The Springer Series on Human Exceptionality

Alan W. Leschied · Donald H. Saklofske
Gordon L. Flett *Editors*

Handbook of School-Based Mental Health Promotion

An Evidence-Informed Framework for Implementation

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Alan W. Leschied: *In dedication to my family, both those who have passed and those I am privileged to share my life with every day and who constantly remind me that it is all about relationships and caring for one another.*

Donald H. Saklofske: *In memory of my beautiful mother and father, Frances Annette and Harold.*

Gordon L. Flett: *In dedication to my wife Kathy and our daughters Hayley and Alison and to the memory of my sister Karen.*

Foreword

It is a great pleasure for me to welcome this *Handbook for School-Based Mental Health Promotion*. This book presents a great deal of timely, well-researched, and very valuable scholarly information about mental health problems of school students, as well as extremely practical recommendations about how to reduce these problems and encourage healthy student development. In my opinion, there has been too much emphasis in schools on academic achievement, and I hope that this book will help redress the balance and encourage more focus on student well-being. In many countries, certainly including the USA, the UK, and Canada, school students with mental health problems often find it very difficult to receive appropriate services, and it is important to investigate what influences help-seeking by students and how this can be increased. This book should encourage policymakers to ensure that mental health services are available for all school students who need them.

Most mental health problems, including anxiety, depression, attention-deficit hyperactivity disorder, and obsessive-compulsive disorder, begin in childhood and adolescence. Therefore, early prevention and intervention are essential, and schools are important settings for this to occur. This book shows that there are many effective evidence-based school prevention and intervention programs that do not involve drugs. However, less is known about what works for whom, in what circumstances. Also, most knowledge about effective programs has been obtained in small-scale demonstration programs and what are now called efficacy trials. It is known that trials led by the program developer generally show greater effects than those carried out independently. More research is needed to establish if this reflects some kind of developer bias or conflict of interest (in which case it is very worrying) or whether it reflects better implementation in developer-led trials (in which case it is less worrying; see the exchange between Eisner, 2009, and Sanders, 2015).

This book, like the older one edited by Bernfeld, Farrington, and Leschied (2001) on offender rehabilitation, pays a great deal of attention to the important problem of how to implement programs most effectively. Many studies show that the effectiveness of programs tends to decrease in moving from a small-scale efficacy trial to large-scale implementation in what are now called effectiveness trials (Welsh, Sullivan, & Olds, 2010). This book provides a great deal of valuable scholarly and practical information about how to move successfully from a small-scale trial to large-scale implementation.

In schools, teacher training and technical assistance for teachers are both vital. While manualized programs are perhaps most likely to be successfully translated into large-scale implementation, there is some tension between staying totally faithful to the original program and adapting some features of it to the local context. These kinds of implementation issues are discussed in this book, which should help scholars and practitioners to overcome problems and achieve successful implementation of evidence-based programs.

I have carried out a great deal of research on bullying, which is a prevalent problem in many schools. We know, for example, that bullying victimization is a precursor to later mental health problems such as depression (Ttofi, Farrington, Lösel, & Loeber, 2011). The good news is that many programs are effective in reducing bullying (Ttofi & Farrington, 2011). The less good news is that most of the evaluations have been carried out by the program developers. Perhaps the most famous antibullying program was developed by Dan Olweus in Norway. After successful evaluations in Bergen, the program was implemented nationally in Norway (Olweus, 2004). This is a very impressive translation of a demonstration program into a nationwide policy, as Christina Salmivalli also achieved in Finland (Karna et al., 2011). However, two independent evaluations of the Olweus program in Seattle (Bauer, Lozano, & Rivara, 2007) and California (Pagliocca, Limber, & Hashima, 2007) yielded less encouraging results. More replication research is clearly needed on school antibullying programs, but it is impressive that several antibullying programs have been developed in one country and used in another. Nowadays, cyberbullying is a great problem, and a forthcoming book (Baldry, Blaya, & Farrington. 2018) reviews prevalence, risk factors, and interventions for cyberbullying in ten countries.

To summarize, editors Alan Leschied, Donald Saklofske, and Gordon Flett should be congratulated for presenting a great deal of valuable information, which should be used by policymakers and practitioners as well as academics, about mental health problems in schools and how to reduce them. There are a lot of recommendations about teacher education, including how to support teachers and how to improve the mental health knowledge of teachers. Worryingly, this book quotes research by Cunningham et al. (2009) suggesting that teachers tend to choose programs that are supported by the anecdotal reports of colleagues rather than those based on scientific evidence. The challenge is how to convey the most accurate and valid information to teachers. Hopefully, teachers and others who read this book will learn a great deal about school-based mental health promotion and about the most effective programs that will increase the well-being of school students.

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Donald H. Saklofske is a professor in the Department of Psychology, the University of Western Ontario; adjunct Professor at the University of Calgary as well as the University of Saskatchewan; Visiting Professor in the Faculty of Psychology, Beijing Normal University; and a Research Member in the Laboratory for Research and Intervention in Positive Psychology and Prevention, University of Florence, Italy. His research interests are focused on individual differences in intelligence and personality with a current emphasis on emotional intelligence, resiliency, psychological health, and building capacity in service delivery. He is editor of *Personality and Individual Differences* and the *Journal of Psychoeducational Assessment* and is an elected Fellow of APS, CPA, and SPSP.

Gordon L. Flett holds the Canada Research Chair in Personality and Health, and he is the Director of the LaMarsh Centre for Child and Youth Research at York University. His research has led to the appreciation that personality holds the key to many health problems stemming from stress and the inability to cope with stress. Dr. Flett has firmly established through his collaborative work that the construct of perfectionism has personal and interpersonal components and is associated with various forms of maladjustment, including depression, anxiety, and suicidal tendencies across the lifespan. His work has garnered national and international attention in both the academic as well as popular press, and he is supported by major research grants from the Canadian Institutes of Health Research and the Social Sciences and Humanities Research Council of Canada.

An Overview of Implementation

1

Alan W. Leschied, Donald H. Saklofske, and Gordon L. Flett

Abstract

This book is motivated, in part, by the realization that schools and the people who comprise school systems have an enormous and essential role to play in the assessment, prevention, and treatment of mental health problems among students. We are convinced that the challenges and problems on the mental health front have become urgent enough that it would be quite reasonable for any jurisdiction to decide at the policy and implementation levels that a focus on mental health promotion in children and adolescents must become part of the regular school day, and this is just as important as the more traditional educational learning that takes places in our schools.

The well-known axiom "two steps forward, one step back" can be applied to the developments that have taken place over the past two or three decades when it comes to mental health problems facing children and adolescents. On the positive side, as we discuss in more detail below, we are now in an area of much greater openness and awareness of mental health problems. Moreover, there is a significant progress in regard to new knowledge being obtained and put into evidence-based action around the globe. However, in terms of the "one-step-back" theme, it is also evident that mental health problems among youth are on the rise at a level that is alarming and exceeds our service capacity. This book is motivated, in part, by the realization that schools and the people who comprise school systems have an enormous and essential role to play in the assessment, prevention, and treatment of mental health problems among students. We are convinced that the challenges and problems on the mental health front have become urgent enough that it would be quite reasonable for any jurisdiction to decide at the policy and implementation levels that a focus on mental health promotion in children and adolescents must become part of the regular school day, and this is just as important as the more traditional educational learning that takes places in our schools. This conclusion would likely seem quite reasonable to those educators who see the toll that mental health problems have on students and how these problems interfere with learning, achievement, and performance. The results of a 2012 survey conducted by the Toronto District School Board certainly support these observations. This survey found that 97% of respondents, including over 900 staff members, endorsed the view that student emotional well-being is very or extremely important to academic

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achievement in their schools. This survey also found that among the high school student respondents, it was the case that 38% said they were under a lot of stress (38%) and 34% were nervous or anxious all the time or often (Toronto District School Board, 2013).

Arguably, unprecedented progress is being made in the openness with which we are now willing to discuss and address heretofore unspoken issues regarding mental health disorders, and we can look to the contributions of mental health researchers and practitioners and particularly progress in public awareness campaigns where mental health has been given an increasing profile. However, national statements regarding our adequacy to provide mental health services provide sobering evidence regarding our inability to meet this increasing awareness and need. Certain realities qualify conclusions about the overall degree of progress. Below we focus extensively on the situation in Canada. A recent comparative analysis of four countries (Canada, Liberia, Norway, and the United States) concluded that in terms of school-based mental health issues, Canada and the United States have shown strong progress, while Norway has been characterized by moderate progress, and Liberia is just beginning its work (see Weist et al., 2017). However, it is evident that even "strong progress" still leaves many significant concerns and unaddressed problems.

The Canadian Mental Helath Commission's Report Out of the Shadows at Last stated that the lack of capacity in meeting the mental health needs of Canadians left this Senate-appoitned committee no option but to characterize mental health as the orphan of the health care system (Mentla Health Commisison of Canada, 2017). In the United Kingdom, findings indicated that "Mental health is chronically underfunded. It accounts for 28% of the disease burden, but gets just 13% of the National Health System budget" (National Health Services, 2009). A recent update by the children's mental health commissioner expressed concerns about the number of children and adolescents needing mental health treatment but being turned away. It was concluded that the support for children and adolescents is "shockingly poor" and the call was issued for a "wholescale shift in the scale of ambition" in order to address existing and anticipated needs (see Children's Commissioner, 2017). In the United States, a similar perception emerges, with Schacter (2000) stating in the report of the surgeon general that, "The burden of suffering experienced by children with mental health needs and their families has created a health crisis in this country [United States]."

What is further discouraging is that the situation is even worse as reflected in general statements regarding child and youth mental health care. In fact, in the aforementioned report, *Out of the Shadows at Last*, the state of child and youth mental health was characterized as the *orphan of the orphaned mental health system*. Renowned child psychiatrist Dr. Simon Davidson had no reservation in stating that, in regard to child and youth mental health, "It is a shameful state of affairs that makes one wonder how much our society really cares about the well-being of our children and youth" (Davidson, 2011). Kimberley Hoagwood and her associates recently stated, "At a time when the prevalence of mental disorders in children and adolescents, particularly in those living at a low income, is increasing dramatically only 2% of children using publicly funded services receive evidence-based services." This finding is accompanied by what Hoagwood et al., (2018) also cite is a 42 % reduction over the past ten yaers in US federal funding to research the casues and contributions to the American child and youth mental health crisis.

What do these data say? What is agreed upon, and a theme reflected in the preamble to a number of chapters that follow, is the commonly accepted rates of child and youth mental disorders. These estimates reflect that approximately one out of five of any nation's child and youth population before the age of 18 years old will experience a *diagnosable mental health disorder*. Further, the World Health Organization estimates reflect that half of all mental illnesses begin by the age of 14, with three-quarters by the mid-20s (World Health Organization, 2005). However, as one of the editors of this volume has stated, these estimates are a vast underrepresentation of the

true state of need, where the actual level approximates almost two-thirds of children and youth will manifest a mental health need but "fly under the radar of detection with '… subthreshold conditions that do not meet diagnostic criteria *yet involve substantial distress and impairment*'" (Flett & Hewitt, 2013, p. 12).

Access to Services While evidence for the magnitude of child and youth mental health disorders is unsettling, even more so is the lack of accessibility to appropriate services for those who are assessed and identified as requiring some form of intervention. These data reflect that the vast majority of children with mental health difficulties "do not receive any type of mental health care …. [In the US] approximately 75% of children with mental health needs do not have any contact with the child mental health service system" (McKay & Bannon, 2004). However, it is relevant to point out that the data as reported by McKay and Bannon reflects the *overall average rates of access*; there is a considerable variation within the population of children and youth who require service that reflects that children who are marginalized by virtue of ethnicity, socioeconomic status, and/or geographic location have accessibility rates that are vastly lower than the national average (Cooper et al., 2008). Let us also state that a world that is in chaos with war, political uncertainty, poverty and famine, and the mass movement of persons both escaping and seeking a "better" life has added to the tragedy for millions more children and heightened their need for mental health support and services.

It is also of relevance that for those expenditures targeting mental health, there is little support for prevention, early intervention, child and youth mental health, or literacy related to personal wellness and mental health well-being. Over a 10-year period in the United States, there was a shift away from supporting treatment and toward the use of prescription drugs. In fact, by 2005 slightly more than one-quarter of all US expenditures toward mental health support was accounted for by drugs, a move up from less than 8% two decades earlier (SAMSHA, 2010). Clearly, little focus over this period was given to therapeutic services and innovations that would reach beyond the support for pharmaceutical intervention at the deep end of mental health need.

Despite the strength of advocacy regarding the need for increasing funding to child and youth mental health, the child and youth mental health system as it has been and is currently constituted could never extend itself to meet the needs as they are now understood. In part as a result, schools became a focus as a site for certain of these services to be provided.

Schools as Part of the Solution

Schools and the education system as a whole have long been seen as providing services to children and youth beyond their primary focus of advancing the academic and vocational needs of their students. For example, the child guidance movement in the early twentieth century viewed schools as part of a larger effort to counter the effects of juvenile crime. This movement evolved into a broader scope of practice in supporting schools to focus on assessing the different learning needs of certain students which was given impetus with the development of the Binet intelligence tests. This advanced the work within the education system to address students' unique learning styles and channel these students into different academic paths leading to more varied vocational opportunities. By the mid-twentieth century, most schools had access to a *guidance teacher* who served the purpose as a part-time instructor to work with students in considering their future academic opportunities or how to apply for post-secondary schooling.

However, by the latter part of the twentieth century, it had become apparent that students had needs that went beyond the capacity and knowledge that guidance instructors could provide and increasingly schools looked to augmenting their services through accessing school psychologists, on-site nurses, and/or developing cooperative relationships with local public health services to

address the mental health and social emotional needs of their students.

Advances in School-Based Mental Health By the 1980s, the momentum began to focus on the potential of viewing schools as a forum for addressing concerns with respect to a broad range of issues related to mental health, personal well-being, and violence prevention. In reviewing publications during this period related to school-based mental health (SBMH), a rationale emerged for situating interventions within schools. The conclusion was simple; since children and youth spend a substantial part of their day in school, more should be made of that time in addressing areas of relevance beyond the traditionally defined focus on academic achievement. By 2005, major professional groups such as the American Association of Pediatrics, who had heretofore not been viewed necessarily as mental health advocates, released a policy position stating that "School-based programs offer the promise of improving access to diagnosis of and treatment for the mental health problems of children and adolescents. Pediatric health care professionals, educators, and mental health specialists should work in collaboration to develop and implement effective school-based mental health services" (American Pediatric Association, 2004). This view was further augmented by emerging research that, in keeping with the primary focus of schooling as a forum in which to maximize a child/youth's academic potential, the presence of certain mental health or social challenges could actually explain a significant amount of the variance when accounting for academic outcomes (Masten et al., 2005). Findings such as these lead Suldo, DuPaul, Gormely, and Andersen-Butcher (2014) to conclude: "Controlling for initial levels of academic skills, higher subjective well-being predicted better distal academic skills (GPA)…above and beyond the negative effect of externalizing symptoms. Further, the students most at-risk for deterioration in GPA were those with the combination of low subjective well-being and elevated psychopathology, underscoring the need to attend to both wellness and problems."

Dean Fixsen and his colleagues developed the further rationale for situating intervention in schools in promoting schools as a critical and integral part of the broader system of care network for children, youth, and their families (Friedman, Paulson, & Fixsen, 2003). Prior to schools being viewed as a part of this larger social service network, schools had too often been an outsider in what was already a heavily siloed and disconnected system of care in children's services where there was only modest, if any, integration or complementarity in the services offered.

Effectiveness of School-Based Mental Health By 2009 the focus and effectiveness of SBMH interventions had matured to the point where a dedicated journal, *School Mental Health*, yielded its first issue. This was followed within the next 6 years by the publication of three edited volumes that provided exhaustive summaries of school-based mental health interventions: *The Handbook of School Mental Health Research, Training, Practice, and Policy* (Weist et al., 2014); *School Mental Health: Global Challenges and Opportunities* (Kutcher, Wei, & Weist, 2015); and *Critical Issues in School-based Mental Health: Evidence-based Research, Practice, and Interventions* (Holt & Grills, 2015).

With these contributions, a literature had thus emerged that strongly supported the rationale for schools as a forum for effective intervention, with evidence that addressed the potential for schools to effectively inform, intervene, and promote wellness in the lives of students. Large-scale government-funded reviews were also generated during this time that explored the potential of SBMH in Canada (Mental Health Commission of Canada, 2013), the United States (US Department of Health and Human Services 2011), Australia (Australian Department of Health, 2006), and the United Kingdom (2007) to cite but a few examples.

With achievements regarding the dissemination of information through the above-cited dedicated journal, edited volumes, and government initiatives, the momentum of work in SBMH

shifted to the challenge of exporting effective programs to a broader range of schools and school districts. This entailed educating educators and support persons on the front lines and in classrooms, ensuring that the most recent and validated outcomes could be manualized in supporting replication, working with school administrators to support the initial introduction of programs with teachers being part of a mental health team, tracking the process and outcome from intervention, and working on sustainability of the program once the formal training and outside supports had been withdrawn. And, as with all programs where the goal is for dissemination and replication, the challenge of implementation and figuring out what it takes to get good outcomes emerged, and that is where the ethos for this volume got its beginnings.

The Science of Implementation

Arguably, the goal of all research-based programs in the human services is to develop early and ongoing intervention (primary and secondary prevention) that can achieve an outcome that promotes well-being and/or reduces human suffering. Once showing an effect, the next challenge for a program is the replication of the initial findings, which, once achieved, can then be disseminated to educate others in the ability to promote similar effective programming. And in fact, major funding sources such as the *Social Science and Humanities Research Council* in Canada or the *National Institute of Mental Health* in the United States now routinely require in all funding requests a plan from the investigators regarding dissemination of their results.

However for the past two decades, the term the science of implementation has come to characterize the unique place program translation or generalization occupies regardgni the study of taking results from one context and having that program replicated in another context, in other words, what researchers and program developers now routinely ask: what does it take to get the outcomes from one research context in the delivery of a program and be able to show equivalent outcomes in other contexts? This translation of knowledge requirement draws on an ability to characterize contextual data beyond which previous program descriptions had offered. Manualized-based interventions that require training and support are often the de rigueur of the science of implementation.

Definition of Implementation Science The National Implementation Science Network defines implementation science as "the study of factors that influence the full and effective use of innovations in practice. The goal is not to answer factual questions about what is, but rather to determine what is required… factors that are action oriented and mission driven. In this conception, the actors that influence the full and effective use of innovations in practice are not assumed to be known. In implementation science, implementation factors are identified or developed *and* demonstrated in practice" (National Implementation Science Network, 2015).

The science of implementation lies at the heart of this volume, and all of the authors have organized their contributions around the concept of *what it takes*, in translating what we know in SBMH and how can we continue to get good outcomes based on the track record of the evidence thus far.

Organization of the Volume

This volume is organized into three sections.

Section 1 features summaries on the current status of overall effective SBMH interventions, a specific discussion of implementation science in the context of school-based mental health and social support programs, and a reporting on the progress in one large jurisdiction of the necessary steps to bring about change in promoting SBMH. While these broad issues are addressed, we have also included a discussion of the relevance of not forgetting the importance of continually asking the funda-

mental questions regarding what it is that we are doing and what it is that we are hoping to achieve in our efforts in SBMH promotion.

Section 2 provides a focus on teachers and school administrators in supporting SBMH. Teachers have too often been overlooked in understanding what they bring and what they need in being part of effective SBMH initiatives. While several of the chapters in this section focus on mental health literacy in promoting knowledge and understanding with teachers so they can be a support to their students, research in this area has not forgotten that, in the sentiments of one author, involvement in SBMH is yet one more thing we are asking teachers to do on top of what is considered one of the most challenging and stressful professions. Other authors in this section make the claim that we cannot have mentally healthy students if we do not also have mentally healthy teachers, and as a result, programs and supports need to be in place for educators if they are to be effective in this regard. This section addresses the above needs not only with experienced teachers but also promotes the need to begin to educate teachers in SBMH who are at the beginning of their careers, while they are still in preservice teacher education programs.

Section 3 provides a summary of those SBMH programs that have been delivered and evaluated. However, most importantly in the current context, they also are programs that have addressed the factors that are relevant for implementation. Taken together, the authors in these contributions not only speak to the issues regarding what works but why they work and what it takes if future sites are to consider incorporating these targeted school-based interventions. The program areas that were selected include those that are most sought after due to the high frequency of occurrence of the disorder or the serious nature of the consequences of the disorder for students and the school. Hence, the decision was made to include programs that address mental health stigma, anxiety, depression, suicide, nonsuicidal self-injury, as well as the promotion of wellness factors such as emotional intelligence, mindfulness, and adoption of a parenting program in the care of younger children.

It is the hope of the editors of this volume that this contribution will further the progress of seeing the potential in our schools to be part of a solution in addressing the mental health crises with our children and youth. But we are also aware that schools, while an important part of that solution, do not in themselves take the place of the necessity for an overall strategy that includes many other community and, at times, residential resources to address the full continuum of mental health needs that many of our children and youth require.

We will conclude this introductory chapter by noting that it is becoming increasingly clear that there is a need for rapid expansion at several levels – most notably, there is a need to expand and extend training programs so that there is a wave of new psychologists, psychiatrics, counselors, social workers, nurses, and other school personnel. But it is also essential that the required financial resources are made available so that these much needed people can be added to existing systems. While prevention and building resilience is clearly still preferable, it is troubling when there is a clear need for mental health services, but these services are not available, despite the good intentions of the many people who are committed to improving the mental health of children, adolescents, and emerging adults.

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Part I

The Evidence for Program Implementation in Schools and Systems of Care

2 Both Promising and Problematic: Reviewing the Evidence for Implementation Science

Debbie Chiodo and Hailey Kolpin

Abstract

Delivering evidence-based prevention programs within school settings has the potential to reduce problem behaviors and enhance youth well-being. Moreover, delivering interventions within school settings may reach those youth who would otherwise not receive support. Schools hold the potential to provide effective services to address students' academic, behavioral, emotional, and social needs. However, the implementation of these comprehensive, evidence-based programs is an ongoing challenge within schools. While most school-based prevention programs target individual students' behaviors, students are nested within classrooms and schools, which are in turn nested within broader school districts and communities. Even when the larger systemic issues are not part of the intervention, they can nonetheless have important effects on the process of implementation and student outcomes. This chapter reviews the current state of the implementation quality of school-based evidence-based prevention programs and the challenges of program implementation in classroom-based settings. The chapter reviews why implementation fidelity is a critical component of program success and those factors that can improve implementation efforts in schools.

