention. Indeed, effective SMHPs can leverage parent involvement in intervention by having parent meetings at school, connecting parents and caregivers with educators and other school staff, and increasing parents' knowledge of their child's academic and social functioning at school. SMHPs can serve a unique role of bridging communication between parents and educators in service of student success, particularly when parents express frustration toward the school. Further, SMHPs can work with parents to ensure a student gains skills not just at school but also at home by coaching parents to prompt students to use skills and even equipping parents with skills to intervene to support student success. For example, several school-based interventions for students with ADHD incorporate parent involvement by hosting parent training meetings at school (see Evans et al., 2011; Langberg et al., 2008). Further, parents have been involved in school-based substance use prevention intervention to reduce students' risk of substance use with promising effects (see Dishion & Kavanagh, 2003; Dishion et al., 1999). In this way it is possible to incorporate multiple aspects of a student's ecology to increase the effectiveness of intervention.

The chapters that follow are written by some of the top experts in school mental health interventions for a variety of presenting problems. Many of them focus on interventions that would be considered targeted (tier 2 or 3), but some describe universal approaches. While reading these chapters we encourage you to consider the nature of the intervention and how they may ben-

efit students. To what extent do the interventions target changes in meaningful behaviors in school? Do they take advantage of the context of a school to implement and/or measure the impact of the intervention? Do they incorporate parents to increase the reach of the intervention? To what extent do they enhance competencies in contrast to reducing expectations? We propose that these are important considerations when critically considering the potential value of school mental health interventions described in this section as well as those occurring every day in schools.

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2 Universal, School-Based Social and Emotional Learning Interventions and Their Potential to Improve Students' Mental Health

Neil Humphrey

What Do We Mean When We Talk About Mental Health, and Why Does Mental Health Matter?

In this chapter I adopt the 'complete state' view of mental health (Keyes, 2005), also sometimes referred to as the 'dual factor' model (Petersen et al., 2020), in which mental health is theorised as simultaneously comprising our experience of symptoms of psychological distress (e.g. anxiety, depression) *and* well-being (e.g. life satisfaction, positive affect). These are not proposed to form a single bipolar dimension, but rather correlated unipolar dimensions that together form a complete state of mental health.

These dimensions share a complex relationship, with different determinants. For example, it is possible to experience elevated symptoms of mental health difficulties alongside high levels of well-being. In dual factor nomenclature, this stratum of the population is referred to as the *symptomatic but content* class, whose social determinants are distinct from other symptomatic groups (such as those who are *troubled*, experiencing high symptoms and low well-being) (Petersen et al., 2020). The complete state perspective is a particularly useful model when thinking about population mental health, where it can capture greater variability than a solely symptom-driven approach (Alexander et al., 2020).

The societal significance of complete mental health (e.g. high well-being, low symptoms) cannot be overstated. Mortality studies demonstrate that well-being is associated with longer life (Chida & Steptoe, 2008). In children, higher levels of well-being are concurrently and prospectively associated with better academic attainment (Gutman & Vorhaus, 2012). By contrast, mental health difficulties lead to reduced quality of life, destabilisation of communities, and higher rates of health, education and social care utilisation (Humphrey, 2018). The global direct (e.g. healthcare) and indirect (e.g. productivity and income loss) economic cost of these difficulties is estimated at US$2.5 trillion (Trautmann et al., 2016), and they account for 13% of disability-adjusted life years (Vigo et al., 2016). The case for investing in prevention is therefore extremely strong, particularly during the school years. Approximately one in eight children and adolescents across the world experience clinically significant mental health problems (Polanczyk et al., 2015), and where recent data are available, prevalence appears to be increasing over time, particularly since the COVID-19 pandemic began (e.g. in England; Vizard et al., 2020). Furthermore, most lifetime cases of mental illness have their first onset in adolescence (Jones, 2013). Those

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who experience mental health difficulties during childhood and/or adolescence go on to experience poorer physical and mental health, are less likely to be employed and more likely to incur additional societal costs (e.g. criminal justice) as adults (D'Amico et al., 2014; Goodman et al., 2015; Knapp et al., 2011). Finally, from birth to midlife, less than 20% of people experience 'enduring mental health' (that is, they never experience a period of significant distress), making at least one episode of impairing mental health difficulties the norm, rather than the exception (Schaefer et al., 2017).

Why Are Schools Important Settings for the Promotion of Mental Health?

School is a critical developmental context for children and young people (Bronfenbrenner, 2005), in which many key determinants of mental health are primarily situated (e.g. bullying) (Patalay & Fitzsimons, 2016). Schools benefit from very wide reach, a prolonged period of engagement and a central role in most communities (Greenberg, 2010). If parents are concerned about their child's mental health, they are most likely to contact their teacher(s) as a first port of call (Ford et al., 2007).

Furthermore, children's mental health and their learning are concurrently and temporally related; for example, girls' academic attainment in middle childhood predicts later emotional symptoms, even after accounting for prior symptom levels and risk factor exposure (Panayiotou & Humphrey, 2018). Collectively, these findings support the view of school as an important setting for the promotion of well-being and prevention of the development, maintenance or escalation of mental health difficulties among children and young people (Greenberg, 2010). Accordingly, there has been an increased policy emphasis on this issue in recent years. For example, in England, mental health education was made compulsory in all schools in 2020 (Department for Education, 2019); alongside this, an ongoing plan to transform children and young people's mental health provision includes the requirement for every school to have a designated mental health lead, and the creation of mental health support teams, managed jointly by schools and the National Health Service (Department for Education/Department of Health, 2017). However, such developments place increasing demand on the teaching workforce without guaranteeing any additional resources to support this. More generally, we know that many teachers feel inadequately prepared to engage with mental health issues in the classroom, though the extent of training available at the school level appears to be related to their perceived capacity in this regard (Mansfield, et al., 2021). In other words, the more mental health training available in a given school, the more teachers within it report feeling that they have the capacity to undertake mental health-related practices as part of their role.

The role of school staff in promoting mental health can arguably be distilled into four distinct but related areas of work. First, they can provide a nurturing environment in which children and young people feel safe and happy. Second, school staff can monitor and assess mental health needs in the student population, and identify those with emerging or established difficulties. Third, they can provide support for mental health needs. Fourth, where necessary, school staff can refer children and young people to external services and agencies (e.g. child and adolescent mental health services) for more specialised and intensive intervention than they are able to provide themselves (NatCen Social Research & the National Children's Bureau Research and Policy Team, 2017). In this chapter, my focus is universal interventions, and so the discussion that follows pertains primarily to the first and third areas noted above. However, it is important to note that these interventions do not occur in a vacuum. Schools are complex ecological systems, and provision in the second and fourth areas, in addition to the broader socialisation practices and interactions that occur in school (e.g. that which is 'caught' as opposed to being 'taught'), will have a strong bearing on students' experiences and outcomes relating to their mental health.

The Rationale for Universal, School-Based Interventions

Universal, school-based interventions are defined as those that are for all students, regardless of need. They are therefore distinct from targeted/selective (for those at increased risk or with emergent difficulties) and indicated (for those with established/diagnosed difficulties) interventions (Foxcroft, 2014). In the literature discussed throughout this chapter, reference is variously made to 'school-wide', 'whole-school' and 'multi-component' approaches. Although there are some important distinctions between these terms (e.g. whole-school is used in Europe to describe programmes characterised by work across multiple system levels in a school to enact change – hence an intervention may technically be universal but not whole-school; Demkowicz & Humphrey, 2019), they are united by their fundamental emphasis on *all* rather than *some* students. The rationale for universal interventions is multifaceted. First, use of universal interventions aligns with the public health approach to mental health promotion (e.g. Embry's [2011] notion of 'behavioural vaccines'). Second, they are potentially more cost-effective than targeted/indicated approaches because even though treatment effects are expected to be more modest, universal interventions are much less resource-intensive (McLaughlin, 2011). Third, universal approaches may serve to reduce stigma (Greenberg, 2010). Conversely, targeted/indicated interventions may yield unintended negative consequences (e.g. iatrogenic 'deviancy training' effects; Evans et al., 2015). Finally, universal school-based interventions can influence outcomes for children and young people who would not otherwise access the support they need through usual care pathways (given that most who experience significant mental health difficulties do not get specialist support; NHS Digital, 2018).