> You can have the most creative, compellingly valid, productive idea in the world, but whether it can become embedded and sustained in a socially complex setting will be primarily a function of how you conceptualize the implementation process. (Sarason, 1996, p.78)

Each year, worldwide efforts estimated in excess of billions of dollars are spent in schools to support the development and implementation of evidence-based prevention innovations, that is, interventions, practices, and guidelines that are designed to improve student health, mental health, and classroom behaviors. There is substantial evidence indicating that, when properly developed and implemented, school-based prevention programs can produce positive effects on youth's behavioral, social, and emotional functioning (Botvin, Mihalic, & Grotpeter, 1998; Durlak & DuPre, 2008; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Kutcher & Wei, 2013; Mihalic & Altman-Bettridge, 2004; Wilson, Lipsey, & Derzon, 2003; Wolfe et al., 2009). The cumulative evidence for the efficacy and effectiveness of youth prevention programs aimed at mental health, violence, substance use, and delinquency has led to more widespread implementation of these programs within school

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settings (Botvin & Kantor, 2000; Foshee et al., 1998; Han & Weiss, 2005; Kutcher & Wei, 2013; Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010; Payne & Eckert, 2010; Wolfe et al., 2009). While many studies ultimately conclude that problem behavior, substance use, mental health, and violence can be reduced by school-based interventions, research has also documented that only a small fraction of these programs are ever successfully translated into practice (Durlak & DuPre, 2008; Gottfredson & Gottfredson, 2002; Han & Weiss, 2005; Payne, Gottfredson, & Gottfredson, 2006; Wilson et al., 2003), and efforts to implement these programs to the point of sustainability can take many years. In other words, even when a prevention program has been shown to be effective and/or efficacious by research, if it is not implemented properly or without sufficient adherence to an established model, the research shows it will likely fail.

One consequence of the movement toward disseminating or scaling-up evidence-based prevention programs in schools is the increasing attention directed toward understanding the complexities of program implementation under "real-world" conditions (Bloomquist et al., 2013; Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005; Han & Weiss, 2005; Weist, Lindsey, Moore, & Slade, 2006). Research or demonstration projects often receive support from various levels (e.g., a research team, coaching, financial incentives, close monitoring of intervention implementation, or technical assistance) that often leads to greater quality of implementation and, subsequently, better program outcomes. Outside of research studies, however, conditions for implementation are frequently less than ideal, and programs delivered in a classroom, school, or a community setting may be less effective. Few schools and communities initiate new programs without experiencing difficulties during the implementation phase (Fixsen et al., 2005). This chapter reviews the implementation quality of evidence-based prevention programs in schools, the challenges of program implementation in real-world settings, why fidelity of implementation is a critical component of implementation success, factors that can improve implementation of school-based programs, and strategies that can help our implementation efforts in school-based settings.

Why Is the Study of Implementation Critical to School-Based Prevention?

The field of school-based prevention has made significant progress in the past 25 years in identifying factors that can prevent high-risk behaviors among youth such as violence, drug use, and unsafe sexual behaviors and in developing interventions for achieving prevention. The use of evidence-based prevention programs has become a hallmark of high-quality professional practice in school and mental health (Crooks, Chiodo, Zwarych, Hughes, & Wolfe, 2013; Forman, Olin, Hoagwood, Crowe, & Saka, 2009; Foshee et al., 1998; Kutcher & Wei, 2013; Wolfe et al., 2009). While much attention has been placed on identifying effective evidence-based programs, there has been much less awareness of the factors needed to successfully implement those programs. Simply put, and not surprisingly, well-implemented programs achieve stronger effects than programs that are implemented with less success. Moreover, there is strong recognition in prevention science and in school-based prevention that it is important to go beyond understanding program effects to also understand what works and what does not work, for whom, and under what conditions (Greenberg, Domitrovich, & Bumbarger, 2001; Guerra, Boxer, & Cook, 2006). A more accurate understanding of program effectiveness success and failure can be found by studying the implementation process. School settings are complex systems. The effectiveness of a program implemented within a classroom or a school is greatly impacted by the surrounding environment. Fixsen et al. (2005) have indicated the process of implementation is defined as:

> A specified set of activities designed to put into practice an activity or program of known dimension. According to this definition, implementation processes are purposeful and are described in sufficient detail such that independent observers can detect the presence and strength of the "specific set of activities" related to implementation. (Fixsen et al., p.5)

Positive effects (e.g., school change, student change) can only occur when a certain level of implementation is attained (e.g., Durlak & DuPre,

2008). Implementing a program in settings like schools is difficult. There exists significant variability in the manner in which programs are delivered because of varying levels of support from key staff, organizational capacity to support the program, and trained staff to deliver the program (Durlak & DuPre, 2008; Han & Weiss, 2005). While most school-based prevention programs target individual students' behaviors, students are nested within classrooms and schools, which are in turn nested within broader school districts and communities. Even when the larger systemic issues are not part of the intervention, they can nonetheless have important effects on implementation and outcomes and as a result need to be accounted for in documenting any program's success.

Prior to the last decade, there has been only modest incentive for school-based researchers to consider issues related to wider implementation, diffusion, and sustainability of effective programs (Durlak & DuPre, 2008; Greenberg, 2004). For many years, it was assumed that if a program was effective and made available to schools, it would naturally be implemented and implemented well. We now know that implementation is a complex process consisting of many stages and affected by personnel, program, organization, and systemic factors. Failure to consider these factors not only results in diminished program outcomes but impedes students' access to the growing number of evidence-based programs that exist in schools (Crooks et al., 2013; Durlak & DuPre, 2008; Han & Weiss, 2005; Kutcher & Wei, 2013; Payne & Eckert, 2010).

How Well Are Evidence-Based Prevention Programs Implemented in Schools?

Evidence-based programs are those that have demonstrated effectiveness in rigorous scientific evaluations and demonstrate beneficial and predictable outcomes if implemented with adherence to the program developer's model. There is increasing emphasis and accountability within schools to implement programs that are evidence-based, with the understanding that adopting these programs will result in positive outcomes for youth. The emphasis on evidence-based practice has encouraged schools to search for the types of programs that would be most effective and appropriate for the targeted problems they are meant to prevent or the behaviors that are to be enhanced.

Fundamental to the success of implementation efforts of evidence-based programs in schools is that the program be implemented as designed. This concept of "implementation as designed" is known as implementation fidelity, also referred to as treatment adherence, or integrity. Effective and successful school-based programs do not implement themselves; they are carried out by teachers with the support of school administrators and sometimes other school staff. With increased dissemination of effective, evidence-based programs in schools, the field of school-based prevention faces new issues and challenges. Teachers often find that research-based programs are difficult to implement and scale up in real-world settings, and program effects are typically diminished beyond the initial research studies. In short, much of the research on the implementation of school-based prevention programs has identified that the quality of school prevention activities is generally poor, and prevention activities tend not to be implemented with sufficient strength and fidelity to produce the desired outcomes. To illustrate, two prominent examples of the study of the implementation process of school-based prevention programs will be offered.

In a seminal review of over 500 studies on the impact of implementation quality on program outcomes, Durlak and DuPre (2008) concluded that expecting perfect or near-perfect implementation is unrealistic. They reviewed 542 quantitative implementation studies in the field of prevention and promotion targeting children and adolescents across a diverse set of programs, providers, and settings. In their review, they sought to determine whether implementation affects outcomes and, secondly, what factors affect implementation. The first major conclusion from their study was that implementation matters. That is, the magnitude of mean

effect sizes reflecting program outcomes is at least two to three times higher when programs are carefully implemented and do not suffer from any serious implementation problems. No study in their review documented completely perfect implementation, and positive program results were obtained with implementation levels approximating 60%. The second important finding that Durlak and DuPre's (2008) research highlights is that achieving satisfactory levels of implementation not only increases the chances of program success in statistical terms but also can lead to much stronger practical benefits for participants. Finally, these findings provide important information for understanding the effects of program adaptation and modification on outcomes. Studies in Durlak and DuPre's (2008) review demonstrated that there is marked variation in the degree of within program implementation. Discussed later in this chapter, the fact that less than perfect quality implementation is still associated with positive outcomes suggests that some adaptation of a program may be acceptable. What is unknown is the degree to which adaptation hinders or facilitates positive outcomes.

Gottfredson and Gottfredson (2002) conducted one of the largest national studies examining the implementation quality of school-based prevention programs in the United States. Using a national probability sample of 3691 school-based prevention activities, Gottfredson and Gottfredson (2002) were able to describe the quality of implementation of typical school-based prevention practices, compare the quality of implementation of prevention practice with what is typical in prevention research, and test hypotheses about the predictors of the quality of implementation. Results of this large-scale study found that the implementation quality of school-based prevention programs is generally poor. Depending on the type of activity, only one-fourth to one-half of the programs compared favorably with research-based programs in terms of the number of sessions delivered. In addition, only 47–78% of the programs lasted for longer than 1 month. Gottfredson and Gottfredson (2002) also found that activities in elementary school were of better quality than those in high school, as were those in urban compared with rural schools.

In other work, Gottfredson et al. (2002) raise the observation for understanding and measuring implementation quality of prevention programming in schools. Today's schools are implementing a significant number of prevention activities; some are evidence-based and others are not. It is possible that multiple activities – each with small effects combined, could make a significant difference in outcome. The reviews by Durlak and DuPre (2008) and Gottfredson and Gottfredson (2002) illustrate that implementation is extremely complex. If implementation was easy, more prevention programs and prevention activities would be able to achieve higher-quality implementation and better and more prolonged sustainability. Of the many attempts to use an evidence-based program or an evidence-informed practice or activity, these two reviews show that few studies actually result in implementation with high fidelity.

The field of implementation science has enabled researchers to study the process of implementation of evidence-based programs and has offered ways to improve the implementation of prevention programs. Implementation science helps researchers to use evidence-based programs or practices that have been validated in research settings to the application of these programs in real-world environments.

Implementation Science

Researchers are challenged to bridge the gap between efficacy trials and "real-world" settings such as classrooms. Understanding the processes and conditions under which evidence-based practices are successfully scaled up can help move programs toward even greater benefits for youth. Implementation science is the study of how a practice that is evidence-based or evidence-informed is translated to different, more diverse contexts in the real world (Fixsen, Blasé, Naoom, & Wallace, 2009). Even Yogi Berra, the famous baseball catcher, manager, and coach, knew

something about implementation science when he was quoted to say, "In theory there is no difference between theory and practice, but in practice there always is."

A review of one of the most often used implementation evaluation methods, fidelity of implementation, will now be offered. Fidelity of implementation often serves as the focus of implementation studies and is understood as one component that has the potential to impact successful implementation and subsequent scaling-up of research-based programs and practices in schools.

What Is Implementation Fidelity?

A central challenge that schools face when implementing an evidence-based program centers on the issue of high-quality implementation or what is known as implementation fidelity. Fidelity is defined as the degree to which an intervention is implemented completely and successfully in a new setting (Fixsen et al., 2005). Fidelity also relates the degree to which the procedures and components of a given program are followed by those delivering it (Dane & Schneider, 1998; Mihalic & Altman-Bettridge, 2004). Fidelity of implementation seeks to examine several important key components of programs such as: Are all parts of the program being delivered? Is the program being delivered with high quality? Is the program implemented in the correct sequence and for the prescribed time? Are program components being delivered with the proper materials? Is program drift occurring? Are participants engaged?

Fidelity is a key component in prevention programs and acts as a potential moderator of the relationship between the program and its intended outcomes (e.g., Durlak & DuPre, 2008; Gottfredson & Gottfredson, 2002). Durlak and DuPre (2008) estimated that evidence-based prevention programs with acceptable fidelity have effect sizes 3–12 times higher than those with low fidelity. Therefore, understanding how to produce high-fidelity use of a program in school settings is useful. Moreover, understanding fidelity of implementation may also prevent potentially false conclusions from being drawn about an intervention's effectiveness, and it can even help in the achievement of improved outcomes (Carroll et al., 2007). By studying the fidelity of implementation, program developers and researchers can better understand some of the reasons why a program has succeeded or failed in practice.

Even the most effective prevention programs are limited by the extent to which they are delivered with fidelity. The ability to answer the question, "Did teachers do what was required to deliver the program effectively in the classroom," is critical in understanding the relationship between program implementation and outcomes. The challenge is that strict fidelity of implementation is difficult to achieve and actually may not be appropriate in the complex and multifaceted contexts of schools (Chiodo, Exner-Cortens, Crooks, & Hughes, 2015; Crooks et al., 2013; Durlak & DuPre, 2008; Kutcher & Wei, 2013; McCuaig & Hay, 2014).

Barriers Related to Implementation Fidelity in School Settings

Why is fidelity of implementation difficult to achieve in school settings? One major challenge to implementing evidence-based programs for youth in schools is the complexity of prevention activities and topics. Not all teachers feel comfortable teaching youth prevention strategies about substance use or violence. Second, teachers typically receive limited instruction in specific program interventions. For example, some teachers may receive 1-day training on the program, and some may just receive the manual. Teachers are then expected to implement evidence-based practices without the ongoing coaching and feedback that is often critical for program success (Mihalic, Fagan, & Argamaso, 2008). Third, not all evidence-based programs were designed for school settings and therefore can be difficult to implement completely in classroom settings. Finally, it is not uncommon in schools for the school administrator to mandate

the use of a program that may not align with the teachers' beliefs, classroom environment, or overall readiness to implement the intervention. There are other challenges in our understanding of fidelity of implementation which have been found to affect the quality of the implementation process. Three of these challenges are highlighted next: the definition of fidelity, measurement issues, and the fidelity and adaptation debate.

What Do We Really Mean by Fidelity of Implementation?

One of the difficulties in improving the quality of program implementation is that a singular term for fidelity has yet to emerge. While there is agreement generally about what is intended when research refers to fidelity, there exists a diversity of definitions given to fidelity of implementation. Dane and Schneider (1998) have provided perhaps the most comprehensive schema in defining fidelity. The domains they have identified include adherence, exposure or dosage, quality of delivery, participant responsiveness, and program differentiation. "Adherence" and "dosage or exposure" are typically considered the core domains of fidelity in that they measure the extent to which specified program components are delivered in the way they were intended to be delivered and the quantity of the program delivered (i.e., dosage). Adherence and dosage are the domains of fidelity that are more commonly assessed in program implementation (Dane & Schneider, 1998). "Quality of delivering" is related more to teachers' enthusiasm, preparedness or confidence and attitudes toward the program, and/or aspects of program implementation that are not directly related to program content. The underlying assumption is that teachers who believe a program has value, are motivated and excited to teach it, and feel more prepared and confident in delivering its content are more likely to implement it in a more competent manner (e.g., Crooks et al., 2013). "Participant responsiveness" refers to program recipient's level of participation and enthusiasm. There is evidence to suggest that the extent to which a program actively engages its participants can increase the likelihood of program effects (Elliott & Mihalic, 2004). Participant responsiveness is related to the quality of delivery because a participant's reaction to a program may be an indicator of the teacher's skill in implementing the program as intended (Stead, Stradling, MacNeil, et al., 2007). "Program differentiation" refers to the absence of contamination from another program that could account for any effects noted. For example, in any given year, schools may be delivering several prevention programs simultaneously, and in this context, fidelity can be compromised or contaminated when a program is altered by a similar program in place.

The substantial variability in the fidelity of implementation of school-based prevention programs may be due in part to the domains of fidelity assessed, as almost no study considers all five domains. Dane and Schneider (1998) strongly recommend that researchers measure all five dimensions of fidelity in order to provide a comprehensive picture of program integrity. It is unclear, however, if all types of fidelity have to be present for a program to achieve its goals, and to date, there is no data that can answer this question. The diversity of definitions also makes it difficult to know which specific fidelity issues are being addressed in research studies and how outcomes may have been different if other domains were included. Each domain has value. Yet, researchers still consider adherence and dosage as sufficient in reflecting fidelity of implementation. Valid and systematic methods of measuring fidelity become a challenge when multiple domains of the construct exist and there is no agreement on which component is more critical than others or if they all contribute equally to program effects.

Measuring Fidelity

It is not uncommon for researchers to report the methods they undertook to promote fidelity of implementation, but what seems to be lacking from the literature are the methods used to assess

it. Although researchers try to apply systematic methods to measure fidelity, measures have been cited as weak (Ennett et al., 2011). There is likely no single measure that will adequately reflect all the elements of fidelity of implementation, and there is a clear need to develop well-validated, cost-effective measures of program implementation that can assess each domain. Compounding the measurement issue with fidelity is the problem that there is no widely applicable standardized methodology for measuring it (Domitrovich et al., 2008). For example, some studies have teachers use logs or tracking forms to document the nature and extent of program activities. Other studies will use observations or site visits to assess fidelity.

Another common approach to measuring fidelity is in the form of a teacher survey at the end of the program to gather information on how much of the program was implemented. Currently, there is also significant variability in the depth of fidelity data collected, where some studies assess fidelity with a random selection of one program session versus an assessment of all sessions. We also have only modest evidence on the threshold of implementation quality necessary for producing the intended outcomes (Domitrovich et al., 2008). That is, how much of a program must be delivered to be considered "high fidelity" compared to "low fidelity." More studies are needed in several areas of measurement related to the implementation quality of prevention programs in schools.

When measuring program fidelity, there is some suggestion that self-reports can be biased (Lillehoj, Griffin, & Spooth, 2004) and third-party observations are thought to be more reliable (Hansen & McNeal, 1999). Fidelity ratings are typically higher when based on self-reports than on observations by outsiders (Lillehoj et al., 2004). Another study found that teachers' self-reports of fidelity implementation were negatively correlated with observations, with classroom observations noting more adaptations to the curriculum than teacher self-report (Dusenbury, Brannigan, Hansen, Walsh, & Falco, 2005). This raises the concern whether teachers can be expected to accurately report whether they have made adaptations to the program. It is also possible that teachers may not recognize when they have adapted a program because so much of their daily teaching centers on tailoring instruction and teaching for different students. As a result, adaptation of a program is thought to be always part of the core business of their pedagogical practice. While observational data are less subject to social desirability, these data are more time-consuming and resource-intensive to collect. If high-quality implementation and program sustainability are to continue beyond a research study or effectiveness trial, schools need to measure implementation reliably and with validity, without a dependency on external researchers. Researchers, however, must first establish how best to measure fidelity and how much fidelity we really need to achieve positive outcomes.

Measurement issues provide a caveat to the conclusions that can be drawn from the fidelity literature since what emerges is considerable variability in the estimates of fidelity that are being reported (e.g., Ennett et al., 2011). In part this challenge is inevitably tied to the broad definition of fidelity and the challenge in developing measures that can be used for programs or activities that differ markedly in their approach or strategy. Further complicating the measurement issue is the dearth of longitudinal data collected in the implementation quality literature.

Implementation is a process that occurs over time. Ideally, implementation research should begin prior to implementation when a school or school district decides to adopt a program. Unfortunately, the study of the implementation process of most prevention programs is still not commonplace. Several scholars argued that a better understanding of the barriers and bridges in achieving high-quality implementation of school-based programs is needed (Greenberg, 2004; Roberts-Gray, Gingiss, & Boerm, 2007) in addition to reporting on the status of implementation of school-based prevention programs (Crooks et al., 2013; Elliott & Mihalic, 2004; Gingiss, Roberts-Gray, & Boerm, 2006).

Strict Fidelity Versus Program Adaptation: Is the Tension Constructive?

There is a tension between implementing programs as they were designed and delivered in their efficacy or effectiveness trails and the need to adapt programs so that they fit the local context in which they are implemented. As programs are disseminated, the desire to maintain strict adherence and fidelity, which is typically driven primarily by program developers, is often countered by a desire to adapt, alter, or reinvent programs that is primarily driven by program implementers, especially when a program needs to be tailored to the culture and circumstance of the participants.

The notion of fidelity in domains like public health or health promotion defines successful implementation by the extent to which a campaign, a program, an intervention, or curriculum is adhered to and delivered, with the same consistency and precision and across every setting (McCuaig & Hay, 2014). Proponents who believe in the strict adherence to fidelity of program implementation such that programs should be delivered in the exact way they were developed and tested argue that much of the available research demonstrates that fidelity is related to effectiveness and any "bargaining away" of fidelity will most likely decrease program effectiveness (Durlak & DuPre, 2008; Elliott & Mihalic, 2004; Gottfredson & Gottfredson, 2002).

The emphasis on strict fidelity, however, has been challenged by educational scholars who argue that strict adherence to program fidelity within education suppresses a teacher's capacity to enact the principals of their profession (Achinstein & Ogawa, 2006; Kutcher & Wei, 2013; McCuaig & Hay, 2014; O'Donnell, 2008). Moreover, strict fidelity within school-based implementation is likely to be met with much resistance, since for a program to be sustainable in the multifaceted classroom, teachers must be able to adapt the program so that it is appropriate for changing classroom circumstances and diverse students within classrooms (Durlak & DuPre, 2008; Kutcher & Wei, 2013; McCuaig & Hay, 2014). Kutcher and Wei (2013) have found ways to implement their school-based mental health pathway to care program in a flexible, locally adaptable way so that the model is built on available resources and modified to meet local realities, including school and community readiness for adoption and implementation, and the availability of resources. McCuaig and Hay (2014) offer a convincing argument around the need for an educationally driven notion of fidelity. Their review notes that the educational setting has different issues and contexts than does the public health setting, where the notion of strict fidelity was originated and holds central importance to achieving the objectives of health interventions. McCuaig and Hay (2014) argue instead that schools are complex spaces and employing a public health notion of fidelity within the education system creates significant challenges and limitations. Classroom complexities, teacher characteristics, family characteristics, school characteristics, and children's characteristics all influence adherence to a program and need to be considered when assessing fidelity.

The consideration of an educationally driven notion of fidelity has significant implications for our understanding of how programs are adapted and modified in real-world settings. Based on a nationally representative sample of almost 2000 lead substance use prevention teachers in the United States, Ringwalt et al. (2003) examined the factors associated with teachers' fidelity of substance use prevention curriculum. Findings from this study found that about one-fifth of teachers did not use a curriculum guide at all, whereas only 15% reported they followed one very closely. The authors conclude that some degree of curriculum adaptation is inevitable in reporting the following: "We can thus say now with confidence that some measure of adaptation is inevitable and that for curriculum developers to oppose it categorically, even for the best of conceptual or empirical reasons, would appear to be futile" (Ringwalt et al., 2003, p. 387). In an effort to resolve the tension between strict fidelity and adaptation, some researchers (e.g., Dusenbury, Brannigan, Falco, & Hansen, 2003; Maggin &

Johnson, 2015) have argued that program developers should identify what the critical elements, activities, or core components are to evidence-based programs and what activities are nonessential and can be easily adapted or omitted without compromising program outcomes.

While program adaptation may be a likely and inevitable consequence of school-based program implementation, there is little evidence under what conditions, if any, adaptations or modifications might enhance program experience and outcomes or result in a loss of program effectiveness and interest (Berkel, Mauricio, Schoenfelder, & Sandler, 2011). It is also not clear if teachers understand a program well enough to be able to modify it without sacrificing the core principles that underlie the program. Without guidance around the modifications or monitoring of what is removed or added from programs, it is difficult to know whether modifications alter outcomes or increase the likelihood of program drift. Moreover, it is likely that some changes to the program curriculum will be positive and others will be negative. There is also a real difference between modifications based on running out of time or confidence in delivering a particular component and adaptations that are planned, organized, and addressed in a systematic way. Many researchers see adaptation and tailoring of programs as critical for successful dissemination of evidence-based programs in schools and are calling for the development of systematic strategies to guide this process so that key components are retained and the context is considered (Morrison et al., 2009; Wandersman, 2003). Unfortunately, there is little experimental evidence on the impact of local enhancements or modification on programs achieving their desirable outcomes. To date, it is not yet clear whether and under what conditions adaptations might enhance program outcomes or result in a loss of program effectiveness.