However, the above arguments are counterbalanced by a series of concerns about the predominance of universal provision. First, the low prevalence of mental health difficulties means that much of the effort in universal approaches is expended on children who are unlikely to develop difficulties (Greenberg & Abenavoli, 2017). Second, the relatively 'light touch' approach taken in universal interventions (compared to targeted/indicated approaches) means that children who *are* at risk may not benefit (Greenberg, 2010). Though the assumption that students will not all respond to an intervention in a uniform manner is sound, we still do not know enough about exactly *who* benefits more or less from universal interventions (Durlak et al., 2011). Third, if targeted and/or indicated interventions are always needed as part of a tiered approach to intervention (as is the case in education systems around the world), one might ask what exactly the universal layer is preventing (Humphrey et al., 2013)? Finally, the assumption that universal interventions are cost-effective remains largely untested (McCabe, 2008). These are issues to which I will return later in the chapter.

Even a cursory glance at the evidence base reveals a very wide range of universal, school-based interventions that may influence student mental health outcomes. A useful distinction to be made at this point is between those where mental health is the primary focus and those where it is a secondary focus. Examples of the former include those where intervention content and processes focus directly on the development of protective strategies to prevent the emergence of symptoms of anxiety and depression (Johnstone et al., 2018), and those that focus on mental health education/literacy (Wei et al., 2013).

Examples of the latter include interventions focused on social and emotional learning (SEL) (Wigelsworth et al., 2016), substance abuse prevention (Onrust et al., 2016) and behaviour management (Korpershoek et al., 2016). Although the range of available programmes does not neatly reside within a single category, the distinction remains an important one, not least in terms of expectation management regarding the magnitude and timing of intervention effects on mental health outcomes. In other words, we would naturally expect more substantial and immediate intervention effects on student mental health in interventions where this is the principal focus,

compared to those where it is a secondary consideration.

In this chapter, my focus is primarily on those classified as social and emotional learning interventions; accordingly, the following section provides an overview of this body of work.

What Are Social and Emotional Learning Interventions?

Universal, school-based social and emotional learning (SEL) interventions aim to develop the social and emotional skills (e.g. self-awareness, self-management, social awareness, relationship skills, responsible decision-making) of students through explicit instruction in the context of learning environments that are safe, caring, well-managed and participatory (Humphrey, 2013; Weissberg et al., 2015). These skills have considerable utility. They help children to effectively navigate the social world and promote resilience to bullying and victimisation, violence and a wide range of other negative processes and outcomes (Sklad et al., 2012). Crucially, SEL skills also facilitate learning in the classroom (Durlak et al., 2011). Learning is a social process and it stands to reason that improved social and emotional competence will facilitate academic success. Furthermore, longitudinal studies highlight the predictive utility of childhood social–emotional competencies for mental health and labour market outcomes in later life (Goodman et al., 2015). Accordingly, effective promotion of SEL skills has emerged as a policy priority in education systems around the world (Marcelino Botin Foundation, 2015). Below I provide two brief case examples of SEL interventions. The interested reader can find further examples in the Collaborative for Academic, Social and Emotional Learning's (CASEL) programme guide (CASEL, 2013).

Zippy's Friends

Implemented in early elementary education (ages 5–7) settings across Europe (e.g. the United Kingdom, Ireland, Netherlands, Denmark, France) and the world (e.g. the United States, Chile, India), Zippy's Friends (ZF) aims to equip children with the social and emotional skills that enable effective coping in difficult circumstances. This intervention is characterised by eight key principles, as follows: (i) children choose their own solutions; (ii) positive skills are reinforced; (iii) repetition and continuity are essential for learning; (iv) abilities are developed in different settings; (v) children are active participants; (vi) children help each other; (vii) children evaluate their own success; and (viii) teachers are open to listening to children (Partnership for Children, 2016). The intervention follows a modular approach built around six stories about Zippy, a stick insect and his friends (a group of children). The stories focus on feelings, communication, making and breaking relationships, conflict resolution, dealing with change and loss, and coping. Each story is explored over the course of four weekly sessions, wherein part of the story is read by the teacher and children then participate in a range of activities including games, drawing and discussion. Sessions follow a common format that begins with a review of previous learning and ends with each child providing feedback to reflect their feelings (Partnership for Children, 2016).