Educational scholars have argued for an educationally driven notion of fidelity that considers the complexity inherent in classrooms and schools and among students, teachers, and their families. Schools or school boards may not be interested or motivated to adopt a program or continue with it if there is no flexibility in adapting the program to meet the unique needs of their school or system. Balancing the need to implement programs with fidelity while also considering the local context increases the likelihood that programs will be adopted, meet the local need, and sustained (McCuaig & Hay, 2014).

Conceptual Frameworks to Guide Implementation of Prevention Programs in Schools

During the past decade of implementation science, there has seen a number of conceptual models, frameworks, and theories developed to guide successful evidence-based practice implementation. The diffusion of innovation (DOI) theory (Rogers, 1995, 2003) and the ecological framework (Durlak & DuPre, 2008) both provide an explanation of the different factors that affect the spread and the quality of the implementation of school-based programs.

The Diffusion of Innovations Model Rogers (1995, 2003) DOI theory describes diffusion as a special type of communication concerned with the spread of messages of new ideas, and the process of diffusion can represent a certain degree of uncertainty to an individual or organization. An innovation, which can be an idea, practice, or a program, is typically perceived as *new* by the adopting individual or group of individuals. Why do certain innovations (in this case school-based prevention programs) spread more quickly and widely than others? Why are some innovations effectively implemented by some providers and not others? Why some innovations are initially adopted with much enthusiasm but subsequently abandoned for the next best thing?

According to Rogers (1995, 2003), the characteristics of a program, as perceived by the members of a social system (e.g., teachers within schools), determine its rate of adoption and subsequently the quality of implementation. Five characteristics of programs have been identified as being critical in determining an innovation's rate of adoption and its subsequent implementation quality: relative advantage, compatibility,

complexity, trialability, and observability (Rogers, 1995, 2003). In recent years, researchers have asked questions regarding what essential ingredients can increase or impede a program's implementation quality, scalability, and sustainability (e.g., Durlak & DuPre, 2008). According to Rogers (1995), understanding the influence of program characteristics can explain why certain programs are adopted, implemented with high quality (i.e., fidelity), and scaled up successfully within a system.

Characteristics of Programs that Affect Diffusion and High-Quality Implementation

Rogers describes *relative advantage* as the degree to which a program is perceived as better than the idea it supersedes. Rogers (1995, 2003) argues that it does not matter whether a program has a great deal of objective advantage. What does matter instead is whether an individual *perceives* the program as advantageous. Relative advantage, which addresses both the costs and benefits of adoption, has been proven to be one of the best predictors of program adoption (Rogers, 1995, 2003).

Compatibility is the degree to which a program is perceived as being consistent with the existing values, past experiences, and needs of potential adopters. This implies that the more the program is in line with the current value system and way of life of possible adopters, the more acceptable and accommodating are the adopters. Rogers (1995, 2003) argues that in order for a program to be successfully implemented, it must find confirmation in its integration into the values and practices of the adopting entity, be it an individual teacher, a school, or an entire school district.

An extension of compatibility is the concept of reinvention (Greenhalgh, 2004) or adaptation. Some research suggests that if potential adopters can adapt, change, and modify a program to suit their own needs and context, it will be adopted more easily (Durlak & DuPre, 2008). For example, Hatch (2000) found that the fastest adoption and improvements came in schools that developed a balanced approach to program implementation whereby practices that have been successful in the past and new practices adopted to meet the needs of schools were considered. While the need to make adaptations to fit the program to local conditions or to implement programs as designed is an ongoing tension in implementation science, education and health scholars continue to question the emphasis on strict adherence to fidelity and instead argue that intentional adaptations may not be as counterproductive as assumed (e.g., Durlak & DuPre, 2008; Kutcher & Wei, 2013; McCuaig & Hay, 2014).

As its name implies, *complexity* is the degree to which a program is perceived as difficult to understand and use. Some programs are easy to understand and use, while others are more difficult to comprehend. In general, the more complex a program, the lower the chance of it being adopted and implemented with high quality. Based on their experiences of the Collaborative for Academic, Social, and Emotional Learning (CASEL) and reviews of literature addressing implementation failures, Elias and colleagues note that simple programs in schools are sometimes easier to explain, sell, and manage, especially given the pressure to show quickly that one's program works (Elias, Zins, Graczyk, & Weissberg, 2003). Elias et al. (2003) also caution researchers that simplicity should not create pressure to show quickly that one's program is effective, without the front-end time needed to build the capacity for change. *Trialability* is the degree to which a program can be experimented with a limited basis. When a program can be tried, it increases its chances of adoption, and the practice helps with implementation quality. The exception is where the undesirable consequences of a program appear to outweigh the desirable characteristics (Rogers, 1995).

The last characteristic of a program that contributes to the process of diffusion is *observability*, defined as the degree to which the results of a program are visible to others. For example, when teachers see their peers using a new program and hear positive reports about program outcomes or see positive changes in their students as a result of the program, they are more likely to consider

trying it out and keeping with it longer. There is some evidence to suggest that ideas that are easily observed and communicated are more likely to be adopted. Frank, Zhao, and Borman (2003) in their study of implementation quality within schools found that implementation was sustained or discarded largely due to collegial pressure or encouragement and that implementation was facilitated indirectly by setting up contexts for informal staff communication about using the innovation. Rogers (2002) argues that most individuals evaluate a program not on the basis of scientific research by experts but through the subjective evaluations of peers who have already adopted the innovation. Roger's DOI theory focuses primarily on the characteristics of the programs that enhance diffusion and implementation of a program, without much attention to the broader contextual systems that programs are implemented within. The ecological framework offered by Durlak and DuPre (2008) offers a multilevel ecological perspective for understanding successful implementation.

Using an Ecological Framework to Enhance Implementation

Based on their review of the implementation quality of over 500 prevention program studies, Durlak and DuPre (2008) offer an ecological perspective of implementation that is shared by other authors (e.g., Wandersman, 2003; Wandersman et al., 2008). This systems approach to understanding successful implementation points to multiple levels of influence and acknowledges that there are relationships within and across the levels that guide implementation efforts. Durlak and DuPre (2008) found that organizational capacity, training, and technical assistance form the basis of effective implementation. Some type of organizational structure is necessary and responsible for guiding implementation. Durlak and DuPre (2008) note that while organizational capacity is important, organizations need support in conducting new interventions successfully, and this support comes primarily through training and technical assistance, sometimes provided by outside parties. Most importantly, the ecological perspective assumes that an organizations' success at implementation is also dependent on program characteristics, provider characteristics, and community factors. Thus, the extended ecological context for implementation of Durlak and DuPre's (2008) model hypothesizes that implementation is influenced by multiple system-level variables that include the program, the provider, organizational capacity, training, and technical assistance. Successful implementation, therefore, depends on a constellation of multiple ecological factors that help to facilitate implementation. Thus, the diffusion of innovation and ecological framework provide an understanding of the factors that influence implementation success.

How Do We Improve the Implementation of Evidence-Based Programs in Schools?

The literature on effective implementation of school-based prevention programs argues that researchers need to focus on understanding the contextual factors that influence implementation: factors related to the intervention, the provider (i.e., teacher), and organizational characteristics (i.e., school or district). Numerous factors affect the quality of program implementation in schools, including the characteristics of teachers, the schools responsible for implementation, program participants, the community in which implementation occurs, and program support systems (i.e., training and technical assistance). The processes that occur within a program, classroom, school, or system that lead teachers to implement and continue to implement an innovative program are critical (Durlak & DuPre, 2008; Payne & Eckert, 2010). School settings have the potential to influence the implementation process. The growing understanding of what may be needed to enhance the implementation of evidence-based programs in schools suggests that multiple characteristics of programs, teachers, and schools need to be considered. Next, a review of the characteristics of programs, teacher, and the organization (i.e., school) that have been found to influence implementation will be provided.

Program Factors that Enhance Implementation Success

As programs become more widely disseminated, the need to identify specific program characteristics that promote or inhibit implementation quality becomes essential. Some program features that enhance implementation success include a program manual, program complexity and structure, and compatibility and adaptability of the program.

Program Manual Arguably, one of the more important program characteristics leading to improved implementation is clear, explicit guidelines and materials for the program. Curriculum manuals can provide scaffolding for the implementation process by providing structure for each program lesson, which in turn leads to less deviation from the implementation plan. For example, in a review by Gottfredson and Gottfredson (2002), reporting on the implementation quality of more than 360 school-based prevention activities found that already prepared program materials, such as handouts, overheads, videos, and assessments, can make implementation easier and deviation from the intended content less likely. Similarly, Payne et al. (2006) drew on a large, representative sample of over 540 American schools in examining the predictors of the intensity of implementation of school-based prevention programs. Using structural equation models, they found that schools using a standardized program manual were more likely to implement more lessons and sessions. Moreover, these schools achieved greater student participation that lasted longer than in those programs without a standardized manual (Payne et al., 2006). While a standardized program with a comprehensive manual can effectively guide implementation, there still remains significant variability in the application and reporting of manualized components (Maggin & Johnson, 2015).

Compatibility, Adaptability, and Complexity As Rogers (2003) and others have noted, when a program is compatible with the values and goals of the school or implementing organization, the likelihood of successful implementation is greater than a program that does not align with the values of the school. A program is also much more likely to be implemented if it fits with the organization's existing priorities and if it is modifiable in accordance with local needs of the classroom or school. Programs that are perceived as flexible and easy to implement also achieve greater implementation success (e.g., Bergström et al., 2015) than programs that are perceived as complex or difficult to implement.

Teacher Factors that Enhance Implementation Success

At the heart of school-based interventions are the individuals who are expected to deliver such programs, the teachers. As central change agents within the classroom, teachers can promote students' positive development and skills through their ability to provide youth with frequent opportunities to practice and learn new skills (Wolfe, Crooks, Chiodo, Hughes, & Ellis, 2012). Although schools can improve student's access to prevention programming, not all teachers are able to successfully implement evidence-based programs and practices. It is, therefore, not surprising that program implementation is highly dependent upon certain characteristics of teachers that may influence implementation. Although program adoption decisions are often made by a school administrator, teachers' support, motivation, and buy-in are critical to implementation success. Durlak and DuPre's (2008) review of implementation influences and impacts identified four teacher characteristics consistently related to implementation. These included (a) perceived need for the intervention, (b) belief that the intervention would succeed, (c) confidence in their ability to carry out the intervention (self-efficacy), and (d) possession of the required skills to implement the intervention. Some of the teacher characteristics related to implementation success are discussed further below.

Teacher Self-Efficacy The research on teacher self-efficacy is extremely compelling in the

achievement of high-quality program implementation. There is substantial evidence to suggest that teachers with a greater sense of their ability to carry out the intervention (i.e., self-efficacy) actually invest greater effort in program implementation, which in turn leads to more successful experiences with new educational strategies and practices (Durlak & DuPre, 2008; Gingiss et al., 2006; Han & Weiss, 2005). In a classroom context, teacher self-efficacy represents a self-judgment of a teacher's belief regarding their capability and their level of confidence to affect student performance functioning (Bandura, 1997). That is, higher-quality implementation is more likely to occur when a teacher feels that he or she could make a difference in the learning of their students. A teachers' sense of self-efficacy has also been found to be related to their enthusiasm about a program and their motivation to implement and experiment with new methods to better meet their student' needs (Gingiss et al., 2006). School administrator support for program implementation has been shown to positively influence teacher self-efficacy (Elias et al., 2003).

Teacher Experience The background of the teacher, such as their experience in implementing the program, has been found to play a role in implementation quality (e.g., Gingiss et al., 2006). For example, Rohrbach, Grana, Sussman, and Valente (2006) found in their research on translating prevention interventions in communities that when someone who has more experience with the program carries out an innovation, high-quality implementation is more likely (Rohrbach et al., 2006). There is some evidence to suggest that implementation quality increases when teachers are more comfortable with the content and delivery method (Rohrbach, D'Onofrio, Backer, & Montgomery, 1996). The program training that a teacher receives has the ability to increase their confidence and comfort in delivering the program, thus influencing the quality of implementation (Ozer, 2006). Training not only should address pertinent program guidelines and components, but it is important that it also addresses the experience teachers will have of competing demands for their time and attention and familiarizes them with skills and techniques to create a classroom environment that encourages meaningful behavior and attitude change (Ozer, 2006).

Teacher Perception and Beliefs Teachers' implementation efforts may also be influenced by their perceptions and beliefs about how a new program fits with their existing priorities. Leadbeater, Gladstone, Yeung Thompson, Sukhawathanakul, and Desjardins (2012) found that program champions of Walk Away, Ignore, Talk it Out, Seek Help (WITS), an evidence-based bullying prevention program, were more likely to adopt the program if it fits with their personal beliefs about children's needs, to their teaching strategies, and to the schools' values, culture, and philosophy. Pankratz, Hallfors, and Cho (2002) found that as long as a prevention program was compatible with the values, needs, mission, and experience of the institution, implementation quality was enhanced. Han and Weiss (2005) found that the compatibility of the program with teacher's beliefs about the anticipated effectiveness of the program appear to influence teachers' ratings of a program's acceptability – and ultimately the effort they invest in program implementation. In his empirical review of school-based violence prevention programs, Ozer (2006) found that better implementation outcomes were achieved when the values and beliefs of the teacher aligned with those in the curriculum.

In terms of the ingredients of a sustainable school-based program, Han and Weiss (2005) argue that teachers must view the program as acceptable, and the program's structure and content need to motivate and inspire teachers to want to implement the program. In turn, this may increase the likelihood of teachers who implement the program with fidelity and commitment. When teachers do not support or believe in the program, not only is implementation impacted but there is an effect on student's response to the program. It has been found that when teachers rate the program low, students may often be uninvolved and disruptive (Fagan & Mihalic, 2003). These findings suggest that the attitude teachers have toward the program has the ability to affect

the degree to which they deliver the program and the subsequent outcomes for students (Ozer, 2006). On the other hand, some teacher attitudes toward the program have the ability to increase implementation quality. For example, comfort with the nature of the program and teaching the content of the curriculum can enhance implementation success (e.g., Durlak & DuPre, 2008).

Organizational Factors that Enhance Implementation Success

Even with the increase in the recognition of the importance of school-based programs that improve the mental health and well-being of students, schools are not primarily organized in a way that facilitates successful program implementation (Cunningham & Cunningham, 2001). Thus, characteristics of the school environment can affect the implementation fidelity of programs.

School Administrator Support Schools lacking organizational capacity have difficulty implementing programs of all types (Durlak & DuPre, 2008; Ennett et al., 2011; Gottfredson & Gottfredson, 2002; Payne et al., 2006; Payne & Eckert, 2010). In particular, when a schools' organizational capacity lacks a supportive administrator, problems with implementation arise. In their role as leaders of the school, school administrators serve as "gatekeepers" for new curricula or programs that are introduced and implemented in their schools (Gottfredson & Gottfredson, 2002). Not surprisingly, their attitudes, behavior, and support can significantly affect teachers' implementation of new programs (Chiodo et al., 2015; Crooks et al., 2013; Gottfredson & Gottfredson, 2002; Payne & Eckert, 2010). In a process evaluation of a school-based drug prevention program, Life Skills Training (LST), it was found that a lack of support by the school administrator contributed to virtually all of the failed sites in the study (Fagan & Mihalic, 2003).

It has been noted that effective school administrators provide the oversight and accountability that is necessary to maintain focus and ensure follow through of prevention programs by teachers in schools (Domitrovich et al., 2008). Conversely, a lack of administrator support can be related to a reduction in rapport with teachers and a lack of feedback shared about the initiative of implementing the program. In turn, dissatisfaction may arise among teachers (Fagan & Mihalic, 2003). Satisfaction with the program among teachers is important for improving the quality of implementation (Ozer, 2006); thus, a lack of support from administrators can have a negative ripple effect on program implementation. An example of the importance of school- and system-level leadership can be seen in the implementation and sustainability plans of the Fourth R, an evidence-based healthy relationship program. In their study of 200 teachers in 26 districts in 6 provinces surveyed regarding barriers to Fourth R implementation and sustainability, Crooks et al. (2013) found that perceived support and accountability of the school administrator predicted implementation fidelity of the program.

The way that school administrators prioritize the program is not only adopting a program to be disseminated school-wide, but they also need to find ways to prioritize the integration of the program into the school's schedule and resource allocation (Fagan & Mihalic, 2003). An administrator's support in this task is important because a common barrier of program implementation includes scheduling issues (e.g., Fagan & Mihalic, 2003). When the scheduling of the program in the school is not prioritized, the fidelity of implementation is compromised. Moreover, it is unlikely that a program will become institutionalized beyond its research initiative if it is not successfully integrated into the school schedule. Since administrators have a strong influence on implementation, it would be advantageous to formally commit administrators to the intervention either by including them in the planning, training, or implementation, as this has been shown to increase quality implementation (Barrett, Bradshaw, & Lewis-Palmer, 2008; Chiodo et al., 2015).

Classroom Environment Factors that have also been found to affect implementation quality

include aspects specific to the classroom. Classroom factors can include the size of the class which impacts affect classroom management, with evidence suggesting that challenges arise to program implementation when a class is larger (Ozer, 2006). The classroom climate also influences implementation. Higher implementation fidelity is achieved when there are higher rates of participation, there is organization, teachers and students have high-quality relationships, and there is a high degree of trust among the students (Ozer, 2006). Depending on the nature of the program, the norms of the classroom have the ability to influence implementation quality. For example, the existing norms in the classroom surrounding aggression have the ability to influence the way that a violence prevention program is implemented (Kellam, Ling, Merisca, Brown, & Ialongo, 1998).

School Environment School factors can include the size of the school, the broader school culture and climate, the school's readiness for change, and the stability of leadership and staff (Ozer, 2006). Similar to classroom size, larger schools have faced struggles achieving a school-wide initiative. If the school climate is not one that contains high-quality relationships or the structure of decision-making and authority figures is not clear, then barriers may exist to program implementation. The openness that teachers and administrators have in regard to change has also been found to be an important implementation factor (Durlak & DuPre, 2008; Mihalic, Fagan, & Argamaso, 2008). Furthermore, the stability of staff is also important such that there is not frequent turnover and teachers are well trained and committed (Ozer, 2006). The training teachers received and the assistance available to them within the school have been noted as a factor influencing implementation throughout the literature. For example, the presence of technical assistance is identified as a meaningful factor in support of implementation quality, with professional development workshops and individualized coaching positively affecting teacher's implementation (Anyon, Nicotera, & Veeh, 2016).

When evidence-based programs are implemented in schools, it has been noted that a collaborative process occurs that facilitate the transfer among service providers. Massey, Armstrong, Boroughs, Henson, and McCash (2005) conducted focus groups with service providers with the goal of learning about their experiences during program implementation in terms of supports and challenges within the school system and whether there were any similarities and differences in these experiences between types of service providers (i.e., external to the school or internal). School-based prevention and intervention programs are often staffed by employees of the school such as the teachers. However, these programs can also be staffed by members external to the school system, such as community-based personnel. While challenges are experienced by both internal and external service providers, certain challenges are unique to each of these groups. Both groups noted that at times they had difficulty implementing the program due to obstacles in obtaining the required materials and resources, being unaware of who the appropriate point of contact would be in particular situations, and difficulty obtaining status and visibly of the program they were implementing (Massey et al., 2005).

Massey and colleagues note some unique barriers for external service providers implementing a prevention program in schools, namely, gaining legitimacy and status in the school setting among staff and students. External service providers struggled with being able to access the school administrators. In cases where principals or other school officials were not salient in their support, the staff implementing the program were left organizationally abandoned without clear communication or authority lines (Massey et al., 2005).

Training, Technical Assistance, and Adequate Resources Even when teachers receive proper training, a manualized program, and perceive support by their school administrators and peers, these factors alone are not enough. It is useful to include ongoing supervision and coaching and provide a high level of technical assistance. Technical assistance refers to the resources offered to teachers once the intervention begins, and no program can be faithfully implemented without adequate resources. Training is needed to provide the knowledge and skills to implement

the program and can help to encourage a commitment to the program among peers. Trained teachers are more likely to full implement a program and with greater fidelity and achieve better student outcomes, compared to untrained teachers (Fixsen et al., 2005; McCormick, Steckler, & McLeroy, 1995; Mihalic, Fagan, & Argamaso, 2008).

Strategies to Overcome the Obstacles of the Implementation of School-Based Prevention Programs

Gottfredson and Gottfredson (2002) suggest that the level of implementation of prevention practices can be improved through better integration of prevention activities into normal school operations; more extensive local planning and involvement in decisions about what to implement; greater organizational support in the form of high-quality training, supervision, and principal support; and greater standardization of program materials and methods. Han and Weiss (2005) have identified essential ingredients that characterize potentially sustainable teacher-implemented classroom mental health programs. In their review, a sustainable program must be (a) acceptable to schools and teachers, (b) effective, (c) feasible to implement on an ongoing basis with minimal (but sufficient) resources, and (d) flexible and adaptable. Below we expand on several keys strategies to enhance the implementation of prevention programs in schools.

1. *Assure the program fits with the values, beliefs, and attitudes of the school and the individuals delivering the program.* Widespread dissemination of effective prevention programs is unlikely to positively change the social, emotional, and behavioral outcomes of students until the quality of implementation of these programs can be assured. As numerous scholars have argued, prevention programs must be compatible with the values, beliefs, and attitudes of the school and the teachers delivering the program to enhance implementation success. Teachers already have very full plates and are under significant pressure to have academic subjects take priority over prevention programs. Programs that can be integrated into existing curricula (Wolfe et al., 2009) and are aligned with the priorities of the school will be better implemented than programs that are seen as additional burden to teachers' workloads.
2. *Prioritize the support, coaching, and ongoing monitoring of school-based program implementation to increase implementation fidelity.* Most schools do not have mechanisms in place to monitor the teachers' implementation of prevention or curriculum-based programs or other professional development activities for which they have received training (Klingner, Ahwee, Pilonieta, & Menendez, 2003). Typically, there are few mechanisms in place to observe whether teachers are actually implementing the program they learned or what additional follow-up support they could use to help their implementation efforts. Programs should include measures of fidelity to ensure that teachers are implementing with fidelity and, where necessary, to increase their fidelity. This suggestion is supported by studies that have found programs to have more positive outcomes when implemented with fidelity (Crooks et al., 2013; Gottfredson & Gottfredson, 2002; Han & Weiss, 2005; Payne & Eckert, 2010). Manualized programs should also include information for teachers regarding why fidelity matters, how to implement with fidelity, ways to increase fidelity, and suggestions of how potential barriers can be surmounted or seen as opportunities to overcome.
3. *Prepare and plan for program adaptation.* Teachers modifying prevention programming offered by researchers is commonplace in school-based prevention. This process has both pros and cons. It may reduce program fidelity when a manualized format has been previously adapted (Maggin & Johnson, 2015). However, adaptations allow teachers to gear material to the specific needs or characteristics of their students, classroom, school,

or community. In addition, teachers who modify programs have been found to develop ownership of the curriculum to a greater degree which could potentially facilitate longer-term maintenance (McCuaig & Hay, 2014).