Promoting Alternative Thinking Strategies

The Promoting Alternative Thinking Strategies (PATHS) curriculum aims to help children aged 4–11 to manage their behaviour, understand their emotions and work well with others (Greenberg & Kusche, 1993). It has been implemented in a variety of countries around the world, including the United States, the United Kingdom, Switzerland and Croatia. PATHS is delivered by class teachers and includes a series of lessons on topics such as identifying and labelling feelings, controlling impulses and understanding other people's perspectives, with associated physical resources and artefacts (e.g. Feelings Face cards, Feelings Dictionaries and posters relating to

PATHS concepts and strategies). Lessons are intended to be delivered approximately twice a week throughout the year. These are supported by generalisation activities and techniques that support the application of new skills during the school day, and parent materials that aim to extend learning to the home environment. In addition to this, a daily procedure of compliment-giving is encouraged using the 'Kid of the Day' system, in which children are randomly selected and wear a badge or identifier to be recognisable to other pupils and staff around the school. The Kid of the Day may be assigned special roles and responsibilities, and other pupils and staff complete a compliment sheet for them. Teachers in PATHS schools usually are aided by trained external coaches, who offer ongoing technical support and assistance (e.g. lesson modelling, observation and feedback) throughout the school year as a means to optimise implementation (Humphrey et al., 2018).

How and Why Might SEL Interventions Improve Students' Mental Health?

Before we examine evidence on the efficacy of SEL interventions in improving students' mental health, it is important to first consider underpinning theory. SEL theory (e.g. the SEL logic model; CASEL, 2007) and models of risk and resilience processes in human development (e.g. Wright et al., 2013) both highlight the importance of social– emotional competence in serving important promotive and protective functions, and accordingly, they have been described as, 'the skills and competencies that underlie mental health' (Weare & Markham, 2005, p. 14). As previously noted, SEL skills help children and young people to navigate their social environment successfully, particularly in difficult or challenging circumstances. Students who are able to understand, articulate and manage their emotions, while also being better equipped to develop and maintain positive social relationships (including social problem solving), are more likely to experience greater levels of positive affect: 'Emotions can need regulating when they threaten to overwhelm or need to be amplified… these [social–emotional] skills help them to experience more well-being and maintain satisfying relationships with others' (Denham, 2006, p. 70). Research on the determinants of well-being provides support for these propositions. For example, our own research has demonstrated an inverse relationship between SEL skills and mental health difficulties, both concurrently (Humphrey & Wigelsworth, 2012) and longitudinally (Panayiotou et al., 2019b).

What Does the Evidence Base Tell Us About the Potential of Universal SEL Interventions to Improve Students' Mental Health?

The SEL evidence base has grown exponentially in the last three decades. Unsurprisingly, this has resulted in the publication of multiple meta-analyses (Corcoran et al., 2018; Durlak et al., 2011; Sklad et al., 2012; Taylor et al., 2017; Wigelsworth et al., 2016). These provide rigorous evidence that illustrates the impact of SEL interventions on a range of outcomes, including social and emotional skills, school attitudes, academic performance and, importantly, mental health. In terms of the latter, aggregated effect sizes (ES) observed in relation to internalising problems (e.g. anxiety) range from 0.19 (Sklad et al., 2012; Wigelsworth et al., 2016) to 0.24 (Durlak et al., 2011). Larger but more variable ES are reported for externalising difficulties (e.g. conduct problems), ranging from 0.22 (Durlak et al., 2011) to 0.43 (Sklad et al., 2012). Meta-analyses of longer-term follow-up studies indicate that intervention effects are still evident, but attenuate somewhat over time. Thus, Sklad et al. (2012) reported average intervention ES of 0.1 and 0.2 (for internalising and externalising difficulties, respectively) in studies where measures were taken at least seven months after a given intervention was concluded.

Analysing studies with a follow-up period of at least 24 weeks post-intervention, Taylor et al. (2017) reported average intervention ES of 0.16

for internalising symptoms and 0.14 for externalising problems. None of the SEL meta-analyses published to date has reported aggregated effects on well-being, probably owing to a lack of primary studies. However, findings from individual studies are promising. For example, Panayiotou et al. (2019b) found that the aforementioned PATHS curriculum produced an intervention ES of 0.17 in relation to children's well-being.