The challenge remains that without guidance surrounding program modifications or monitoring additions or removal from the program, there is the increased likelihood of program drift. Moreover, it is likely that some changes to programs will be positive and others will be negative. There is a real difference between modifications based on running out of time or a lack of skill or confidence in delivering a particular component and adaptations that are planned, organized, and addressed in a systematic way. There is a recognized need for flexibility, but if program effects are largely based on the extent to which school personnel are able to adhere to the components of an intervention (Maggin & Johnson, 2015), it will be critical to determine which program components are most important for producing desired outcomes.

4. *More research attention should be paid around the practices that promote fidelity of implementation in school settings*. As much of the research shows, it is no longer enough to assume that interventions are being implemented with fidelity. Forgatch, Patterson, and DeGarmo (2005) note that program manuals do not guarantee the competent application of a program. In their study of the fidelity of the Oregon Model of Parent Management Training, they argue that intervention delivery must be evaluated for implementation fidelity to the program content and processes; otherwise it is not clear whether failure to replicate findings is a problem with the program or the application of the program in practice.

Many scholars have argued that traditional approaches to fidelity within the context of health promotion or public health should not be applied within an educational context because the approach does not take into account the different issues and complexities that exist within classrooms and schools. Instead, what has recently been proposed is a new approach toward the understanding of program fidelity within the context of school-based health education (McCuaig & Hay, 2014). Education and health scholars have suggested that intentional adaptations to health programs delivered in schools may not be counterproductive but rather strict adherence to fidelity may compromise or suppress a teacher's capacity to enact the principals of their profession (Achinstein & Ogawa, 2006; McCuaig & Hay, 2014; O'Donnell, 2008). McCuaig and Hay (2014) argue instead that developers and researchers of health education programs must articulate a notion of fidelity that more appropriately accounts for the dynamics and expectations of education systems, including teacher and classroom characteristics.

Some practices that have been noted to promote fidelity of implementation include the need to (1) clearly describe the intervention program, components, procedures, and techniques to the teacher, (2) clearly define roles and responsibilities, (3) create a system for measuring program implementation at all levels, (4) link implementation fidelity and improved outcomes for data, and (5) create accountability measures for noncompliance (Pierangelo & Giuliani, 2008).

Implications for Prevention Research

For school-based prevention programs to achieve the successful outcomes that are observed in effectiveness trials conducted by independent researchers, future research should focus on improving implementation in real-world settings. Currently, school-based prevention lacks comprehensive models that clarify the relationship between implementation actors and processes that contribute to the potential of a program's effectiveness (Greenberg et al., 2001). Several scholars have argued that a better understanding of the barriers and bridges in achieving high-quality implementation of school-based programs is needed (Greenberg, 2004; Roberts-Gray et al., 2007) in addition to reporting on the status of implementation of school-based prevention

programs (Crooks et al., 2013; Elliott & Mihalic, 2004; Gingiss et al., 2006).

One of the most powerful factors in classroom-based prevention programs is the teacher. Future research could include understanding the circumstances that promote or discourage teacher implementation fidelity. Durlak and DuPre's (2008) review of implementation influences and impacts identified four teacher characteristics that have been shown to be related to successful implementation: (1) perceived need for the intervention, (2) belief that the intervention would succeed, (3) confidence in their ability to carry out the intervention (self-efficacy), and (4) possession of required skills to implement the intervention. Future reseach could also expand on the number of factors related to curriculum implementation that resides in teacher attitudes and beliefs.

Beyond teacher characteristics, future research in this area could also include considering other program factors, cultural and individual curriculum demands on fidelity, and classroom makeup that may result in higher fidelity. Klein and Sorra (1996) argue that researchers need to consider the cumulative influences on implementation fidelity (e.g., training, incentives, administrative support, and school climate) rather than focus solely at the individual level (e.g., teacher characteristics). One of the challenging issues in understanding the influences on implementation is that many factors intervene and interact with key elements or active ingredients of programs making it difficult to pinpoint exactly what is creating the effects that are observed.

As a number of scholars have noted, researchers currently face significant challenges in measuring implementation-related factors. While there is likely no single measure that will adequately capture all the elements of fidelity of implementation (Domitrovich et al., 2008), there is a clear need to develop well-validated, cost-effective measures of fidelity of implementation along with a standardized methodology for measuring it. For example, some studies have teachers use logs or tracking forms to document the activities they covered and how much they covered. Other studies will use observations or site visits to assess fidelity. It is also not clear on how much fidelity of program implementation data should be collected. For example, is assessing fidelity of implementation with a random selection of one program session adequate, or do we need to assess fidelity of all program sessions? And how much of a program must be delivered to be considered "high fidelity" compared to "low" or even "medium" fidelity? Future studies examining this topic should address these questions and include several rigorous measures of fidelity that help to verify fidelity and include classroom observations. The inclusion of different dimensions of fidelity such as adherence may also yield different results.

Conclusion and Summary

Although an increasingly popular place of intervention, schools have not been overly successful in their implementation efforts of prevention programs and activities. Implementing evidence-based prevention programs in schools is not merely a matter of training teachers and providing a manual. Moreover, effective prevention programs do not implement themselves; they are carried out by teachers, school administrators, and support staff in the field, within the multidimensional context of the school environment. The demands to raise academic achievement are forever increasing. This emphasis is often at the expense of adopting and implementing prevention programs. With what to many is an inherent juxtaposition of *either* emphasizing academic success *or* implementing prevention programs, the implementation fidelity of these programs may actually worsen. Introducing and effectively supporting evidence-based programs in education are simultaneously promising and problematic. While knowledge about the effectiveness of a program or intervention is important, such knowledge is not necessarily sufficient to change practice in the classroom or school. Unfortunately, evidence about a program does not tell us anything about the changes within an organization or system that need to be made to support implementation. As Jerald (2005) noted in a briefing

report on school improvement, "As thousands of administrators and teachers have discovered too late, implementing an improvement plan – at least any plan worth its salt – really comes down to changing complex organizations in fundamental ways" (p. 2). Educational settings and prevention science researchers must attend to the process of implementation to ensure that evidence-based innovations are effective and _sustainable in typical classroom settings (Fixsen et al., 2009). Integrating implementation science into the educational domains of prevention will help with the tough questions of how to deliver successful replications of programs in real settings.

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What Works in School-Based Mental Health Service Delivery?

3

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Abstract

Recognition of unmet mental health needs of children and youth has helped to prompt the advancement of more comprehensive mental health services for youth in schools, involving the mental health and education systems joining together to improve the depth and quality of services. These partnerships assist the mental health system in gaining access to children and youth and providing services to them in a more natural setting and assist the education system through enhanced services to help students in need.

The gap between more serious emotional/behavioral challenges in children and youth and the availability of effective services has been well documented, with around one in five youth qualifying for a mental health diagnosis (2010b; Merikangas et al., 2010a). Despite the alarming prevalence of mental health concerns, only half of youth actually receive treatment for their mental health challenges (Merikangas, He, Burstein, et al., 2010). This is especially true for youth under the poverty line; these youths are 1.5–2 times the risk of having mental health concerns (Slopen, Fitzmaurice, Williams, & Gilman, 2010) yet are twice as likely to not receive mental health treatment (Ghandour, Kogan, Blumberg, Jones, & Perrin, 2012).

Recognition of unmet mental health needs of children and youth has helped to prompt the advancement of more comprehensive mental health services for youth in schools, involving the mental health and education systems joining together to improve the depth and quality of services (Weist, 1997). These partnerships assist the mental health system in gaining access to children and youth and providing services to them in a more natural setting and assist the education system through enhanced services to help students in need. A number of terms are used to describe these more comprehensive mental health programs in schools, including school-based mental health (SBMH), expanded school mental health (Weist, 1997), and school behavioral health. Consistent with the title of this book, we will use the term SBMH throughout this chapter.

Brief History

In the United States (USA), SBMH has its roots in the school-based health center (SBHC) movement, with these centers beginning to be developed in the 1980s to address the growing unmet

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health needs of youth in schools (National Assembly on School-Based Health Care, 2002). Since the introduction of SBHCs, referrals for mental health concerns constituted one-third to one-half of all student referrals (Center for Health and Health Care in Schools, 2001). In Baltimore and other cities adopting SBHCs early on (e.g., Dallas, Minneapolis), the high demand for mental health services got the attention of policy leaders and prompted the expansion of mental health services in schools both connected to and not connected to SBHCs (Flaherty, Weist, & Warner, 1996).

Directly related to experiences of SBHCs in identifying and providing services to address significant unmet emotional/behavioral (EB) challenges in students in the USA, the federal Maternal and Child Health Bureau (of the Health Resources and Services Administration) launched its Mental Health in Schools initiative in 1995 (Adelman et al., 1999). The bureau funded two national training and technical assistance centers: the Center for School Mental Health (CSMH) at the University of Maryland, Baltimore, and the Center for Mental Health in Schools at the University of California, Los Angeles, as well as five states to build infrastructure for SBMH (Kentucky, Maine, Minnesota, New Mexico, and South Carolina). In the early 2000s, the CSMH began collaborating with the Individuals with Disabilities Education Act (IDEA) partnership, a group of federal and national partners seeking to improve learning supports for children in schools, to develop a National Community of Practice (CoP; see Wenger & Snyder, 2000) on Collaborative School Behavioral Health (Weist, Lever, Bradshaw, & Owens, 2014). The CoP focused on involving diverse stakeholder groups (e.g., education, mental health, family and youth advocacy, child welfare, juvenile justice) in strengthening relationships and partnerships as a foundation for furthering progress in SBMH across practice, research, and policy dimensions (as well as linking efforts across these dimensions). The CoP emphasized "leading by convening" (Cashman et al., 2014), enabling diverse groups to move from discussion to dialogue to real collaboration in advancing SBMH, and a "shared agenda" with all stakeholder groups, especially education, mental health, and family and youth advocacy, having an equal voice in driving the improvement and building capacity for the field through a range of collaborative activities (see Andis et al., 2002). The emphasis on the CoP continues to this day, and the CSMH (see http://csmh.umaryland.edu) has continued to broaden its scope, for example, through emphasis on issues such as school safety, cultural competency, trauma sensitivity, bullying prevention, student dropout prevention, and other related issues (Weist et al., 2014).

With more than three decades of experience related to comprehensive SBMH services in the USA, much has been learned about how to implement these services effectively. Key themes include clarifying roles and responsibilities; moving toward genuine interdisciplinary collaboration; effectively working within the school's multitiered system of support (MTSS), involving promotion/prevention at Tier 1, early intervention at Tier 2, and treatment at Tier 3; engagement of students and family in services and in providing guidance to the program; evaluation, data-based decision-making, and quality assessment and improvement; implementing evidence-based practices; and culturally competent practice. Each of these themes is reviewed in the following.

Clarifying Roles and Expectations

For effective SBMH, it is important for team members (e.g., teachers; administrators; behavioral specialists; school psychologists, counselors, social workers, and nurses; collaborating community mental health professionals) to understand the roles and responsibilities of all. Establishing and operating within the parameters of memoranda of agreement (MOA) helps to increase role clarity. MOAs are formal documents that clearly define the terms and details of a collaborative partnership between the school and collaborating community mental health clinicians (Rabinowitz, 2016; Ross et al., 2010). MOAs can be used to clarify and define roles and expectations of all parties involved in bringing

collaborating mental health providers into the school and can help create a shared understanding of the ways in which they will interact with the school. For example, in the model for Baltimore City, community mental health systems and providers receive contractual funds to provide SBMH, and, in return for these funds, agree to common training on evidence-based practices (EBPs), common measurement, and quality improvement strategies, and are sanctioned to have roles on school teams, including assisting with Tier 1 and 2 programs in addition to their more significant role in providing Tier 3 intervention services (Weist, Paternite, Wheatley-Rowe, & Gall, 2009). Without such clearly defined roles, the practice of SBMH can vary from school to school, and collaboration between clinicians and school personnel may be limited, resulting in confusion, disjointed services, and limited improvement in student outcomes (Weist et al., 2014).

MOAs are best utilized when developed and finalized before SBMH services begin in the school and can serve as a means of articulating both the school's and the mental health system's commitment to providing quality SBMH services (Tan et al., 2014). When developing a MOA, school personnel, SBMH clinicians/staff, and other relevant individuals should hold conversations and come to a mutual understanding about the details of the partnership. Before the MOA is finalized, all parties should carefully review and raise any questions or concerns they have noted (Rabinowitz, 2016). Terms of the MOA can also be reviewed and revised with each academic year to ensure that the roles and responsibilities defined accurately reflect the ongoing partnership (Eber, Weist, & Barrett, 2013).

MOAs should be explicit and detailed to ensure that all parties understand their expected roles. There are a number of content areas schools and SBMH clinicians may emphasize in these MOAs, and the applicability of each area will vary by school. MOAs may include information on the following topics.

Roles and Responsibilities of Each Party MOAs should clearly delineate the roles and expectations of each party involved, including descriptions of both general functions and specific roles of each party/individual (Rabinowitz, 2016; Ross et al., 2010; Tan et al., 2014). For example, roles of SBMH clinicians may include providing evidence-based services to students and their families, participating in school team meetings, and consulting/collaborating with relevant school personnel, while the roles of school-employed staff may include providing access to school resources, developing safeguards to ensure student confidentiality, allowing SBMH clinicians access to student records, and participating in referral procedures.

Evaluation of Student Mental Health and Other Outcomes MOAs should describe how student emotional/behavioral outcomes will be evaluated, how often, and by whom (Eber et al., 2013; Ross et al., 2010). This description may include information about the roles/responsibilities of all party members in outcome evaluation, safeguards for how this information will be kept confidential, and how outcome data will be shared and used to improve SBMH efforts. Information about specific measures that will be utilized to evaluate outcomes and how these measures will be obtained or purchased may also be included.

Parameters Surrounding Communication and Conflict MOAs should include information about communication between SBMH clinicians and school staff (Eber et al., 2013), as well as how conflicts will be managed and resolved if they arise (Tan et al., 2014). This includes communication regarding SBMH caseloads or updates regarding specific students, procedures regarding communications surrounding student crises (e.g., suicidality or homicidality), and limitations of the collaborating clinician's ability to communicate about individual cases (i.e., to protect confidentiality of their clients). Ideally, there is a proactive stance about both protecting the student and family's confidentiality/privacy, but also sharing information appropriately among school- and community-employed

team members. For promotion/prevention and early intervention services at Tiers 1 and 2, there should be no barriers to communication, with these services considered part of the education system's emphasis on assisting students and reducing barriers to their learning. At Tier 3, with strong MOAs, the collaborating community clinician and school-employed staff should be able to have open discussions about students receiving services, for example, with the consent form for services indicating the clinician and relevant school staff will collaborate in discussing the student's progress, with all information held in strict confidence. Unfortunately, too often, confidentiality/privacy issues can become a barrier to collaboration without arrangements established as we describe here (Eber et al., 2013).

Clarity of Funding Mechanisms It is important to clarify specific financial responsibilities of each party in these collaborative school-community mental health system partnerships (Eber et al., 2013; Tan et al., 2014; Weist, Paternite, et al., 2009). It should be noted that schools should develop a legally binding contract rather than solely a MOA in any instance where a sum of money is exchanged (Rabinowitz, 2016), although MOAs can also reflect financial responsibilities as defined in the contract. Financial obligations to be clarified include payment of any portion of the SBMH clinician's salary, purchasing mental health outcome evaluation measures, or SBMH clinician use of materials that may require a cost to the school (e.g., printing).

Assuring Genuine Interdisciplinary Collaboration

Successful interdisciplinary collaboration in SBMH is characterized by communication, cooperation, and coordination with school- and community-employed staff members (Anderson-Butcher & Ashton, 2004; Weist, Proescher, Prodente, Ambrose, & Waxman, 2001). As reviewed earlier, the range of collaborators is large, including teachers (in general and special education), school psychologists, counselors, social workers and nurses, school administrators, allied health staff (e.g., speech pathologists, occupational therapists), and the collaborating community mental health clinicians. In addition, there is increasing emphasis of including family members and older youth as members of school teams, enabling them to be significantly involved in shaping the school environment and SBMH programs and services (Weist, Garbacz, Lane, & Kincaid, 2017). Each of these professionals/stakeholders plays an important role in the overall SBMH effort and the identification of students in need of services, and all share a common goal of improving the overall well-being and functioning of students (Weist et al., 2001). Despite this, many of these professionals work parallel to each other with little interaction (Anderson-Butcher & Ashton, 2004).

Collaboration between community clinicians and school-based professionals has been linked with enhanced treatment outcomes and satisfaction with services (Lever et al., 2003; Weist et al., 2001) and more efficient resource utilization through reduction of duplicated services/efforts (Anderson-Butcher & Ashton, 2004; Rappaport, Osher, Greenberg Garrison, Anderson-Ketchmark, & Dwyer, 2003). Alternatively, a lack of partnership and collaboration among school- and community-employed professionals and family and youth stakeholders can lead to ineffective, disjointed, and potentially duplicated services (Weist et al., 2001).

Interdisciplinary collaboration can involve a number of challenges, including "turf" issues (Waxman, Weist, & Benson, 1999; Weist et al., 2001); the time required to build and maintain collaborative relationships (Bronstein, 2003); lack of school staff awareness of the presence, role, and/or effectiveness of community clinicians in the building (Weist et al., 2001); lack of clinician understanding of school culture (Rappaport et al., 2003; Waxman et al., 1999); and discipline-specific differences in approaching the work of assisting children and youth (Bronstein, 2003). Successful SBMH practitioners are able to work with a variety of professionals and demonstrate respect for their disciplines and contributions, recognizing each profession-

al's unique strengths and areas of expertise and treating each professional as an equal partner in the larger effort to meet student needs. Mutually developed goals and clearly stated expectations of collaboration can be effective in clearing up miscommunications and making sure all partners are "on the same page" (Rappaport et al., 2003; Weist et al., 2001). In fact, through working together and clarifying roles of all representative parties, "turf" issues and tension between disciplines may be reduced or eliminated (Waxman et al., 1999). Regular contact and communication with school professionals about topics such as community clinician roles and referral processes as well as consulting about specific students can build school staff awareness and understanding of SBMH and can serve as an avenue for school staff to ask questions, share information, and voice concerns (Waxman et al., 1999). This can also be helpful in increasing community clinicians' orientation to and understanding of school processes and culture (Rappaport et al., 2003; Waxman et al., 1999). At the policy level, guiding entities such as schools and mental health agencies should allocate time and resources to ensure that community clinicians and school staff are able to schedule collaboration efforts into their work week.

Interdisciplinary collaboration extends to other youth-serving systems such as child welfare and juvenile justice systems. Students involved with these systems are likely to have experienced adverse life events (Bruskas & Tessin, 2013) and will often meet criteria for a mental health diagnosis (Lever et al., 2009; Osterlind, Koller, & Morris, 2007; Teplin et al., 2007), indicating a high need for SBMH services. As such, community clinicians are in an excellent position to act as liaisons between schools and these other youth-serving systems (Lever et al., 2009). Working with students involved with these other youth-serving systems can be a complicated process that requires effective communication and collaboration to run smoothly, as well as knowledge of system processes and efficient exchange of clinically relevant information and associated organizational records (Brock, O'Cummings, & Milligan, 2008). Additionally, involvement of the child's parents or guardians is crucial to this collaboration; family engagement has been found to improve child safety, well-being, and positive outcomes, and promotes family stability and treatment engagement (Brock et al., 2008; Children's Bureau, 2017; Lever et al., 2009; Weist et al., 2017).

Effectively Operating Within the Multitiered System of Support

A multi-tiered system of support (MTSS) is a framework for promoting positive social, emotional, behavioral, and academic functioning of students (Sugai & Horner, 2009). Inspired by frameworks from public health and prevention science (Mrazek & Haggerty, 1994; O'Connell, Boat, & Warner, 2009), MTSS approaches utilize three tiers to address needs in the student population, including universal promotion/prevention (Tier 1) for all students, early identification and targeted intervention (Tier 2) for students at risk or showing early signs of problems, and more intensive, individualized intervention or treatment (Tier 3) for students demonstrating more significant problems (Horner, Sugai, & Anderson, 2010).

An example of a widely used MTSS that targets the improvement of social, emotional, behavioral, and academic outcomes of students is Positive Behavioral Interventions and Supports (PBIS). PBIS is the mostly widely implemented EBP in education and human services fields (Fixsen & Blase, 2008), with over 25,000 schools currently implementing it (Office of Special Education Programs Technical Assistance Center on PBIS, 2017). This approach has demonstrated effectiveness in improving school climate, reducing student discipline referrals, decreasing suspension rates, decreasing referrals for counseling, improving academic achievement and student quality of life, and increasing parental involvement in education (Bradshaw, Koth, Thornton, & Leaf, 2009; Bradshaw, Mitchell, & Leaf, 2010; Kincaid, Knoster, Harrower, Shannon, & Bustamante, 2002).

Utilizing concepts of implementation science, PBIS promotes sustainability and scalability by

emphasizing data-based decision-making and use of EBPs, providing clear guidance for collaboration, teaming, and establishing well-defined roles for personnel (Horner et al., 2010). The well-designed structure provided by a MTSS is a significant strength of PBIS. However, in practice, PBIS and MTSS models often place emphasis on universal supports at Tier 1, contributing to less developed Tier 2 and Tier 3 programs and services (Eber et al., 2013). Additionally, PBIS has a strong emphasis on behavior; therefore, internalizing concerns such as anxiety or trauma may be overlooked.

Alternatively, while well-done SBMH services are associated with positive outcomes such as improving access to care (Atkins et al., 2006; Catron, Harris, & Weiss, 1998) and positive outcomes for students (Center for School Mental Health, 2013), SBMH lacks an implementation structure, contributing to community clinicians and school staff operating separately and limiting opportunities for enhancing depth and quality of programs within the MTSS (Barrett, Eber, & Weist, 2013).

Related to increasing recognition of missed opportunities because PBIS and SBMH have operated separately, for about 10 years in the USA, efforts have sought to join these two approaches through an Interconnected Systems Framework (ISF). Supported by national centers for both fields (www.pbis.org, http://csmh.umaryland.edu), an e-book reviewing multiple dimensions of ISF implementation (e.g., building, district, and state implementation, effective teams, using data for decision-making, implementing EBPs, federal and national support) was published in 2013 as a free downloadable resource (see Barrett et al., 2013). In addition, a national ISF workgroup is supporting implementation in more than 25 sites in the USA, and a current randomized controlled trial funded by the National Institute of Justice is exploring the impacts of the ISF compared to PBIS alone or typical PBIS+SBMH and parallel functioning. In the USA, there is increasing enthusiasm for ISF implementation as a method to capitalize on complementary strengths of PBIS and SBMH and on economies of scale.

The Importance of School Teams The development and ongoing operation of effective interdisciplinary teams is perhaps the most important quality indicator in SBMH (Splett et al., 2017). These teams should be inclusive and diverse, including school-employed mental health staff (e.g., psychologist, counselor, social worker), general and special education teachers, the collaborating community clinician, and ideally family members and older youth (Barrett et al., 2013; Weist et al., 2017). In regular meetings, team members should discuss, set goals, and coordinate efforts to improve Tier 1, 2, and 3 programs and services, actively using data to guide decision-making around the implementation and refinement of EBPs, as well as coordinating programs and resources within the school and with other youth-serving systems (Anderson-Butcher & Ashton, 2004; Barrett et al., 2013; Brock et al., 2008; Splett et al., 2017).

In addition to building level school teams, the ISF recommends the development of a District-Community Leadership Team (DCLT) to oversee and guide the improvement and expansion of programs and services within the MTSS. The DCLT is comprised of leaders with decision-making authority within school districts, mental health, and relevant community agencies, as well as family and youth advocates and other stakeholders, and provides clear and consistent leadership for systems-level changes, including allocating additional resources as needed. The DCLT also serves as a liaison between higher-level district and state-level programs and resources, getting these enhanced resources down to school buildings and in turn tracking best practices in buildings and organizing them for dissemination and technical assistance to other schools (Barrett et al., 2013).

Student and Family Engagement in Programs and Services

A critically important quality indicator in SBMH is the active engagement of students and their families in all aspects of services. Engagement

involves forming a connection with students and families and maintaining an open dialogue (Hoagwood, 2005), with students and families serving as equal, collaborative partners (Bode et al., 2016; Staudt, 2007). Moreover, student and family engagement in services is foundational to the delivery of EBPs (McKay & Bannon, 2004; Weist et al., 2017). For example, research has shown that students who are engaged in their own treatment are more positively impacted by (Karver, Handelsman, Fields, & Bickman, 2006; Voight, 2015) and participate more fully in treatment (Staudt, 2007). Family engagement in treatment has also been shown to have a positive impact on treatment and student outcomes, decreases problem behavior and prevents such behavior from worsening, and improves relationships within families and between families and the school (Chorpita, Daleiden, & Weisz, 2005; Garbacz, Witte, & Houck, 2017; Karver et al., 2006).

SBMH practitioners working in schools can foster engagement by partnering and collaborating with students and their families not only in the early, rapport-building stages of treatment but throughout the duration of the therapeutic relationship (Staudt, 2007). As mentioned, this is best accomplished by treating the relationship as an equal partnership rather than a hierarchical relationship wherein the provider is the "expert" (Becker, Buckingham, & Brand, 2015; Cohen, Linker, & Stutts, 2006; Garbacz et al., 2017; Hoagwood, 2005; Minke & Anderson, 2005). Families can serve as important sources of information regarding presenting symptoms and strengths of their children, should help guide treatment plan development and implementation, and, through the collaborative relationship with the clinician, help to support the accomplishment of treatment goals (Becker et al., 2015; Osher, Osher, & Blau, 2008; Perales et al., 2017).

Engagement in treatment is most effective when conducted in a manner that empowers students and their families by bolstering their strengths, supports, and resources, providing them with the skills needed to advocate for themselves (Hoagwood, 2005). Approaching treatment from an empowerment framework communicates the understanding that students and their families have strengths and competencies that can be utilized to make decisions, advocate for themselves, and get their own needs met (Minke & Anderson, 2005). Notably, engaging families in a manner that fosters empowerment is related to lower levels of parenting stress (Bode et al., 2016).

Despite the benefits of engaging families in treatment, this often does not occur in school mental health; in fact, lack of parent engagement has been noted as a major challenge within education and mental health systems (Kutash & Duchnowski, 2013; Weist et al., 2017). Engaging families in SBMH services can be challenging for a variety of reasons, including conflicts with family work schedules, transportation difficulties, coordination of child care for other children in the family, and family history of negative prior experiences with school-based personnel (Becker et al., 2015; Bode et al., 2016; Staudt, 2007; Weist et al., 2009). These barriers may be especially salient for families of lower socioeconomic status, who may encounter these hardships more frequently and may have had their own negative experiences in school (Minke & Anderson, 2005). Individuals providing mental health services in schools likely need to "go above and beyond" to engage families in services, and many of these providers may find themselves lacking the funding, resources, and/or availability to adequately do so.

SBMH practitioners working in schools may need to find creative solutions to work around the barriers for family engagement in SBMH services. This includes being as flexible as possible when scheduling meetings with families, offering regular phone calls for families with transportation difficulties or demanding work schedules (Becker et al., 2015), providing information about treatment—including roles and expectations surrounding student/family participation in treatment as well as information about treatment effectiveness—at the onset of treatment (Becker et al., 2015; Cohen et al., 2006; Minke & Anderson, 2005). Taking care to establish rapport and providing the family with examples of positive interactions with practitioners may help to counteract

negative prior experiences with mental health and/or school personnel (Becker et al., 2015). Conversations with students and families about anticipated barriers to treatment engagement and collaborative problem-solving around identified barriers can also be a way of increasing engagement later in treatment (McKay, Stoewe, McCadam, & Gonzales, 1998).

Evaluation, Data-Based Decision-Making, and Quality Assessment and Improvement

Evaluation is necessary for providing high-quality SBMH care (Nabors, Weist, & Reynolds, 2000). School-wide evaluation such as universal mental health screenings can help schools identify students at risk or showing early signs of mental health challenges and rapidly connect those students with indicated supports (Eber et al., 2013). Evaluation of SBMH services provided enables the practitioner and other school staff to ensure that interventions being delivered are appropriate and effective for the students receiving them. Data can be used to make decisions about which students are receiving a given intervention, whether it is necessary to tailor the intervention, and how the intervention is being delivered (Barrett et al., 2013; Greenberg et al., 2003). In addition, evaluation allows for outcomes of shared value—such as improvements in attendance, academic performance, discipline referrals, rapid access to care, and improvement in emotional/behavioral outcomes—to be documented in plain language that can be understood by the full range of stakeholders (e.g., district leaders, administrators, teachers, families, community members; Nabors et al., 2000). When programs document that they are achieving valued outcomes, they are more likely to be a priority in the community and sustained (Weist, Nabors, Myers, & Armbruster, 2000). Finally, evaluation can be used to inform SBMH policy at the school, district, state, and national levels. If a significant number of SBMH programs in a region are having difficulties with a given problem (e.g., significant increase in suicide attempts in an area), the agency or organization coordinating services in this region may direct additional resources or recommend policy changes to address the need.

Depending on the purpose and intent of an evaluation, there are two primary types: process evaluation and outcome evaluation. A process evaluation gathers information about how a program is operating and aims to measure the extent to which the program is operating as intended (Weist et al., 2000). Process evaluation typically considers the dosage of services received, reach of services (e.g., equitable receipt of services across demographic groups), quality of services provided, and the fidelity of particular interventions to defined parameters (Rossi, Lipsey, & Freeman, 2003). Ultimately, the goal of a process evaluation is to ensure quality and that process data are used to inform continuous improvement of the program. These efforts increase the likelihood that effects will be detected in an outcome evaluation if the program is indeed effective. An example of a process evaluation is tracking the use of evidence-based interventions and approaches by clinicians. An outcome evaluation documents the effects of a program on indicators of shared value to stakeholders (Weist et al., 2000). Assessing the extent to which students receiving SBMH have significant reductions in mental health symptoms and improvements in school and life functioning is an example of outcome evaluation. In the following, we provide evaluation examples from the individual (e.g., student), school, and systems (e.g., regional, national) levels of analysis.

At the individual level of analysis, evaluation efforts often involve documenting a student's progress in response to receiving a particular intervention (e.g., improvements in life functioning as a result of cognitive behavioral therapy) and using regularly collected data to inform treatment. In addition, other indicators that may indirectly improve quality of care can be assessed, such as clinician use of EBPs or clinician productivity. Quality assessment and improvement (QAI) is an example of this method in practice (Ambrose, Weist, Schaeffer, Nabors, & Hill, 2002; Evans, Sapia, Axelrod, & Glomb, 2002). In addition to monitoring outcomes and progress for

students receiving care, there is focus on tracking use of EBPs, provision of culturally competent care, involving stakeholders in discussions and decision-making about SBMH, and clinician productivity, among others (Ambrose et al., 2002; Evans et al., 2002). Systematic strategies focusing on QAI have been documented to improve the quality of care provided to students receiving SBMH services (Weist, Paternite, et al., 2009).

At the school level, evaluation consists of examining school-wide student data trends—such as attendance, discipline referrals, and screening data—as well as other school-wide data, such as staff ratings of school climate. These data can be used to inform implementation and targeting of school-wide interventions. An example of this is PBIS (discussed earlier), which utilizes regular collection of school data to help schools make data-based decisions about the programming and effective implementation of promotion/prevention (Tier 1), early intervention (Tier 2), and intervention (Tier 3) programs and services (Horner et al., 2010).

Finally, evaluation at the systems level of analysis can be particularly beneficial for informing policy and best practice on a district, state, regional, or national level. An example of this is the SHAPE System (see www.theshapesystem.com), which was developed and is managed by the CSMH. The SHAPE System enables schools to complete SBMH quality and sustainability assessments, which can be used to inform implementation and sustainability efforts. Data provided by schools across the USA are then used to map the status of the field through a "school mental health census." These data are being used to identify areas of strength and potential growth for SBMH programs nationally, as well as to inform national policy and technical assistance efforts aimed at improving and supporting SBMH across the country.

Implementing Evidence-Based Practices

The effective implementation of evidence-based practice (EBP) in the fluid and challenging environment of schools is foundational to the growth of the SBMH field, and it is broadly acknowledged that this work is very hard (see Evans & Weist, 2004). EBP is defined as "the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" (American Psychological Association, 2005, p. 273). EBPs are typically theory-driven, involve pursuit of specific and targeted goals, and are time-limited (Kazdin, 2008; Schaeffer et al., 2005).

EBPs have been reliably shown to outperform usual care and result in improved outcomes, including reduced mental health symptoms and functional impairment as well as increased overall life satisfaction and well-being (Weisz, Jensen-Doss, & Hawley, 2006). In addition to these valued outcomes, students receiving EBPs spend less time in treatment, meaning that students can receive needed services more rapidly (Schaeffer et al., 2005). More recently, emphasis has been placed on delivering universal and selected EBPs in schools to strengthen promotion/prevention and early intervention efforts (Daly, Nicholls, Aggarwal, & Sander, 2014; Weist, Stiegler, Stephan, Cox, & Vaughan, 2010). Unfortunately, there is a significant research to practice gap in EBPs that has been well documented (Kazdin, 2008; US Public Health Service, 2000), particularly in school settings (Ringeisen, Henderson, & Hoagwood, 2003; Weist & Christodulu, 2000). This gap has resulted in many students receiving interventions that lack empirical support (Zins, Weissberg, Wang, & Walberg, 2004). While schools present a unique opportunity to address the mental health needs of children and adolescents "where they are," there are several barriers that affect the implementation and delivery of EBPs in schools.

Some of the most frequently cited barriers to implementation of EBPs include logistical problems (e.g., funding, problems accessing EBP materials, lack of school/administrator support), lack of training to implement EBPs with fidelity, limited implementation support, varying attitudes toward EBPs, and lack of family engagement (Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010; Schaeffer et al., 2005). Increasingly, school administrator support has been recognized

as necessary for schools to have the adequate infrastructure, approach, and support to implement EBPs effectively across tiers within the multitiered system of support (Kam, Greenberg, & Walls, 2003; Langley et al., 2010). Additionally, many clinicians have not had prior exposure to EBPs and may not have access to training in EBPs (Addis & Krasnow, 2000; Schaeffer et al., 2005). This gap in training highlights the need for expanded professional development opportunities for SBMH practitioners. Other SBMH practitioners may be resistant or have negative attitudes toward EBPs for a number of reasons, including concerns that EBPs are not flexible, may result in damaged rapport, and are not responsive to the student's needs (Eiraldi, Wolk, Locke, & Beidas, 2015; Garland, Bickman, & Chorpita, 2010). Finally, active family engagement—discussed earlier in this chapter—is an essential yet challenging aspect to delivering EBPs in the school setting; that is, most interventions for children and youth will be more effective when families are involved, yet many SBMH programs struggle with this aspect of care (see McKay & Bannon, 2004; Weist et al., 2017).

On an encouraging note, advances in recent years show promise for improving the quality of SBMH and increasing the likelihood of implementing EBPs. One example is the use of modular EBPs. The premise of modular EBPs is that there are common practices across evidence-based treatments that are "active ingredients" responsible for client improvement (Chorpita, Becker, Daleiden, & Hamilton, 2007). For example, using specific praise and tangible rewards is found in virtually all evidence-based treatments for externalizing behavior problems such as oppositionality and acting out (Chorpita & Weisz, 2009). Modular EBPs are condensed from common practices used across evidence-based treatments into a user-friendly system that matches appropriate modular EBPs to client problems (Chorpita et al., 2007). Perhaps due to this streamlined approach, clinicians report increased favorability toward EBPs after being trained in modular protocols compared to standard manualized protocols (Borntrager, Chorpita, Higa-McMillan, & Weisz, 2009). In addition, effectiveness trials have demonstrated that modular EBPs outperform both standard manualized treatments and treatment as usual on symptom reduction and functional improvement (Weisz et al., 2012). Increasingly, modular EBPs have been used in SBMH research and practice due to their flexibility, effectiveness, and ability to be tailored to the unique needs of each student (Lyon, Charlesworth-Attie, Vander Stoep, & McCauley, 2011; Stephan et al., 2012; Weist et al., 2009).

Culturally Competent Practice

A foundation of any successful delivery of mental health services—both in and out of schools—is culturally competent practice. It is vital that SBMH scholars and practitioners give priority to increasing cultural responsiveness in research, assessment, and practice (Clauss-Ehlers, Serpell, & Weist, 2013). In this section, we discuss how SBMH practitioners can enhance prevention, early intervention, and treatment efforts by acknowledging the existence of social inequalities, committing to increasing awareness and willingness to dismantle discriminatory systems, and improving their own multicultural practice. Although we focus mainly on racial/ethnic cultural diversity, it is important to note that the need for culturally competent practice is not limited solely to race/ethnicity but to other marginalized populations such as the LGBTQ+ community, immigrants, refugees, low-income families, and those with disabilities.

Within the rapidly growing SBMH research literature, there has been relatively little attention paid to the concept of equity, especially as it intersects with race/ethnicity and culture. Racial inequities are a wide-spread mental health issue for children (Masko, 2005). They are evident with higher numbers of ethnically diverse students in under-resourced schools (Stovall, 2006), disproportionate numbers of students of color facing extreme disciplinary measures (Alexander, 2012; Skiba et al., 2011), and the disconnected relationships between racially diverse students and the predominately white education and men-

tal health professionals (Annapolis Coalition, 2007; McGee & Stovall, 2015). This creates additional barriers to learning for racially and culturally diverse students. Continued research, with attention to cultural competency, is imperative in advancing interconnected training, practice, research, and policy in SBMH.

Acknowledging the ubiquitous role of racism in schools is important in understanding how it impacts mental wellness. Students may experience racial trauma through racial harassment, micro aggressions, witnessing racial violence, and institutional racism; this may lead to symptoms of depression, anxiety, low self-esteem, humiliation, poor concentration, irritability, mental fatigue, and/or psychological distress (McGee & Stovall, 2015; Turner & Richardson, 2016). When institutions fail to understand that racism is embedded in systems, theories, practices, and approaches on top of "a model of illness that somehow fails to grasp the realities of human suffering and misfortune; racism is allowed to thrive" (Fernando, 2012, p. 117). Further investigation is essential to understand how SBMH structures address the unique challenges of racism and what modifications need to occur to better meet the needs of students battling discrimination and its associated negative circumstances.

Student-adult relationship building, connections, and trust are important for student growth and wellness. In the USA K-12 classrooms, 82% of teachers are white, yet by 2024 more than 53% of students will be of color (US Department of Education, 2016). This cultural "mismatch" can negatively affect classroom relationships and educators' abilities to be able to relate to a student's background, experiences, and values (McAllister & Irvine, 2000). African-American and Latino families report a mistrust and a concern over professional competency in working with their race, which may decrease the likelihood of mental health treatments being used (Gonzalez, Alegría, Prihoda, Copeland, & Zeber, 2011). This points to an important direction for advancing the field, that is, studying patterns of teachers, clinicians, and other school staff who are able to build strong relationships with diverse populations of students in ways that assist in delivering EBPs and achieving valued outcomes (see Clauss-Ehlers et al., 2013) and further evaluate the impact these relationships have on mental health.

Recommendations for Improving Culturally Competent Practice

Recognize and Increase Awareness that the Inequities of Society Are Also Evident in the Education and Mental Health Communities Some people struggle accepting that there are inequities in society (Stovall, 2006), especially if they lack awareness and attention and/or do not experience discrimination. The resistance to acknowledging these inequalities exacerbates discrepancies for marginalized communities and increases discrimination and related problems in society and schools. It is important for educators and mental health professionals to engage in discussions about the negative circumstances associated with discrimination and related problems that are experienced by many people in society. This engagement in the issue through dialogue has the potential to increase sensitivity to relevant issues and in turn more sensitive and appropriate policies and programs (Clauss-Ehlers et al., 2013).

Train Culturally Competent Educators, Mental Health Providers, and Other School Staff to Be Able to Effectively Meet the Diverse Needs of Students/Families They Serve To accomplish this goal, it is essential for educators, mental health providers, and other school staff to understand the significant problem of implicit bias or the unintentional stereotypes and/or judgments people make based on rapid (often subconscious) processing about a person they meet (Staats, Capatosto, Wright, & Contractor, 2014). These rapid (and erroneous) judgments about students and their families (e.g., "he is from a poor family and neighborhood….") may directly contribute to negative outcomes for students such as hopelessness and depression (see McGee &

Stovall, 2015). The full range of school staff and collaborating community clinicians should receive ongoing training and support for culturally responsive strategies for working with diverse students and families.

Use Culturally Relevant Pedagogy Ladson-Billings' (2014) extensive work on culturally relevant pedagogy identifies that the most effective teachers have strengths in academic success, cultural competence, and awareness of key events/trends in society and how they are affecting students. These teachers have high expectations, try to learn about at least one other culture other than their own, and push learning beyond the classroom to apply lessons learned in school to thinking about and ideally contributing to constructive dialogue about challenges occurring in society (Ladson-Billings, 2014).

Engage in Culturally Appropriate Outreach and Intervention There is very little research on ethnic minority mental health and how different ethnic groups utilize SBMH services, but the research that is available indicates that there is a discrepancy, with some ethnic minority populations being less likely to seek mental health services (Cokley, Hall-Clark, & Hicks, 2011). While the cause of the discrepancy is not fully understood, there is evidence that supports a need for more culturally relevant assessments and outreach to reduce barriers for treatment (Locke et al., 2017). Recommendations here include enhancing mentoring and other forms of positive adult support to youth of color, hiring more ethnically diverse professionals, and involving diverse local experts in cultural competence in making some appropriate adaptations for diverse youth (Brinson & Kottler, 1995; Cokley et al., 2011).

Implement Culturally Responsive Multitiered Systems of Support As discussed earlier in the chapter, the ISF is a multitiered framework that blends education and mental health systems (Barrett et al., 2013). One of the critical challenges for ISF and the work to join together SBMH and PBIS is to evaluate structures for assessment, promotion/prevention, early intervention, and intervention through a culturally sensitive lens. There is a relatively limited literature on this theme, indicating a clear need for further advancing culturally competent SBMH (see Leverson, Smith, McIntosh, Rose, & Pinkelman, 2016 for an exception).

Use Restorative Justice Approaches to Discipline African-American children have long been overrepresented in special education and experience disproportionately higher rates of discipline, suspensions, and representation in the juvenile justice system (Alexander, 2012; Skiba et al., 2011; Williams, 2015). The restorative justice model uses a reparation approach that holds students accountable, yet requires them to make amends with those involved. There is growing empirical evidence that appropriately implemented restorative justice reduces the number of discipline referrals and keeps youth in school (Schiff, 2013). Restorative justice systems hold core values of believing that all dimensions of student needs must be met, families are key to healthy development, students should be viewed as assets who benefit the local community, and students should be viewed as equals with adults and have the potential to alter their life trajectories with appropriate guidance and support (Ashworth & Zedner, 2008).

Conclusion

Since the 1980s, there has been a progressively growing movement in the USA toward more comprehensive SBMH programs involving mental health and education systems working together, ideally reflecting a "shared agenda" and involving families, youth, other stakeholders, and youth-serving systems in guiding and participating in this work (Andis et al., 2002; Weist, 1997). Growth has been fueled by a significant federal commitment, including a federally funded national center (Center for School Mental Health,

see http://csmh.umaryland.edu), leadership by states and districts, and embracing a community of practice approach (Wenger & Snyder, 2000) that is promoting relationship development and collaboration at multiple levels (e.g., district to district, district to state, federal to state, state to state), escalating the pace of positive change and capacity building (Weist et al., 2014). There is also significant international collaboration in advancing SBMH and very notable progress in countries around the world (see Kutcher, Wei, & Weist, 2015), for example, as supported by the School Mental Health International Leadership Exchange (SMHILE, see www.smhile.com), with global discussion and work together on the themes emphasized in this chapter (roles, interdisciplinary collaboration, operating within the MTSS, engagement of stakeholders, evaluation and quality improvement, implementing evidence-based practices, cultural competence). We extend our congratulations to professor and editor Alan Leschied and the prominent and diverse contributors to this volume, which will no doubt assist in taking the SBMH field to a new level of positive impact for students, families, schools, and communities.

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4 Shifting Systems of Care to Support School-Based Services

Dean Fixsen, Kristen Hassmiller Lich, and Marie-Therese Schultes

Abstract

Promoting children's mental health in education environments has many advantages. In the United States, preschool education and the care of children are not organized or consistent across jurisdictions or income levels. Consequently, the first time society pays attention to the development of children in an organized way is when they enter kindergarten or grade one. Therefore, the investment in promoting children's mental health, which is critical to child development and to society, can be universally supported by the educational system. The goal of this chapter is to highlight approaches to strengthening educational systems for the promotion of mental health from implementation and scaling research and systems science perspectives. We introduce theoretical and practical frameworks that incorporate both perspectives and deduce strategies for creating enabling contexts for promoting children's mental health in educational environments.

Promoting children's mental health in education environments has many advantages. In the United States, preschool education and the care of children are not organized or consistent across jurisdictions or income levels. Consequently, the first time society pays attention to the development of children in an organized way is when they enter kindergarten or grade one. Therefore, the investment in promoting children's mental health, which is critical to child development and to society, can be universally supported by the educational system.

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Define Mental Health

The World Health Organization defines mental health as: "A state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO 2004). Just as physical health is more than the absence of disease, mental health is more than the absence of mental illness.

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Everyone needs the opportunity to learn and practice skills to manage life and engage with others in the world. Skills to manage stress, find balance and focus, and engage socially are critical components that should be cultivated throughout the lifespan in both formal and informal settings. Skills and experiences that help people feel valuable and engaged in their family, community, and economy are critical to society.