To what extent can these intervention effects be considered meaningful? A preliminary caution here is to resist the temptation to reflexively resort to the effect size thresholds outlined by Cohen (1992), since these are completely devoid of context and are misaligned with empirically derived intervention effect sizes in prevention science (Tanner-Smith et al., 2018). Instead, we might start by asking how the magnitude of SEL intervention effects on mental health outcomes compares to those observed in the broader field of universal school-based interventions (which includes, for example, those designed to promote healthy eating, prevent substance abuse or manage behaviour in the classroom). Here, there is reason for optimism; even when one adopts a conservative approach (e.g. the smallest average ES noted above for internalising [0.19] and externalising [0.22] problems), one places SEL interventions above the 50th percentile in the distribution of effect sizes for these outcomes among all universal school-based interventions (Tanner-Smith et al., 2018). An alternative perspective is to consider what these intervention effects mean in practical terms – in other words, do they translate to genuine, noticeable effects in daily life? This is, of course, highly subjective, but Durlak et al. (2011) argue that the kinds of gains evidenced for SEL interventions would be noticeable in typical classroom contexts. For example, the most conservative estimate for the impact of SEL on externalising problems noted above translates to a 9-percentile point improvement (Durlak, 2009). Given the fact that even very modest decreases in externalising problems can have positive consequences for the broader school environment (e.g. up to an hour of learning a day may be lost as a consequence of persistent disruptive behaviour; Office for Standards in Education, 2014), and the likelihood of later escalation of such problems and the huge societal costs that can accrue as a result if they are not effectively addressed at an early stage (e.g. Scott et al., 2001), the effects of SEL interventions must be considered very promising indeed. However, it is important to remember that such effects are not uniform. The next step in this chapter, therefore, is to consider some common intervention effect modifiers.

Intervention Effect Modifier 1: Implementation Variability

Implementation is, 'the process of putting a practice or program into place' (Forman, 2015, p. 10). Dimensions of implementation include behaviours of the implementer, such as fidelity (whether prescribed procedures were followed), adaptations (what changes were made to an intervention), dosage (how much of an intervention was delivered) and quality (how well an intervention was delivered), and those of recipients, such as reach (whether intended recipients were present when the intervention was delivered) and responsiveness (the extent to which recipients engaged with an intervention) (Berkel et al., 2011). Increasingly, contextual factors such as programme differentiation (the extent to which an intervention is distinct from existing practice) are also considered under the implementation rubric. It is now widely accepted that these dimensions are likely to vary when SEL interventions are implemented in schools. Thus, in studies where implementation data are recorded, nearly 40% report problems relating to one or more of the dimensions noted above (Durlak et al., 2011; Wigelsworth et al., 2016). Research has demonstrated clearly that this variability influences the achievement of intended outcomes (Durlak, 2016). For example, in Durlak et al.'s (2011) SEL meta-analysis, the average intervention ES on emotional symptoms in studies reporting no implementation problems was 0.35, compared to 0.15 in studies where implementation problems were noted. Early evidence indicates a similar pattern in relation to well-being.

In their aforementioned trial of the PATHS curriculum, Panayiotou et al. (2019a) observed that the magnitude of intervention ES on well-being grew from 0.17 in their intent-to-treat analysis to 0.43 when complier average causal effect estimation (CACE) was employed in order to take account of variability in dosage.

Intervention Effect Modifier 2: Subgroup Effects

As noted earlier, it stands to reason that children and young people will not respond uniformly to SEL interventions. However, we still know relatively little about exactly who benefits more or less from them (Durlak et al., 2011). An initial problem here is how to robustly investigate individual differences in responsiveness to intervention while avoiding 'data dredging' (that is, systematically searching through a dataset in the hope of finding a significant intervention effect; Keller, 2019). It is therefore recommended that subgroup analyses are specified in advance, informed by theory and/or research, and include clear specification of the expected direction of effects and population subgroup(s) of interest (using characteristics measured pre-randomisation in trials, e.g. demographic characteristics, individual differences at baseline and/or family factors) (Farrell et al., 2013).

I focus here on subgroup moderator effects among students deemed to be 'at risk' by virtue of their existing levels of need (e.g. elevated symptoms of distress at baseline in a given study) and/or socio-economic and other circumstances (e.g. those from more deprived backgrounds) because these are central to the issues noted earlier (see section *The Rationale for Universal, School-Based Interventions*). Furthermore, although common, subgroup analyses relating to demographic characteristics such as sex and age tend to be poorly theorised, if at all (in other words, while researchers frequently test to see if interventions affect boys and girls differently, they usually do not explain their justification for doing so).