Population Mental Health

In this chapter, mental health promotion is viewed from a population point of view. That is, all children from kindergarten through age 18 are included in the population of interest. In implementation terms, this presents a major scaling challenge. Fixsen, Blase, and Fixsen (2017) draw attention to the numerator and denominator when assessing population impact. The denominator for scaling is defined by the specific population of concern. For school-based population mental health, the denominator in the U.S. is nearly 60 million school-age children and youth and their families. The numerator is defined by the number of individuals in the population who experience designated promotion or intervention methods. Recognizing that innovations do not produce social impact unless they are used as intended in practice (McIntosh, Mercer, Nese, & Ghemraoui, 2016; Weare & Nind, 2011), the quality of interventions as they are delivered in practice is an important aspect of scaling (Tommeraas & Ogden, 2016).

Developing sufficient implementation capacity to produce and sustain high fidelity uses of designated mental health promotion methods is essential for scaling and for the mental health of all children and youth. Generating a high-quality numerator for population mental health in school settings in the U.S. will require change for over six million teachers and staff working in about 100,000 schools situated in nearly 15,000 districts located in 3147 geographic counties in 50 states and the District of Columbia. Any school-based efforts to promote children's mental health must be done with the population and the quality of intervention as delivered in practice in mind.

Fundamental changes in interventions and systems must be considered if population mental health goals are to be realized in the coming decades. Current systems of care and school-based interventions have led to modest and often unsustained outcomes for children's mental health (Bruns & Walker, 2010; Weare & Nind, 2011). Herrman and Jané-Llopis (2012, p. 16) conclude their review of the field by stating, "Experience is growing with the development of partnerships and implementation of interventions across welfare, education, health, urban and rural planning, business and other sectors in countries of all types." Sugai, Freeman, Simonsen, La Salle, and Fixsen (2017, p. 62) illuminate current social challenges to positive school-based programs and conclude that:

> Contemporary school and classroom challenges must be defined, verified, and discussed. However, emphasis must be shifted quickly from rumination to prevention. A multitiered system of prevention practices requires moment-to-moment, hour-to-hour, day-to-day, month-to-month, and year-to-year engagement. Practice selection and adoption are necessary but insufficient. Equal, if not more, attention must be directed toward systems or organizational supports (leadership, decision making, support continuum) that enable practice use to be effective, efficient, durable, and relevant. If intervention fidelity is high and sustained, preventing the development and occurrences of our contemporary challenges is thinkable and doable.

Implementation and Scaling Practice and Science

When fundamental change is considered, three factors must be accounted for simultaneously to improve population mental health. The three impact factors (referred to as the formula for success) are (Fixsen, Blase, Metz, & Van Dyke, 2015):

$$\text{Effective innovation} \times \text{effective implementation} \times \text{enabling context} = \text{Socially significant outcomes}$$

What are the implications for population mental health for children? Each factor in the formula is

essential, and together they are necessary for achieving socially significant outcomes such as population mental health. At this stage in the movement toward population mental health, effective innovations have been identified, the science base for effective implementation methods is reaching a more refined level, and enabling system contexts are better understood. It should be noted that the product, socially significant outcomes, is limited by the lowest factor in the formula. For example, if implementation is not effective and has a value of zero, then the product (population mental health) will be zero. While real-life variables are not as precise as the factors in this formula, the three factors need to be present and strong to produce desired outcomes (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

With the advent of the evidence-based practice movement, science-to-service gaps have been identified as a major obstacle to achieving intended socially significant outcomes (Perl, 2011). The lack of focus on implementation practice and science has been identified as a major contributor to the science-to-service gap with Kessler and Glasgow (2011) arguing for a moratorium on randomized control trials (RCTs) that produce more innovations that will not be used in practice. While the RCT resources are not likely to be redirected any time soon, the practice and science of implementation continues to progress led by those who are doing the work of implementation in service settings (e.g., Bond et al., 2001; Chamberlain, 2003; Fixsen, Blase, Timbers, & Wolf, 2001; Mowbray, Holter, Teague, & Bybee, 2003; Ogden, Forgatch, Askeland, Patterson, & Bullock, 2005; Schoenwald, Brown, & Henggeler, 2000).

Changing Systems on Purpose

A major consideration is how to initiate and manage fundamental system and practice change to promote mental health for the population of school-age children. The typical failure of system change efforts has been well documented in many fields for many decades (e.g., Chase, 1979; Coburn, 2003; Nord & Tucker, 1987; Nutt, 2002; Schofield, 2004; Van Dyke & Naoom, 2015; Vernez, Karam, Mariano, & DeMartini, 2006). For example, mediocre literacy scores for age 9 children have persisted since they were first systematically measured by the Institute for Education Sciences in the 1960s. Literacy scores have hovered around an average score of 215 on a 500-point scale despite decades of reforms, quick fixes, and evidence-based approaches to education (National Center for Education Statistics, 2013; National Commission on Excellence in Education, 1983). Massive national investments have successfully built an interstate highway system (McNichol, 2006) and taken astronauts to the moon and back (Dicht, 2009) but have failed to realize the vision of improved human services and education (Rossi & Wright, 1984; Watkins, 1995) in the last century or in the new millennium.

In human service systems, services cannot be shut down, reconfigured, re-skilled, and restarted in some new and hopefully more effective mode. The requirement to develop a more functional and effective system while continuing to meet human service demands using the existing system adds degrees of complexity not faced by road builders or rocket launchers. It is not OK to blow up an education-system-change rocket and then move on to a hopefully improved version. When people and public services are involved, every failed attempt has lasting impacts that make meaningful change that much more difficult (Rittel & Webber, 1973).

To prevent change leaders from being overwhelmed by systemic issues that need to be resolved, systems change is initiated in a transformation zone (Fixsen, Blase, & Van Dyke, 2012). A transformation zone is a portion of the entire system from the practice level to the policy level and includes all major levels within the system within a selected geographical region of the system (e.g., a regional education agency and the districts, schools, towns, and neighborhoods in that region). The portion is big enough to encounter nearly all the vertical and horizontal issues that likely will arise in system change and small enough to keep issues at a manageable level until the beginnings of the "new system" are established and functioning well. Doing system change work in a transformation zone has the

advantages noted for "continuous delivery" (Humble & Farley, 2011) where enabling system components are developed and tested in real time allowing effective functions, roles, and structures to be established and errors to be quickly detected and corrected in daily practice.

The work in the transformation zone is accomplished by engaged staff and stakeholders at each level of the system. Engaged leaders, staff, and stakeholders help to ensure that any selected mental health promotion innovations are the right thing at the right time for the specific subpopulation in the transformation zone and help to assure the macro environment will enhance and not undermine the innovation and associated implementation supports. The goal is to establish a system with aligned and integrated resources that leverage high levels of mental health promotion activities and continual improvement in outcomes for students, families, and society. We will reference the work to be done in the transformation zone throughout this chapter.

Effective Innovations

For school-based mental health, effective innovations are described in chapters of this handbook and in reviews of the field (Weare & Nind, 2011) and will not be detailed here. Effective mental health promotion activities will be designed, selected, or adapted to work within the context to address often varied and complex realities and built to leverage local system strengths to drive meaningful change. From an implementation and scaling point of view, innovations and interventions need to be effective and usable in practice. Usable innovations in the Active Implementation Frameworks meet four criteria (Fixsen, Blase, Metz, & Van Dyke, 2013):

1. They are *described* clearly and specify inclusion and exclusion criteria for the intended beneficiaries.
2. The *core components* ("active ingredients") are identified, and rationales are provided regarding their importance for achieving intended outcomes.
3. The core components are *operationalized* with practice profiles that specify what practitioners do and say when they are using the core components in practice (also known as the innovation configuration (Hall & George, 1978; Hall & Hord, 2011).
4. A measure of *fidelity* is available that assesses the presence and strength of the core components as they are used in practice, and the fidelity data are highly correlated with intended outcomes.

Selection and development of mental health promotion activities is a community affair (Kim, Gloppen, Rhew, Oesterle, & Hawkins, 2015) that begins with system mapping in communities in the transformation zone. For example, system mapping can be done by focus groups of individuals and families who understand what already is being done to support children's mental health, the resources they are aware of, and where are they struggling. In general, system mapping methods seek to illuminate the five Rs (USAID, 2014): results (what does success look like, what is currently measured), roles (who has a role in affecting or is affected by change in those results, such as stakeholders), resources (what is available to work with to use and support the implementation of the innovation/change results), relationships (what are the most important relationships that could either support or undermine change; note that a relationship is the connections among individuals and groups – trust, influence, collaboration, funding, information flow, etc.), and rules (what are the formal and informal rules that govern how the system behaves).

Using system mapping methods, mental health promotion in one community should be expected to be different from other communities. Nevertheless, any approach to mental health promotion must be tested against the four usable innovation criteria. Innovations, interventions, and approaches that meet the usability criteria are more likely to be teachable, learnable, doable, and assessable in practice; an essential foundation for scaling and impacting whole populations in a community or a nation.

Effective Implementation

For mental health promotion, the Active Implementation Frameworks (e.g., Fixsen et al., 2005) provide an evidence-based approach to support the full and effective implementation of innovations on a socially significant scale. The Active Implementation Frameworks combine:

1. Usable innovations: operational descriptions of innovations that include a practical assessment of fidelity that is highly correlated with intended outcomes
2. Implementation teams: groups that are highly skilled in the use of the Active Implementation Frameworks and in affecting organization and system change
3. Implementation drivers: methods to assure the development of innovation-related competencies, organization changes, and engaged leadership that support high fidelity use of innovations in practice
4. Implementation stages: exploration (creating readiness), installation (amassing human and financial resources), and initial implementation (beginning to support the use of the innovation in practice) activities and outcomes that support eventual full implementation (at least 50% of the practitioners meet fidelity standards for using the innovation in practice) within organizations and systems
5. Improvement cycles: plan-do-study-act cycles and usability testing methods for purposeful problem-solving and continual improvement in methods and outcomes
6. Systemic change: practice-policy communication protocols to align, integrate, and leverage existing structures, roles, and functions so that the implementation supports for the innovation maximize intended outcomes at scale

The evidence and practice bases for the Active Implementation Frameworks have been documented (e.g. Blase, Fixsen, Naoom, & Wallace, 2005; Fixsen et al., 2005; Metz & Bartley, 2012). The Active Implementation Frameworks have been operationalized, so they are teachable, learnable, usable, and assessable in practice (for examples, see the Ai Hub http://implementation.fpg.unc.edu), and the frameworks have been and are being used proactively to establish implementation capacity and improve outcomes (Fixsen et al., 2013; Metz et al., 2014).

The essential first step in using the Active Implementation Frameworks is to establish a local Implementation Team. A team consists of three to five individuals who are experts in the use of the Active Implementation Frameworks. Initially, the Implementation Team members likely will convene the focus groups; do the system mapping; participate in selecting and developing mental health promotion innovations, interventions, and activities that meet the usable intervention criteria; use the implementation drivers as a guide to find or develop the expertise to develop competencies among local school-based and other practitioners; help schools and other organizations change to support the use of promotion activities; and assure appropriate and engage leadership in schools and the community. Scaling (as defined in this chapter) requires a high-quality numerator to reach the population of school-age children defined in the denominator. Scaling requires expanding implementation capacity in the form of expert Implementation Teams across communities, the state, and the nation. They are a necessary means to the desired socially significant outcomes.

Enabling Context

An enabling context is the third factor in the formula for success. In the Active Implementation Frameworks, the context refers to the system in which organizations provide services to people. For example, schools provide teaching, learning, and mental health promotion services to students in the context of district, state, and federal education systems. The goal is to assure that the structures, roles, and functions within a system are more enabling than hindering in their impact on the services provided and the degree to which socially significant outcomes can be achieved. Accordingly, in order for school-based mental health interventions to be successful, the micro-(individual),

meso-(organizational), and macro-(systems) level of systems have to be taken into account (Fixsen, Schultes, & Blase, 2016).

There are three aspects to be considered with respect to an enabling context. The first reflects the extent to which the current context supports the desired outcome among the target population – how well does the current environment in a given community support children's mental health? The systems mapping focus groups and community involvement leading to mental health promotion actions provide a list of possible ways in which the current system does and does not support children's mental health. The gap between the current system and the system that is needed provides an indication of the amount of systemic change that is needed.

The second aspect of an enabling context is the support for Implementation Team formation and development. Enabling contexts purposefully support the use and expansion of effective implementation methods to assure the high fidelity use of effective innovations in practice on a population scale.

The third aspect of an enabling context reflects the extent to which the broader system's reaction to the innovation supports it. School-based mental health innovations are implemented in a broader context with competing objectives (e.g., ensuring children's mental health, access to healthy food, public safety, balancing the budget) and limited resources. Delays often exist between innovation and observable improvements in outcomes, making it hard to learn what works with so many things constantly changing. Given the interconnectedness of stakeholders in and outside school systems and the impact others can have on an innovation's success, anticipating external reaction to the use of innovations positions is important. It is understood that mental health promotion activities will disturb the existing system and point to areas that need to change so that implementing organizations can execute innovation and implementation plans with high fidelity to maximize impact. With feedback from the practice level, policymakers and leaders can "change the structure of our systems, creating different decision rules and new strategies" to reduce the likelihood that the system inadvertently will undermine its investment in its mental health promotion goals (Sterman, 2006, p. 509). Such "policy resistance" within systems might be driven, for example, by side effects of implementing school-based mental health innovations within schools or outside the boundary of schools. An example of the former might be if a school-based mental health innovation disrupts social interaction with the targeted students, undermining attempts to bolster well-being. An example of the latter might be if community or state investment in children's mental health services is decreased as decision-makers see services within schools duplicating their effort. To make a more enabling context in the first example, stakeholders might discuss strategies for providing school-based mental health intervention without disrupting more social interaction within the school day. In the second, the school-based mental health innovation should be developed in collaboration with community and state mental health systems and decision-makers, to ensure the programs are synergistic and their theory of change, together, is clearly communicated. Systems can be enabling or hindering in various ways (Fixsen et al., 2005, 2013, p. 59).

Developing an Enabling Context

Existing human service systems are legacy systems that are the product of "[d]ecades of quick fixes, functional enhancements, technology upgrades, and other maintenance activities [that] obscure application functionality to the point where no one can understand how a system functions" (Ulrich, 2002; p 41–42). Legacy systems represent a layered history of well-intentioned but fragmented changes. Legacy systems are a poor fit with methods for promoting mental health for 60 million students in 98,000 schools in the United States.

The development of expert Implementation Teams and the full and effective use of the Active Implementation Frameworks and innovations in

practice disturb the status quo and create a degree of instability and uncertainty that are goads to action. Disturbing the status quo creates a chaotic context (Snowden & Boone, 2007) that demands rapid responses to issues as they arise. The executive leadership at each level of the system must be prepared for frequent (weekly, monthly) communication from the front line and be prepared to engage in constructive problem-solving with constituents within and outside the system. As roles, functions, and structures are strengthened and barriers are eliminated, coherence is created as system components and resources are aligned with clarified system goals and intended outcomes. The Practice-Policy Communication Cycle is the timely communication from the practice level to the executive leadership (policy) level to inform policymakers of the intended and unintended consequences of policies and guidelines (Fixsen et al., 2013). The "cycle" is completed as the executive leaders make changes that remove barriers and increase support for the full and effective use of innovations. The cycle continues as those changes are further evaluated for impact and improvement or are deemed functional enough to be embedded in policies and guidelines. In this way, legacy systems are changed in functional ways so that innovations are not crushed by the already established routines that sustain the status quo (Nord & Tucker, 1987).

As stated by (Sterman, 2006), "Deep change in mental models, or doubleloop learning, arises when evidence not only alters our decisions within the context of existing frames, but also feeds back to alter our mental models. As our mental models change, we change the structure of our systems, creating different decision rules and new strategies. The same information, interpreted by a different model, now yields a different decision." (p. 509). In addition, "we must be able to cycle around the loops faster than changes in the real world render existing knowledge obsolete" (p. 509). Thus, an intended outcome of disturbing the system is to provide leaders with opportunities to redesign system roles, functions, and structures – in essence, develop a new system on purpose. With the Practice-Policy Communication Cycle in place and Implementation Teams functioning as sensors of alignment and misalignment at the practice level, the executive leaders have the ability to continually "monitor and question the context in which it is operating and to question the rules that underlie its own operation" (Morgan & Ramirez, 1983, p. 15).

An Example from the Field

This chapter has provided an outline and brief description of the key elements of scaling school-based mental health innovations, interventions, and activities to promote mental health for all school-age children. Words on a page are linear. The work described in this chapter is not linear. It is complex and simultaneous with many iterations as obstacles are encountered and eventually overcome. There is no end to it, since life continues to change at a rapid rate. Thus, an example of usability testing and continual improvement will provide a realistic ending for this chapter.

An Example from the Field: PDSA/ Usability Testing Methods for Developing and Integrating Effective Interventions, Effective Implementation, and Enabling Contexts to Produce Socially Significant Benefits on Purpose

An example of an approach to establishing usable interventions is provided below. Note how PDSA is used to develop simultaneously the innovation and the implementation supports for the innovation.

The process outlined below employed nine teachers over the course of 4 months. In a usability testing format, the Implementation Team worked intensively with three teachers at a time to maximize the learning and to quickly make use of learning in the work with the next group of three teachers. This provides more learning and improvement opportunities for the Implementation Team compared to one experience with nine teachers.

Iteration #1

Plan The state legislature just passed a law mandating new standards for grade 3 literacy. The state education leaders asked faculty of the state university to summarize the research on early literacy instruction with an emphasis on instructional practices that might be useful for children and students from age 3 through grade 3. The summary specified the following two instruction practices found to be effective in the literature (e.g., Hattie, 2009):

- Effective instructors encourage high levels of student engagement with education content.
- Effective instructors provide frequent, prompt, and accurate feedback to students when they respond.

Do Based on the summary, the Implementation Team contacted a nearby district. After some exploration stage work with principals and teachers, they secured the cooperation of 9 K-3 teachers and their principals. The teachers agreed to try to use the instruction methods, participate in training, allow two people to observe their classroom every day for 2 weeks, give students a weekly quiz related to literacy content taught that week, and participate in up to 1 h of de-briefing discussion during each week. In a meeting with the teachers and their principals, a schedule was developed so teachers 1–3 would participate during month 1, teachers 4–6 would begin to participate in month 2, and teachers 7–9 would begin to participate in month 3.

Just prior to month 1, the Implementation Team developed a 2-h training workshop to review and discuss the literature regarding the two key instruction practices, model the two key components, and provide opportunities for teachers 1–3 to practice the skills in a mock classroom. The Implementation Team debriefed with the teachers at the end of training to obtain their opinions of the training methods and content.

Prior to month 1, the Implementation Team drafted four fidelity items to assess the use of the two key instruction practices. During the behavior rehearsal section of training, one member of the Implementation Team used the items to observe teacher instruction in the mock classroom. The items were modified based on those observations. The scores for each item related to teacher instruction at the end of training were analyzed to see how training could be improved next time.

Immediately after training, the three teachers began using the instruction practices in their classrooms. Starting on the third day and every other day thereafter, a member of the Implementation Team observed each classroom for 2 h with two members of the team jointly observing one classroom. The team members used the Practice Profile outline to note instances of expected, developmental, and poor examples of instruction. At the end of week 1 and again at the end of week 2, two members of the Implementation Team did a teacher instruction fidelity assessment using the four items developed prior to training and modified during training. Each teacher provided the Implementation Team with the average scores for the weekly student quiz related to literacy content taught that week.

At the end of each week, two Implementation Team members met with the three teachers to discuss the instruction practices. Teachers provided their perspectives on what was easy or difficult for them to do in their interactions with students. Implementation Team members offered suggestions for using the instruction practices based on their observations of all three teachers. Implementation Team members began drafting a coaching service delivery plan based on teachers' input.

Study At the end of weeks 2 and 3, the Implementation Team met to consider the information being developed. The information and data being gained from the experience with the first three teachers was used to revise the innovation and improve implementation supports as noted in the Act section.

Act Based on classroom observations and comments from teachers, the Implementation Team re-defined the key instruction components of the innovation. The Implementation Team expanded the component, "Instructors encouraging high

levels of student engagement with education content" to include "provides explicit instruction" and "models instruction tasks." The Implementation Team drafted a Practice Profile (including the new components) with detail based on the classroom observations. The draft of the Practice Profile was reviewed with the three teachers, and their ideas were included regarding how to define expected, developmental, and poor examples of use of each component of the innovation.

The Implementation Team compared notes on the fidelity assessments to see if they agreed or not on scoring each of the four items. Agreement was not good, the items were revised to be more specific, and the number of items was increased to include the new components being operationalized in the Practice Profile. A protocol for how a fidelity observer should enter the classroom and conduct the observation was drafted for use in subsequent fidelity observations. The fidelity scores and the scores for the weekly student quizzes were summarized. No discernable relationship between the two was apparent.

As noted above, the Implementation Team began studying training during and after the training session for teachers 1–3. In week 3 the team began work on how to improve training methods and how to include the new content in training for the next three teachers.

Iteration #2

Plan The Implementation Team met with the principal and teachers to set the time for a 2-h training workshop for teachers 4–6. The Implementation Team discussed the work during month 1 and invited questions about the classroom observations and the de-brief times.

Do In month 2, the Implementation Team provided the revised training to teachers 4–6. The training content was based on the expanded essential functions. The revised training methods were based on the experience and feedback from teachers 1–3.

The Implementation Team provided a 2-h training workshop to review and discuss the literature regarding the key instruction practices, model the key components, and provide opportunities for teachers 4–6 to practice the skills in a mock classroom. During training, practice continued until the teachers felt competent and confident. The Implementation Team debriefed with the teachers at the end of training to obtain their opinions of the training methods and content.

During the behavior rehearsal section of training, one member of the Implementation Team used the revised fidelity items to observe teacher instruction in the mock classroom. The fidelity items were modified further based on those observations.

To collect pre-post training data, a version of the behavior rehearsal (used in training) was conducted individually for each teacher just prior to training. The teacher's behavior was scored using the fidelity criteria. The scores for each fidelity item prior to training and during the last behavior rehearsal at the end of training were analyzed to see the extent to which teachers improved instruction skills. The data provided direction on how training could be improved next time.

Immediately after training, teachers 4–6 began using the instruction practices in their classrooms. Starting on the third day and every other day thereafter, a member of the Implementation Team observed each classroom for 2 h with two members of the Team jointly observing one classroom. For teachers 1–3 one observation per week was conducted. During the observations, the team members used the Practice Profile outline to note instances of expected, developmental, and poor examples of instruction.

Two members of the Implementation Team did a fidelity assessment. The new fidelity assessment was used for assessments of teachers 1–6 each week to gain more experience with the items and to continue to develop the observation protocol. Each teacher provided the Implementation Team with the average scores for the weekly student quiz related to literacy content taught that week.

At the end of each week, two Implementation Team members met with the six teachers to discuss the instruction practices. Teachers provided their perspectives on what was easy or difficult for them to do. Implementation Team members

offered suggestions for using the instruction practices based on their observations of all six teachers. Implementation Team members revised the coaching service delivery plan based on teachers' input.

Study The Implementation Team now has 2 months of information from teachers 1–3 and 1 month of information from teachers 4–6. In month 2, teachers 1–3 were gaining experience and using the innovation with confidence in their interactions with students. The Implementation Team began seeing more nuanced versions of the four key components of the innovation.

The pre-post training data were summarized to see where training produced more or less improvement in teachers learning the instruction skills. Those data were compared to the ongoing fidelity assessments to see if the post-training scores for teachers predicted later fidelity scores.

The fidelity scores for the six teachers and the scores for the weekly student quizzes were summarized. A pattern emerged indicating a possible relationship between higher fidelity scores and better scores on student quizzes.

Act Based on observations and teacher comments, the Implementation Tem again re-defined the key instruction components of the innovation. The Implementation Team expanded the component, "Effective instructors provide frequent, prompt, and accurate feedback to students when they respond" to include "corrects errors by modeling a correct response" and "limits corrective feedback to the task at hand." These new components were included in the draft Practice Profile. The draft of the Practice Profile was reviewed with the six teachers, and their ideas were included regarding how to define expected, developmental, and poor examples of use of each component of the innovation.

The Implementation Team compared notes on the fidelity assessments to see if they agreed or not on scoring each of the items. The items were revised to be more specific, and the number of items was increased to include the new components being operationalized in the Practice Profile. The protocol for how a fidelity observer should enter the classroom and conduct the observation was revised based on the experiences with all six teachers.

The pre-post training data summary made it clear that trainers were more effective when teaching the instruction components related to delivering information to students. However, the trainers were producing mixed outcomes when teaching instruction components related to providing feedback to students after they responded. The Implementation Team developed new behavior rehearsal scenarios to provide more training on those skills.

Iteration #3

Plan The Implementation Team met with the principal and teachers to set the time for a 2-h training workshop for teachers 7–9. The Implementation Team discussed the work during months 1 and 2 and invited questions about the classroom observations and the de-brief times.

Do In month 3, the Implementation Team provided the revised training to teachers 7–9. The training content was based on the expanded essential functions. The revised training methods were based on the experience and feedback from teachers 1–6. The Implementation Team debriefed with the teachers at the end of training to obtain their opinions of the training methods and content.

During the behavior rehearsal section of training, one member of the Implementation Team used the revised fidelity items to observe teacher instruction in the mock classroom. The fidelity items were modified further based on those observations.

Pre-post training data were collected by using a version of the behavior rehearsal (used in training) individually for each teacher just prior to training. The teacher's behavior was scored using the revised fidelity criteria. The scores for each fidelity item prior to training and during the last behavior rehearsal at the end of training were analyzed to see the extent to which teachers improved instruction skills. The data provided direction on how training could be improved next time.

Immediately after training, teachers 7–9 began using the instruction practices in their classrooms. Starting on the third day and every other day thereafter, a member of the Implementation Team observed each classroom for 2 h with two members of the team jointly observing one classroom. For teachers 1–6 one observation per week was conducted. During the observations, the Team members used the Practice Profile outline to note instances of expected, developmental, and poor examples of instruction.

For teachers 1–9, at the end of week 1 and again at the end of week 2, two members of the Implementation Team did a fidelity assessment. The revised fidelity assessment was used for assessments of teachers 1–9 each week to gain more experience with the items and to continue to develop the observation protocol.

At the end of each week, two Implementation Team members met with the nine teachers to discuss the instruction practices. Teachers provided their perspectives on what was easy or difficult for them to do. Implementation Team members offered suggestions for using the instruction practices based on their observations of all six teachers. Implementation Team members revised the coaching service delivery plan based on teachers' input.

Study The Implementation Team now has 3 months of information from teachers 1–3, 2 months of information from teachers 4–6, and 1 month of information from teachers 7–9. With daily use of the new instruction methods in the classroom, teachers 1–6 were using the innovation with confidence in their interactions with students. As each teacher "made the new skills her own," the Implementation Team began seeing nuanced versions of the key components of the innovation.

Fidelity scores for teachers 1–3 and 4–6 seemed to be improving from the first week after training to month 3. The continued revision and expansion of the fidelity items made these data difficult to interpret, but the impression from observations and teacher reports seemed to confirm the fidelity information. The fidelity scores and the scores for the weekly student quizzes were summarized. Analysis of month 3 data for all nine teachers resulted in a positive correlation of 0.50 between fidelity and student quiz outcomes.

For two teachers in the 4–6 month group, fidelity scores were good, and their student outcomes were outstanding! The Implementation Team and teachers met to review the classroom observations and to engage the teachers in discussion of their instruction practices. It turned out these two teachers had been mentored by the same master teacher. During their induction into teaching, they had been taught to stand by the door and greet each student by name as he/she entered the classroom at the start of the school day and again after lunch period (Embry & Biglan, 2008). They felt this "primed the pump" and helped with student engagement.

The pre-post training data were summarized to see where training produced more or less improvement in teachers learning the instruction skills. Those data were compared to the ongoing fidelity assessments to see if the post-training scores for teachers predicted later fidelity scores.

Act Based on observations, the Implementation Team again re-defined the key instruction components of the innovation. The Implementation Team expanded the key components to include greeting each student by name at the beginning of the school day. This new component was included in the draft Practice Profile. The draft of the Practice Profile was reviewed with the six teachers, and their ideas were included regarding how to define expected, developmental, and poor examples of use of each component of the innovation.

The Implementation Team compared notes on the fidelity assessments to see if they agreed or not on scoring each of the items. The items were revised to be more specific, and the number of items was increased to include the new component being operationalized in the Practice Profile. The protocol for how a fidelity observer should enter the classroom and conduct the observation was revised based on the experiences with all nine teachers.

The pre-post training data summary showed that trainers produced better outcomes when teaching instruction components related to providing feedback to students after they responded.

However, there was need for further improvement. The Implementation Team decided to revise how they were giving feedback to teachers during training (e.g., focus comments on the positive behavior; model expected behavior prior to asking the teacher to practice again) during the behavior rehearsal scenarios.

Cycle After 4 months, the Implementation Team was refining the fine points of the Practice Profile, assessing pre-post training knowledge and skills of teachers participating in training, using a good set of items to assess instruction practices in the classroom, and collecting information to correlate fidelity scores with student quiz scores. The innovation still needed improvement, but met the basic criteria for a usable intervention.

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5 Beyond Silos: Optimizing the Promise of School-Based Mental Health Promotion Within Integrated Systems of Care

Kathryn H. Short, Heather Bullock, Alexia Jaouich, and Ian Manion

Abstract

Schools have a critical role to play within the broader system of care supporting children, youth, and families. For 6 h each day, 10 months of the year, schools have the opportunity to support social emotional skill development, enhance mental health literacy, encourage help-seeking, and provide daily classroom support to students who are struggling with mental health problems. Many school districts also have the capacity to provide evidence-based preventive services, crisis response, assessment, and brief intervention services. However, when school-based mental health promotion and prevention services are not offered within the context of a comprehensive local/regional system of care, students requiring more intensive supports may not receive needed intervention. Further, best and emerging practices across contexts may not get evaluated or shared, and responses to acute needs that transcend geography may be disjointed and confusing. Using a broader system lens, there are policy and practice opportunities for cross-sectoral integration that, when leveraged using system science principles, can lead to more efficient and high-yield service delivery for children, youth, and families as well as system-wide responses to emerging issues or acute circumstances (e.g., suicide cluster, influx of child refugees, high profile media events). Drawing on the modified interactive systems framework and highlighting examples from the provincial rollout of Ontario's Comprehensive Mental Health and Addictions Strategy, a number of system-scale implementation science principles are shared with a view to optimizing the promise of school mental health, beyond silos.

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An integrated system of care is a comprehensive and effective spectrum of mental health services and supports that are organized into a coordinated network, within and across sectors, to meet the complex and dynamic emotional and behavioral health needs of children, youth, and their families (Barrett, Eber, & Weist, 2013; Stroul, Blau, & Friedman, 2010; Weist, 1997). It has

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been increasingly recognized that schools have a critical role to play within an optimally interconnected system of care (Leaf, Schultz, Riser, & Pruitt, 2003; Weist, Lever, Bradshaw, & Sarno Owens, 2014). Specifically, as part of the daily life of children and youth, schools have the opportunity to support social emotional skill development, enhance mental health literacy, encourage help-seeking, and provide regular classroom support to students who are struggling with mental health problems (Barry & Jenkins, 2007; Doll, Cummings, & Chapla, 2014; Short, 2016; Sulkowski & Lazarus, 2016). Many school districts also have capacity to provide evidence-based preventive services, crisis response, assessment, and brief structured psychotherapy services (Lever, Chambers, Stephan, Page, & Ghunney, 2010; Raffaele Mendez, 2017; SBMHSA Consortium, 2013; Short, Ferguson, & Santor, 2009). This is important because school-based mental health professionals have routine access to students within the setting where children and youth spend most of their daily life, can facilitate natural supports and strategies that are easily embedded into the fabric of classrooms and schools, and can help to reduce stigma about mental illness through student-friendly service offerings (Bringewatt & Gershoff, 2010; Hoover & Mayworm, 2017). In addition, schools are an excellent venue for early detection and early intervention, frequently mitigating the need for more intensive and costly services in community settings (Flett & Hewitt, 2013; Weist, Myers, Hastings, Ghuman, & Han, 1999).

While schools clearly have an important role within an integrated system of care and are well-positioned to provide promotion and prevention services as part of the multi-tiered system of support, when these school-based services are not offered within the context of a comprehensive local/regional system of care, students requiring more intensive supports may not receive needed intervention (Freeman, Grabill, Rider, & Wells, 2013). Further, in the absence of a system lens, best and emerging practices across contexts may not get evaluated or shared, and responses to acute needs that transcend geography may be disjointed and confusing. As a result, opportunities for cost-efficient cross-setting approaches are not optimized, and system gaps and redundancies may emerge (Boydell, Bullock, & Goering, 2009; Leaf et al., 2003). Applying a system perspective to implementation and scale-up can lead to policy and practice opportunities for cross-sectoral integration that result in more efficient and high-yield service delivery for children, youth, and families and can facilitate coherent responses to emerging issues or acute circumstances (Boydell et al., 2009). In this chapter, drawing on the modified interactive systems framework and highlighting examples from the provincial rollout of Ontario's Comprehensive Mental Health and Addictions Strategy (Ontario Ministry of Health and Long-Term Care, 2011), a number of system-scale implementation science principles are shared with a view to optimizing the promise of school mental health, beyond silos.

Understanding and Leveraging Context

> *Students are flourishing, with a strong sense of identity and belonging at school, prepared with skills for managing academic and social/emotional challenges, surrounded by caring adults and communities equipped to identify, intervene early, and support recovery when students struggle with mental health and/or substance use problems.*

This is the aspirational vision for student mental health in Ontario, Canada (School Mental Health ASSIST, 2017), a province that is comprised of 72 school districts and approximately 5000 schools, 7400 school administrators, 117,000 teachers, and 2 million students. While all three impact factors identified by Fixsen, Blase, Metz, and Van Dyke (2015); effective interventions, effective implementation, and enabling contexts, are critical for achieving socially significant success toward this aspirational vision, building an effective and sustainable comprehensive system of care for children, youth, and families across a large province, state, or region requires special attention to ensuring an enabling context. For practices in school mental health to optimally impact

population-level wellness among children and youth, a multilayered view of the system context is required (Freeman et al., 2013). Individual and collective student mental health occurs within a complex ecology, with proximal influences at the classroom and school level but equally important conditions and impacts resting with decisions, processes, and structures at the school district, community, and wider provincial system. Understanding the constraints and possibilities within and across the concentric circles of influence around the student and their family is important for leveraging system-level change opportunities and for achieving our shared aspirational vision.

The Cascading Context Within School Districts

Within the education sector, the host context at the classroom level provides the most direct point of influence for student mental health. However, because this setting is influenced by the school environment and by conditions at the district and policy levels, it is important to look at context in a cascading manner.

Enabling Policy Context The overall parcel of funds for the education sector, funding formulas for school districts, and other important decisions such as the curriculum that districts must adhere to are most commonly set by policy-makers at the provincial/state or national level (depending on the jurisdiction). Policy often acts a signal to the system about the areas in which it should focus. This signal then cascades through the other contextual levels and eventually makes its way the classroom, with opportunities for interpretation and adaptation along the way. In Ontario, for example, the provincial Ministry of Education (EDU) recently released a strategy promoting and supporting student well-being, with mental health being one of four key areas identified (Ontario Ministry of Education, 2016). By releasing this strategy, the provincial government is signalling to the system that student well-being is important and worthy of attention and that mental health is a core component of their concept of well-being. Sometimes such policy signals are accompanied by additional targeted financial investments for schools and school districts increasing the incentive for participation and alignment with the desired policy direction. Policy can also be important for scaling-up effective local- or district-level innovations, so they may have socially significant impacts across a population – a cascade that flows in the opposite direction. From a system perspective, it is important to recognize that policy itself can be at mutiple levels within a sector (e.g., school, district/board, ministry) but can also encompass efforts across sectors (e.g., whole-government policies or platforms relating to specific topics like mental health). Through both its general policy actions and targeted actions for specific areas, this broader policy context is a critical foundation for student mental health.

Enabling District Context A focus on organizational conditions at the school district level is particularly important for achieving coherence and consistency across a large province, state, or region. Rarely will school by school, or classroom by classroom, efforts alone lead to a meaningful, far-reaching, and sustained positive change in student mental health. Survey and scan data collected across Canadian provinces suggests that in the absence of district infrastructure, processes, and strategies, a patchwork of fragmented, untested, and short-lived mental health programming has emerged (SBMHSA Consortium, 2013). While innovations can and should be tested at a local level, scalable and sustainable work in school mental health must consider and engage the wider district context.

Creating a hospitable district environment for effective practices in school mental health requires consideration of many features. For example, implementation scientists have identified the important role of leadership, dedicated implementation teams, data-drive decision systems and feedback loops, and readiness for change (Chinman et al., 2008; Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004; Gustafson et al., 2003; Metz, Halle, Bartley, &

Blasberg, 2013). Drawing on this literature and in consultation with Ontario-based district leaders, School Mental Health ASSIST has developed a list of ten conditions that are foundational in facilitating uptake and sustainability of evidence-based practices in school mental health (Short, Finn, & Ferguson, 2017). A district context that includes, for example, visible senior administrator commitment, a mental health leadership and implementation team that has responsibility for developing and executing a board-wide strategy and action plan, and systems for continuous learning and improvement is well-positioned to optimize high-quality programming that lasts. Naturally, as these structures and processes are introduced, this can lead to tensions and discomfort as existing systems and roles are challenged. Strong communication, a shared vision, and authentic engagement of stakeholders help to ensure that the change process is not compromised when the status quo is interrupted. This includes a strong need for communication and collaboration with partners across sectors, as programs and services that were once offered, or introduced in an ad hoc manner, may no longer be supported within the district strategy and action plan. Clear messaging about the need for standardization of protocols and priorities across a district, to avoid fragmentation and inequity, are often needed. It is also important to convey that opportunities for local tailoring and innovation continue to be encouraged but that evaluation and alignment are critical filters for decision-making.

Enabling School Context Just as a coherent district context supports best practices, a school environment that facilitates quality and consistency in mental health practice and programming is critical for enhancing outcomes. Schools that maintain a welcoming and safe climate, embed wellness promotion and social emotional learning in a whole school manner, and support strong staff and student relationships have been associated with good student mental health outcomes (Weare, 2015; Wells, Barlow, & Stewart-Brown, 2003). School administrators set the tone for this positive school climate, and create the conditions for uptake and maintenance of high-yield mental health practices. A key part of leading mentally healthy schools is to apply the ten organizational conditions to this setting (e.g., establishing a school level mental health leadership and implementation team, implementing a systematic staff capacity building plan, ensuring and communicating standard protocols for suicide prevention, intervention and postvention). With organizational conditions in place, it is easier for school teams to select from the array of potential mental health programming options those that are most aligned with their school needs and overall strategy.

Enabling Classroom Context Effective school mental health practices are most likely to be adopted and sustained at the classroom level when teachers feel supported, knowledgeable, and confident about the programming that is presented. Time to learn about mental health, and social emotional learning practices that they can add to their daily practice, is a key part of facilitating staff commitment and comfort with this area of work. With support from school administrators and ongoing coaching from school mental health professionals, educators can grow in confidence in enacting their role in creating a welcoming, safe, and inclusive classroom environment, delivering instruction in mental health literacy and social emotional learning, identifying students who may be struggling with mental health problems, and connecting with parents/caregivers and community professionals as required. Clarity in their role can focus training activities and decrease the burden of teachers feeling they carry all of the responsibility. The context cascade, from policy level to district, to school, to classroom, helps to remove barriers to uptake of effective practices by those who are best positioned to support student mental health at school.

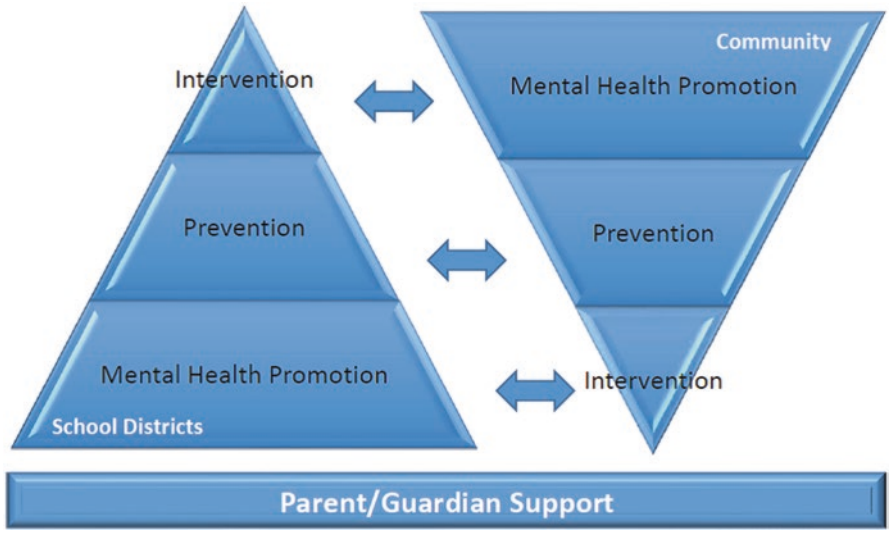
Reaching Beyond Silos for Enabling Context

The multi-tiered system of support (MTSS) framework, akin to the public health model of intervention, is a widely accepted model for

understanding the range of services provided within the school setting and how this can fit into a larger community context (Walker et al., 1996). This model highlights the ways in which schools can promote positive mental health at *Tier 1* (e.g., through creating welcoming and supportive school and classroom environments, engaging student voice and leadership, building understanding about mental health, and reducing related stigma), prevent problems from escalating at *Tier 2* (e.g., by working to enhance protective factors and reduce risk factors in classrooms every day and through targeted preventive services led by school mental health professionals), and provide specialized brief assessment and intervention services at *Tier 3* (e.g., psychological and social work services, specialized support programs). This model echoes a comprehensive school health approach at Tier 1 (Joint Consortium for School Health, 2013) but extends this to include evidence-based prevention and intervention services for students at greater risk. Multi-tiered systems of support are essential for defining and supporting practice within schools and districts (Kutash, Duchnowski, & Lynn, 2006; Stoiber & Gettinger, 2016).

However, to truly effect sustainable uptake of evidence-based school mental health to scale, multi-tiered systems need to engage and be built within and across sectors, collaboratively. Role clarity and partnership protocols, for promotion, prevention, and intervention must be clarified through authentic dialogue and collaborative processes. An aspirational vision for an integrated system of care that rests upon a MTSS model is depicted here.

Multi-tiered Systems of Support Across Sectors



While an appreciation for the cascading nature of the enabling context within the education sector is important, so too is the need to consider settings across the wider system of care. This context, in addition to being enacted locally within each community, is optimized when it aligns with the broader vision at the regional, provincial/state, and even national level when possible. Like ensuring evidence informs practice, having a clear and focused vision is necessary but insufficient for sustainable and replicable system change. The process of enacting a vision guided by evidence requires a clear strategy for operationalization and implementation that needs to be strategic and deliberate.

Conceptual Framework

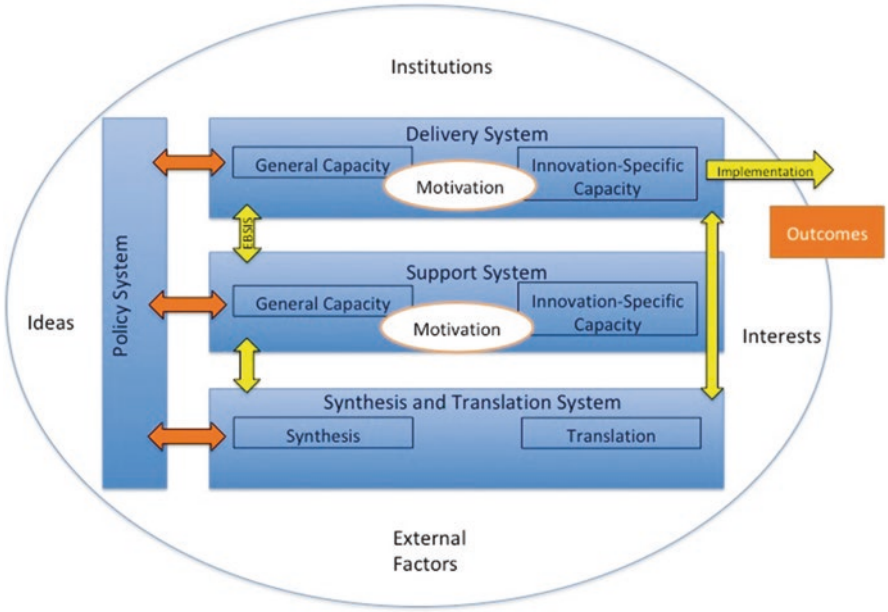
Implementation science offers a wide range of conceptual models, theories, and frameworks from which to draw (for reviews, see Mitchell, Fisher, Hastings, Silverman, & Wallen, 2010; Moullin, Sabater-Hernández, Fernandez-Llimos, & Benrimoj, 2015; Nilsen, 2015; Tabak, Khoong, Chambers, & Brownson, 2012). Some models are useful for describing and/or guiding the process of translating research into practice, others are useful for understanding and explaining what influences implementation outcomes, and still others focus on evaluating implementation efforts (Nilsen, 2015). For the purpose here, which is to understand and describe the supports necessary for system-level implementation and scale-up, we drew upon the interactive systems framework for dissemination and implementation (ISF, Wandersman et al., 2008; Wandersman, Chien, & Katz, 2012). Initially developed as a heuristic to help clarify how new knowledge in the field of violence prevention moves from research development to widespread use and the systems and processes supporting this movement, the ISF has been widely cited and applied across a number of fields including school mental health (e.g., Bradshaw & Pas, 2011; Flaspohler, Anderson-Butcher, & Wandersman, 2008; Taylor, Weist, & DeLoach, 2012) and has been particularly helpful in clarifying the capacities required to support the implementation process at a systems level.