The compensatory effects hypothesis predicts that at-risk children will benefit more from SEL interventions because they are at greater risk and have more room for improvement (McClelland et al., 2017). Thus, SEL can offset the significant disruption of developmental processes brought about by risk exposure. Several studies have provided support for the compensatory effects hypothesis. For example, the Conduct Problems Prevention Research Group (2010) reported greater benefits of the Fast Track intervention (which combines the PATHS curriculum with parent training and other supports) among children with higher baseline levels of aggression. Similarly, Low et al.'s (2015) trial of Second Step found that this SEL intervention primarily produced significant improvements in social skills and mental health among children who started the school year with skill deficits relative to their peers. We know that these results are not explained by regression to the mean because similar trends were not evident in the trial control group. The findings of such studies are therefore encouraging because they indicate that SEL interventions do indeed benefit those most in need of support.

In contrast, the accumulated advantages hypothesis (also known as the 'rich get richer' model) predicts that children from more advantaged, lower-risk backgrounds will benefit more from SEL interventions because they are better equipped to take advantage of learning opportunities and more capable of consolidating and building on their existing skills (McClelland et al., 2017). This prediction was borne out in a trial of the PATHS curriculum in Croatia, where the researchers reported significant improvements in SEL skills and reductions in mental health problems only among those students classed as 'above average'(low risk) in pre-intervention assessments (Novak et al., 2016). Though fewer in number, studies like this set a challenging precedent because they indicate that the benefits of SEL go to those who are already in positions of relative advantage.

Are Universal SEL Interventions 'Worth It'?

In the preceding sections, I hope to have convinced the reader that universal SEL interventions can produce meaningful improvements to students' mental health outcomes. Despite this, it is important to note that just because SEL interventions are effective, this does not necessarily mean that they are *cost*-effective. It is here where economic analyses (e.g. basic cost, cost-effectiveness, cost-utility, cost-consequence and benefit-cost analyses) have great utility, as they provide critical information that can help inform decision-making about how best to deploy scarce resources by examining intervention effects in the context of the costs that were required to generate them. However, economic research on SEL interventions is in its infancy (McClelland et al., 2017).

Indeed, an early review of universal, school-based mental health interventions (including SEL) found *no* published studies (McCabe, 2008), and a recent systematic review only identified nine (Schmidt et al., 2020). Those studies that have been published yield tentative promise. Analyses reported by Turner et al. (2020) determined that the PATHS curriculum was likely to be cost-effective under most, but not all scenarios (e.g. different costing approaches and time horizons). Hunter et al.'s (2018) examination of the cost-effectiveness of the Social Skills Improvement System Classwide Intervention Programme drew similar conclusions.

In interpreting the results of such studies, several issues need to be borne in mind. First, the economic perspective adopted should be taken into account. For example, in the Turner et al. (2020) study, a *UK Health Service* perspective was adopted. In other words, the economic benefit was quantified based on improvements to health-related quality of life, for which the UK Health Service has a 'willingness to pay' threshold per quality adjusted life year. Second, cost-effectiveness estimates are sensitive to key assumptions relating to the costing approach taken and time horizon adopted for a given analysis. Third, these analyses routinely use an intent-to-treat approach that does not account for variability in levels of implementation. As a result, cost-effectiveness estimates based on moderate or high levels of compliance (as in the aforementioned CACE models) are currently lacking.

Current and Future Directions

At the time of writing, there is an accumulated body of robust evidence to support the proposition that universal SEL interventions can improve students' mental health. However, there is still much that we do not know. First, more economic analyses are required; indeed, a rigorous cost-effectiveness analysis (or equivalent) should become a fundamental component of future trials in this area (Schmidt et al., 2020). Second, given what we know about the inevitability of implementation variability, CACE or related instrumental variable approaches should also be undertaken as standard (Peugh & Toland, 2017). Third, an increased emphasis on the factors that facilitate or inhibit effective implementation is warranted, as this can inform future programme training and implementation support activities. Fourth, since a key purpose of universal SEL interventions is to alter developmental trajectories, it is important that this is reflected in the analytical techniques adopted by researchers; hence, the use of growth curve models is recommended (Greenberg & Abenavoli, 2017). The field is currently limited by a reliance on 'point-in-time' estimates that do not analyse the developmental process of growth (although there are a couple of notable exceptions, e.g. Nix et al., 2016). Finally, a shift away from programmatic approaches is underway, with a parallel increase in research on the constituent components that drive improvement in outcomes (Jones & Bouffard, 2012).

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School-Based Interventions for Students with Anxiety

3

Golda S. Ginsburg and Isaac C. Smith

Introduction

In a classroom of 30 students, approximately three will meet full criteria for an anxiety disorder and an additional three will experience excessive anxiety that causes impairment in daily functioning (Kessler et al., 2012; Polanczyk et al., 2015; Rapee et al., 2012). The high prevalence of excessive anxiety in youth makes it the most common psychiatric disorder and, according to the Centers for Disease Control, rates of pediatric anxiety disorders are on the rise (Bitsko et al., 2019). Decades of careful research demonstrate that excessive anxiety confers significant impairment across key domains of development such as academic, social, familial, and personal functioning (Swan & Kendall, 2016). Within the academic domain, excessive anxiety has been associated with school absenteeism and school refusal (Kearney & Albano, 2004); deficits in academic performance (Mazzone et al., 2007); grade retention (Stein & Kean, 2000); and early school dropout (Breslau et al., 2008). Importantly, the link between excessive anxiety and poor academic outcomes is both concurrent and prospective (Woodward & Fergusson, 2001).

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Fortunately, the negative effects of anxiety can be ameliorated with effective treatment. Evidence from meta-analyses and systematic reviews indicates that cognitive–behavioral therapy (CBT) and medication are two effective treatments for pediatric anxiety (Ipser et al., 2009; James et al., 2018). Importantly, these treatments have also been found to improve academic functioning including higher academic motivation and performance on standardized tests, increases in grade point average (GPA), and improved classroom behavior such as test taking, reading in class, and homework completion (Nail et al., 2015; Sanchez et al., 2019; Weems et al., 2009).

Rationale for School-Based Interventions for Anxiety

Despite the high prevalence, documented impairment, and effective treatment of pediatric anxiety disorders, most afflicted youth are unidentified and never receive needed interventions (Merikangas et al., 2011). Reasons for underidentification and low service utilization in outpatient settings are numerous and include pragmatic barriers (e.g., costs, transportation, limited time, lack of access to providers) as well as psychological barriers such as stigma and concerns about confidentiality (Gulliver et al., 2010).

To address these barriers, efforts at the national and state levels have advocated provid-

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ing psychosocial interventions to youth in the school setting. The advantages of providing interventions in schools are numerous and include early and improved detection and better generalization of therapy skills. For instance, school-based clinicians can facilitate the application of coping skills in anxiety-provoking situations in real time and in ways that are not accessible to outpatient community therapists. Finally, school-based interventions improve access to care, do not require out-of-pocket payments, and reduce barriers associated with transportation. Elimination of these barriers is particularly relevant for historically underserved student groups, as a substantial body of evidence indicates that racial/ethnic minorities and lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) youth are significantly less likely to seek or receive mental health services than their non-minority peers (Cummings & Druss, 2011; Garland et al., 2005; Su et al., 2016). Accessing mental health services in school therefore presents a promising option for addressing these disparities.

Recognizing these advantages, a growing literature now documents the effectiveness of school-based interventions for students with anxiety. In the following sections, we summarize this literature by first presenting data from recent reviews and meta-analyses on school-based interventions. Subsequently, we review a selected set of randomized controlled trials (RCTs) of school-based interventions for anxiety organized by categories within a prevention science framework that also align with the multitiered system of supports (MTSS) and Response to Intervention (RtI) models (Gamm et al., 2012; Sugai & Horner, 2009). Specifically, primary prevention models (also referred to as universal or Tier 1 interventions) represent those interventions that are delivered to all students in a classroom or an entire school. Secondary prevention models (which include selective and indicated or Tier 2 interventions) are delivered to students who are at risk for disorder onset or show elevated anxiety symptoms. Finally, tertiary models (similar to Tier 3 interventions) are treatments for students meeting criteria for an anxiety disorder.

Effectiveness of School-Based Interventions for Anxiety

Several meta-analyses and qualitative reviews have been published describing the effectiveness of school-based psychosocial interventions for internalizing problems including anxiety (Caldwell et al., 2019; Gee et al., 2020; Hugh-Jones et al., 2021; Sanchez et al., 2018; Werner-Seidler et al., 2017). Sanchez et al. (2018) reviewed school-based mental health interventions exclusively in elementary-aged children across symptom domains of internalizing, externalizing, and attention problems. With respect to interventions for internalizing problems (including anxiety), a small effect size was found (Hedge's g = 0.30; SE = 0.07; 95% CI = 0.16–0.43) across all interventions. Gee and colleagues reviewed 45 studies of school-based interventions for adolescents with elevated depression or anxiety symptoms across all intervention models (primary, secondary, and tertiary), and found the standardized mean difference of interventions versus control groups at post-intervention was modest (0.52; 95% CI = −0.85 to −0.18; p = 0.003; k = 13). Subgroup analyses generally did not yield significant differences in effect size based on study characteristics. In the most recent review, Hugh-Jones et al. (2021) conducted a meta-analysis of 18 studies focused exclusively on indicated interventions for youth with elevated anxiety. Small but significant positive intervention effects compared to control groups were found at post-test (g = −0.28; 95% CI = −0.50 to −0.05), with maintenance of benefit identified at 6- and 12-month follow-ups. Subgroup analyses based on theoretical orientation (i.e., CBT or other), child age, and delivery agent (e.g., teacher or research personnel) were not possible due to small sample sizes, but type of control group (i.e., waitlist vs. attention control vs. no intervention) was not found to significantly impact treatment effects (Hugh-Jones et al., 2021).

Across studies in these reviews, the magnitude of intervention effects varied widely—likely attributable to differences in the provider of the intervention (i.e., research staff vs. school personnel), extent of provider training and ongoing coaching, level of adherence/fidelity to intervention protocols, length and duration of intervention, inclusion of parental involvement, inclusion criteria (e.g., initial severity of anxiety symptoms, comorbid disorders), assessment strategies (assessor, specific measures, and timepoints), and other key study design characteristics (control group, primary outcome). One important conclusion was that the methodological quality of studies was uniformly low, suggesting a significant need for improvement with respect to trial design and intervention implementation.

Compared to studies conducted in outpatient research settings, school-based interventions show smaller effect sizes. For instance, a meta-analysis of outpatient treatment trials indicates effect sizes ranging from 0.65 to 0.94 (James et al., 2018). Reasons for these larger effects likely reflect differences in efficacy versus effectiveness RCTs (and similar to reasons for variations within school-based treatment trials), where efficacy studies use highly trained mental health specialists who receive ongoing supervision, deliver a higher dosage of treatment, have stricter inclusion/exclusion criteria (e.g., limited comorbidity), and incorporate greater parental involvement in treatment.

Below we highlight a representative sample of school-based interventions for anxiety[1] across each of the three levels of intervention models (primary, secondary, and tertiary); readers are referred to the meta-analyses referenced above for a more comprehensive analysis. Key features of selected studies focused on anxiety are highlighted in Tables 3.1, 3.2, and 3.3. In light of the number of interventions based on CBT, Table 3.4 outlines the core therapeutic ingredients of this model used in school-based interventions.

Primary Prevention (Universal Interventions)

Several randomized controlled trials (RCTs) have evaluated the impact of universal interventions delivered to entire classrooms or schools. The 11 universal interventions in Table 3.1 span from preschool-aged children to adolescents in high school, with a majority (7 studies) focusing on middle childhood. Given that interventions were delivered universally, sample sizes were generally large, ranging from 100 to over 900 (Miller et al., 2010; Rooney et al., 2013). In terms of structure, most, but not all, universal interventions were provided in 1-h sessions administered on a weekly basis for a total number of sessions ranging from 3 to 30. Some universal interventions were quite brief, including one program administered in three 45-min classroom sessions (Aune & Stiles, 2009), whereas another intervention was delivered in a much smaller dosage (less than 15 min) daily for 6 weeks (Britton et al., 2014).

With regard to theoretical orientation, cognitive–behavioral approaches were the most common (core strategies described in Table 3.4); however, 3 of the 11 universal studies utilized mindfulness-based or positive psychology approaches (Britton et al., 2014; Burckhardt et al., 2015; van de Weijer-Bergsma et al., 2014) that were delivered with greater frequency for shorter duration, ranging from daily to biweekly.

Because universal interventions are delivered to all students in a school or classroom, many of these protocols were delivered at least in part by regular classroom teachers rather than research staff (e.g., licensed psychologists, graduate students). One computer-based study was evaluated that involved students logging time on a website delivering inter-

[1]Disorders categorized as anxiety disorders in DSM-IV-TR (American Psychiatric Association, 2000), but not in DSM-5 (APA, 2013) were excluded. Disorders not considered in our selective review included school refusal, post-traumatic stress, and obsessive-compulsive symptoms.