The ISF specifies the three systems needed to carry out dissemination and implementation functions: (1) Synthesis and Translation System, (2) Support System, and (3) Delivery System. The Synthesis and Translation System encompasses the functions associated with distilling theory and evidence, translating it into usable formats and ensuring that people who could benefit from the evidence have access to it (e.g., those in the Delivery System). Examples of activities include the development of guidelines and manuals, creating actionable messages, and hosting knowledge exchange events between the producers of a given innovation and potential users of it. The Delivery System includes individuals, organizations, and communities who carry out the innovations developed by the Synthesis and Translation System. Within education, those in the Delivery System include educators, school mental health professionals and other support staff, school administrators, and school district leadership teams. The Delivery System is where implementation takes place and where social benefits are realized. Finally, the Support System works with the Delivery System to ensure innovations are implemented with quality and to increase the likelihood that the innovation will lead to desired outcomes. The Support System provides two primary types of support: (1) innovation-specific capacity building, including the necessary knowledge, skills, and motivation required to implement a particular innovation, and (2) general capacity building, which includes efforts to enhance the infrastructure, skills, and motivation of organizations and individuals to participate in implementation activities. Some common approaches employed by the Support System include training, technical assistance, and monitoring progress but can also include facilitating a deliberative process to select an innovation, providing expertise on implementation science and accessing and sharing resources developed by the Synthesis and Translation System. Each system is connected through bi-directional relationships, and the systems are embedded within a context that includes macro-policy, existing research and theories, climate (defined as the level of emphasis placed on accountability for practitioners), and funding.

While the ISF has broad use and applicability and has found purchase among researchers and evaluators looking to design, describe, and evaluate implementation efforts at scale, the framework has not been sensitive to the policy considerations and policy-related activities that are an important part of implementation in public systems including the education system in most countries. The model indicates "macro-policy" is part of the context in which implementation occurs, but researchers studying the infrastructure needed for effective implementation (often called intermediaries) commonly identify activities and functions that are policy-specific.

For example, Franks and Bory (2015) identified "policy and systems development" as one of the seven functions carried out by intermediaries, based on a survey of 68 unique intermediary programs or organizations. Within the field of education, Cooper (2014) describes 8 functions of research brokering organizations, and one of these functions is "policy influence" based on a cross-case analysis of 44 organizations in Canada. Furthermore, the outcomes of a national colloquium on the potential contribution of intermediary organizations to school mental health promotion in Australia in 2012 concluded that intermediaries are regularly challenged to work across service sectors and levels of government and that, among other things, they require the ability to understand complex policy relationships and translate these into local contexts for diverse populations (Corcoran, Rowling, & Wise, 2015). Based on these findings and an additional mixed methods review of the literature, Bullock and Lavis (2018) propose to build on the ISF by adding a Policy System to better capture the role of policy in implementation and the interactions between the Policy System and each of the three previously identified systems (Image B). The Policy System includes public policy at all levels (municipal, provincial/state, and/or national levels) as well as organizational policy, with each type of policy having influence on the other systems bridging the research to practice gap.

Modified Interactive Systems Framework (Bullock & Lavis, 2018)



For the remainder of this chapter, we draw on the modified ISF to explore the efforts of three intermediary organizations in the province to support the implementation of a province-wide mental health strategy with a focus on improving services and supports for children, youth, and families and identifying common approaches and lessoned learned.

An Example from the Field: Ontario's Mental Health and Addictions Strategy – *Open Minds, Healthy Minds*

In June 2011, *Open Minds, Healthy Minds: Ontario's Comprehensive Mental Health and Addictions Strategy* was announced. Through this multi-ministry strategy, the province articulated their aim to "reduce the burden of mental illness and addictions by ensuring that all Ontarians have timely access to an integrated system of excellent, coordinated and efficient promotion, prevention, early intervention, community support and treatment programs" (Ontario's Comprehensive Mental Health and Addictions Strategy, 2011, p. 7). This strategy focused on children and youth in the first 3 years and was supported by 14 ministries, under the leadership of the Ministry of Child and Youth Services (MCYS). There were three key target areas: ensuring fast access to high-quality services, providing early identification and support, and helping vulnerable children and youth with unique needs.

Though the 22 initiatives within the strategy were each led by specific ministries, there was considerable cross-sectoral collaboration involved in bringing the work to fruition. Three intermediary organizations emerged to take on significant roles to support various initiatives led by their respective funding ministries. These intermediary organizations became the Support System infrastructure for the strategy and also often acted as part of the Synthesis and Translation System (Bullock & Lavis, 2018; Wandersman et al., 2008). The Provincial System Support Program **(PSSP)** at the Centre for Addiction and Mental Health is funded for this work by the Ministry of Health and Long-Term Care. The Ontario Centre of Excellence for Child and Youth Mental Health (*the Centre*) is funded by the Ministry of Children and Youth Services (MCYS) and provides supports to Ontario's child and youth mental health sector with a primary focus on community-based service agencies. School Mental Health ASSIST (*SMH ASSIST*) is funded by EDU and offers leadership, resources, and implementation coaching to Ontario's 72 school boards in support of student mental health and well-being. Each of these organizations provided

Moving on Mental Health was the transformation effort in the community child and youth mental health sector. This included the identification of lead agencies supporting the development of community mental health plans and the provision of a core basket of services across service provincially. *The Centre* supported this transformation with a team of knowledge brokers (KBs) assigned to each service area. KBs had expertise in evaluation, implementation science, knowledge mobilization as well as family/youth engagement. The goal was supporting agencies in their change management while aligning thinking and efforts in the sector across communities. The Centre also linked evidence to policy by producing strategic policy-ready papers for government on key elements of the transformation.

Systems Improvement Through Service Collaboratives (SISC) aimed to improve the transitions in care for children and youth (e.g., transition from community to hospital services, from child to adult services). To tackle these significant challenges, 18 Service Collaboratives were established across the province. Each brought together stakeholders who worked collaboratively to identify a key system-level challenge in their community that could be mitigated through multi-sectoral partnerships and collaborative implementation efforts. *PSSP* functioned as the intermediary or "backbone" to this initiative. With expertise in implementation, knowledge exchange, evaluation, information management, equity and engagement, and aboriginal engagement and offices across the province, tailored local community support that is consistent with provincial objectives is possible.

leadership and coordination for individual initiatives and took responsibility for promoting alignment across efforts. Through this collaborative approach, project teams learned and grew together and identified key implementation and leadership learnings associated with the first 3 years of the strategy and key recommendations for continued efforts in building the system of care for children and youth in Ontario.

Working alongside EDU, *SMH ASSIST* provides leadership, resources, and implementation support to Ontario's 72 school boards as they work to create and implement a board-level mental health strategy in support of student mental health and well-being. The SMH ASSIST team is comprised of regionally based implementation coaches who support school districts with establishing organizational conditions, building the capacity of education professionals, introducing evidence-based implementation-sensitive programming, supporting equity by recognizing the needs of specific populations, inspiring youth leadership and voice, and contributing to the ongoing development of the system of care.

There are certain commonalities in the work of these intermediary organizations. In each case they support change within their given sectors. Key features of this support include (1) linking evidence to practice, (2) building capacity in evaluation, (3) providing supports for implementation and change management, and (4) creating opportunities for knowledge exchange throughout the process of transformation in each sector including a specific role in informing policy. The push toward *the adoption of evidence-informed processes and practices* has been significant over the last decade. Making evidence available to stakeholders (e.g., service providers, administrators, educators, policy-makers) within context and at the point of decision-making becomes critical in support of systemic change and a role that the Synthesis and Translation System undertakes (Bullock & Lavis, 2018; Wandersman et al., 2008). The intermediaries play a significant role in synthesizing and mobilizing existing evidence using a variety of tools and vehicles (toolkits, policy papers, web portals and websites, pathway documents, evidence briefs, learning modules, training video, learning forums).

The adoption of evidence or the change of any practice within the context of system transformation should be subject to *rigorous evaluation to demonstrate impact*. Evaluation capacity and expertise are often lacking at the level of the individual organization and such efforts are rarely integrated across an entire sector. Intermediary organizations have played a significant role in building this capacity in each of their sectors, and this aligns with one of the functions of the Support System (Bullock & Lavis, 2018; Wandersman et al., 2008). This has included providing frameworks to build evaluation plans for individual programs or processes (i.e., program logic models), identifying tools/measures that can be used to track processes and outcomes, making financial supports available for specific evaluation projects, as well as providing evaluation coaching supports.

Having a strong understanding of the implementation process guided by implementation science has been identified as important for the Support System to function effectively (Bullock & Lavis, 2018; Wandersman et al., 2008). All three intermediary organizations have a strong appreciation of *implementation science* and understand that evidence in and of itself is insufficient to foster sustainable change and impact. Each has adopted the Active Implementation Frameworks developed by the National Implementation Research Network (NIRN) (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005) as a best practice in the science of implementation to support organizational change and system transformation to improve outcomes across the spectrum of human services. Implementation is a staged process that needs to be strategic, deliberate, and systematic. It requires special attention to change readiness and pre-existing organizational/systemic conditions that, if in place, can support not only the adoption of

different practices/processes but also their sustainability. In many ways, implementation includes all of the other key activities of the intermediary organizations as the process is sensitive to the selection of evidence to fit context as well as the need for a foundation in evaluation prior to implementation. The Active Implementation Framework model recognizes the important role of drivers in this entire process (i.e., training and coaching, facilitative leadership, information supports, technical supports, and resources).

Much of the implementation literature has focused on change at the organizational level, with a given evidence-informed practice. Sometimes this extends to scale-up of a specific practice to a jurisdictional or systemic level. In the Ontario context, the intermediary organizations have extended this thinking further to draw on principles from implementation science to inform a complex transformation effort occurring at the system level. This application required adaptations to enhance relevance and effectiveness at the system level. For example, although coaching at the program/intervention level is most relevant when implementing an evidence-based practice (EBP) within in agency, when applying the frameworks to a system-level initiative, "coaching" can be thought of as relevant to organizational and system level as well (Duda, Blasé, Fixsen, & Sims, 2013). Through this coaching process, support and capacity building is provided as it relates to the particular practice but also to the implementation process overall. Most importantly, since organizations across sectors are experiencing this coaching, the capacity for good implementation is increasing in the system overall. For example, in Service Collaboratives members in mental health, education, justice, health, and social services came together to improve a transition between their services. These individuals worked collaboratively to identify a key system-level challenge in their community that could be mitigated through multi-sectoral partnerships and collaborative implementation efforts. Although the specific effort was to implement a new practice or process, the experience of being led and supported through a systematic and deliberate implementation process provided communities with a new way of working across silos to effect change. Another example that illustrates transformation within and across sectors involved the Centre and SMH ASSIST working together, with MCYS and EDU, and practice leaders in each sector, to create a Pathways Support Toolkit. This co-created resource served as a first step toward clearly articulating current roles and functions across the system of care and helped local agencies and school boards to imagine the preferred future together, clearly articulating complementary roles and services.

Capturing the story of change and continuously *sharing knowledge* within and between sectors has been core to the work of the three intermediary organizations involved in *Open Minds, Healthy Minds*. With so much change going on at multiple levels through various initiatives, it was very easy for stakeholders and communities to become confused and overwhelmed. Communication was important and cohesive aligned messaging was essential. Sharing within and across sectors was continuous through a variety of vehicles (publications, presentations, learning forums). Audiences needed to understand what was being done, why it was being done, how it all fit together, and what difference was it making. Consistent communication across the intermediaries facilitated a growing appreciation of a whole-system effort to improve the lives of children, youth, and their families.

An extension of the knowledge exchange role of intermediaries is the ability to bring evidence to policy-making. As suggested by Bullock and Lavis (2018), policy plays a critical role in implementation and scale-up of practices both within and across sectors. It sets the direction for investments in support of system change but also sets the accountability expectation mechanisms to determine the impact of implementation. Intermediaries can be critical in operationalizing policy within context but also in capturing and communicating the process and impact of implementation.

In addition to their roles in their respective sectors, the intermediaries involved in the first phase of the strategy stepped across sectors to collaborate, meaningfully and often! At this meta-systemic level, the three organizations worked together to (1) inform each other on

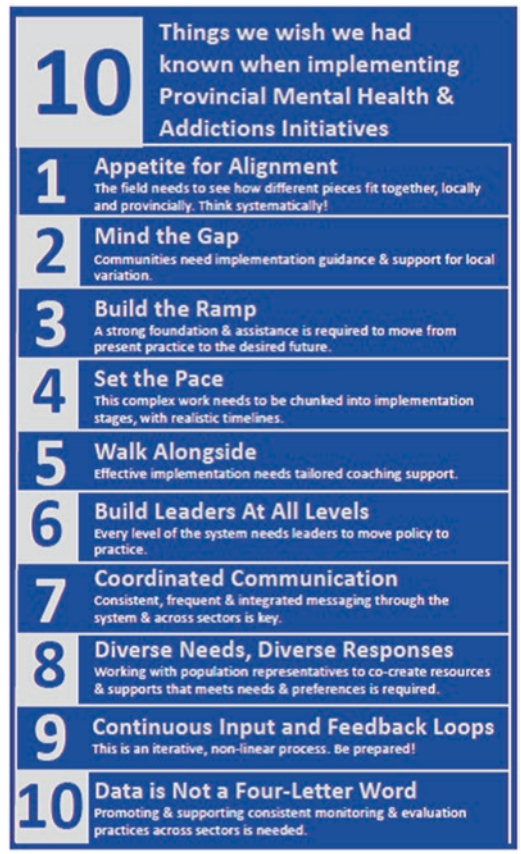
progress of individual initiatives that could be enhanced and better aligned by knowledge from each other, (2) begin to develop a common language for key constructs that were relevant across sectors, (3) co-create new tools/processes where gaps were found in existing evidence, (4) advocate for each other's role across sectors bringing more credibility to each partner's work, and (5) role model cross-sectoral collaboration and the value of a collective whole-government perspective on child and youth mental health. Although relevant for all stakeholders, such role modeling was particularly relevant for policy-makers who also sought to display similar collaboration across ministries. Multiple examples were seen when leads from each organization presented similar material with similar messages to various audiences be they in health, education, or child and youth mental health.

System-Scale Implementation Science Learning

There is important work in school-based mental health occurring across jurisdictions that is informing how best to affect system change to best meet the holistic mental health needs of students (Weist et al., 2017; Weist, Short, McDaniel, & Bode, 2016). In Ontario, Canada, we are seeing change of this magnitude occurring at multiple levels/contexts (individuals, schools, school boards, as well as ministry-wide). This within-sector change is being informed by evidence and evaluated for impact. It is being facilitated by a strong commitment to the principles of implementation and supported by an intermediary organization with the vision, expertise, and capacity to make this change feasible and sustainable.

In and of itself, this process within education will be transformative. However, if done in isolation from other change efforts outside of education, the opportunity for larger system change and impact will be missed. With similar transformation and major change initiatives occurring simultaneously across sectors, there is a real danger of confusing and burdening stakeholders, duplicating efforts, and wasting resources where better alignment could reduce expenses. Our experience in the first 3 years of *Open Minds, Healthy Minds* implementation demonstrates that when harmonized across sectors, more cohesive non-siloed action produces holistic benefits for communities, organizations, schools, families in support of the wellness of children, and youth. Specific learnings from this cross-sectoral work are shared below to offer some potential considerations for optimizing collective efforts across sectors.

Open Minds, Healthy Minds: Phase One Implementation Learnings



The three intermediary organizations worked alongside additional partners that supported phase one work, Canadian Mental Health Association, Ontario Division and Hospital for Sick Children, and Community Health Systems Resource Group, to identify and share a listing of

system-scale implementation learnings from *Open Minds, Healthy Minds*. Each of these considerations is described briefly below.

1. *Systems' Thinking Is Not Easy!* It is natural to become absorbed in granular aspects of work in our own programs, settings, or sectors. We had to make strong and explicit efforts to sustain a system perspective, individually and collectively. Practitioners need help to think systemically and to see how their local efforts fit with the wider direction. When there is perceived or actual duplication of projects or services at a provincial level, the field gets frustrated and discouraged. When alignment is modeled provincially, the field is inspired to persist with challenging local coordination work. Regular reminders of our overarching goal – *contributing to an enhanced system of care for children, youth and families* – kept us focused and hopeful.
2. *Set the Pace* – Systematic implementation of sustainable plans in large organizations and complex systems takes considerable time and effort. The research is clear that large-scale transformation takes many years to bring to fruition. Knowledge, planning, resources, monitoring, and support are all required. Implementation science frameworks help a lot!. Realistic time expectations and a steady pace of work help to maintain momentum for the long term. Chunking the work into implementation stages and cycles and making even small practice change visible can help to carry momentum forward during longer-term change efforts. Across initiatives, we have deepened our understanding of implementation principles, like the importance of maintaining scope, promoting strategy and sequence, and offering ongoing responsive coaching support. In building a system of care for children and youth, all of us have to work well together in new ways, while we are changing how we work internally at the same time
3. *Continuous Communication* within and across government, organizations, sectors, and communities is challenging but necessary to address complex system change. It has been important to create platforms for sharing knowledge across initiatives of the strategy. The field needs regular communication to understand the plan and their part in its execution. Communication that crossed sectors and spoke to integrated messages was particularly welcome in the foundational years of the strategy. Common platforms for sharing information were well-received, like joint cross-sector panel presentations and online forums such as EENet. In addition, a provincial advisory group, with representation across sectors and government presence, supported the ongoing exchange of project-based learning and their connections to the overall strategy. Although this group was initially developed to provide guidance to the Service Collaborative initiative, we quickly realized this collective was important to discussions about the overall strategy.
4. *Diverse Needs, Diverse Responses* – Many approaches are designed for general populations of children and youth. Given the regional and cultural diversity of the province, localized approaches are needed. Rural and urban settings have different resources, needs, and system considerations that require adaptations in the implementation process. In addition, some specific cultural populations in Ontario have more or different needs, requiring a response of a different intensity or nature. In the foundational years, several initiatives worked alongside representatives from specific populations to learn more about needs and preferences (e.g., indigenous mental health). Finding respectful ways to include and co-create resources and supports that meet the needs and preferences of specific populations is a critical implementation learning.
5. *Data Is Not a Four-Letter Word!* Modeling the use of data and evidence, and sharing developmental progress, has helped with uptake of core strategies. The field needs to see progress for their change efforts. This requires measurement for continuous quality monitoring, program evaluation, and pro-

cess/outcome tracking. In the foundational years, several implementation and outcome monitoring measurement tools were developed and shared across initiatives. There were difficulties related to the perception of competing or duplicative measures of child and youth mental health functioning. There are varying levels of capacity and resources across the province to include performance measurement and evaluation into the work.

6. *Mind the Gap* – It is a difficult work to translate policy and research into daily practice locally. Communities need implementation guidance to help to bridge the gap between evidence and practice. This includes considering sustainability from the outset and decision-making throughout the implementation process. Supporting communities with information related to implementation principles (e.g., tips for maintaining scope, sequencing for sustainability, risk management) and offering decision support to promote research-based practice can be helpful ways to "mind the gap." At the same time, it is important to moderate high-level guidance with the appreciation that there will be local variations in how guidelines can be implemented.
7. *Build the Ramp* – In times of transition and transformation, individuals, groups, and communities need help moving from present practice to the desired future. There needs to be explicit attention to preparing people and organizations for sustainable change and meaningful collaboration. It is important to forecast where the field is moving in specific terms and to help stakeholders to understand how we will get there, together. Part of ramp-building involves supporting organizations to tend to foundational conditions so that high-yield programming and services introduced in transformation will flourish within a fertile environment. When the change process and associated expectations and facilitating conditions are made explicit, this can set the stage for future change projects that invariably occur within a transformational culture.
8. *Walk Alongside* – There is good evidence that effective implementation is enhanced via coaching support. Several of the initiatives in the foundational years relied upon implementation coaching as a key enabler of the change process (e.g., Service Collaboratives, SMH ASSIST, youth suicide prevention support through the Centre). It has been well-documented that support models that include implementation coaching are a high-yield way of supporting change within sectors (Fixsen et al., 2005), and our experience in Ontario suggests that the language and experience of coaching can also be used across sectors to reinforce efforts and a sense of collective transformation.
9. *Build Leaders at All Levels*. In order to move from theory and policy into practice, we need leaders at every level of the system. Leadership in times of change needs to be continually nurtured. Distributed leadership is needed to encourage vision setting, strategy development and execution, organizational conditions, systematic communication, capacity building for staff, and ongoing quality monitoring within levels, as well as across sectors. Authentic leadership and voice from families and youth is a critical part of the needed leadership structure.
10. *Meaningful Collaboration* is a critical element in the evolving system of care. Engaging stakeholders including children, youth, families, and those with lived experience to help to plan, develop, and implement new practices every step of the way leads to better solutions and ultimately a better system of care. Collectively, we developed many strategies for honoring historical contributions, sharing leadership, learning together, and co-creating resources across sectors, disciplines, and regions.

Summary

Undertaking implementation efforts that go beyond a single intervention and instead focus on complex, system-level transformational change

for children, youth, and families in a province with over 13 million inhabitants and a vast geography required heavy lifting and the mobilization of many resources. The modified ISF (Bullock & Lavis, 2018) provides a coherent framework for understanding these resources and how each system contributed to the overall change effort. In this final section, we revisit the components of the modified ISF and reflect on how the efforts described here fit within it.

Delivery System

For this particular change effort, the Delivery System is better described as Delivery *Systems*. The focus of the implementation efforts we described took place in the education system, the child and youth mental health system, the adult mental health system, and the criminal justice system. Each of these service delivery systems functions according to its own set of rules, with its own particular service language and culture. In order to achieve change, the Support System, including these three intermediary organizations, needed to have a fulsome understanding of each system, how it operated, and what levers for change were available and needed to have or earn credibility with each service delivery system it was engaging with. Being nimble and adaptive to each particular delivery system context and working to support innovation-specific capacity that was specific to a service delivery system while simultaneously creating general capacity that was not specific to one delivery system but became common to all was a particularly unique feature of this effort.

Support System and Synthesis and Translation System

The three intermediary organizations described here comprised a large portion of the Support System for this change effort. However, the same three intermediary organizations also comprised a large portion of the Synthesis and Translation System. In this system change effort, these two systems were integrated, which is relatively unique when compared to other descriptions of ISF. Although they were integrated from an organizational perspective, they still remained discrete functions within the intermediary organizations. Integrating these systems within an intermediary provides an opportunity for the intermediary to operate along the full continuum of dissemination to implementation; however, it requires an even more diverse skill set of the people working within them and creates a very large scope of work. The intermediaries must be able to do both innovation-specific and general capacity building for implementation, understand and employ tools and tactics to support synthesis and translation of evidence, and have knowledge and understanding of the theory underpinning each system.

Policy System

Each of the intermediary organizations received funding from a separate provincial government ministry: education, child and youth services, and health and long-term care. These Policy System partners recognized the need for Synthesis and Translation System and Support System capacity in order to achieve the goals set out in the strategy. They enabled this capacity directly through funding the intermediary organization, but they remained actively engaged in the work of their respective intermediary organization and encouraged the collaboration among them. These three ministries also met regularly together to foster coordination of their policy implementation efforts. An important role for the intermediary organizations in their Support System capacity is to feedback to the Policy System any structural barriers the Delivery System is encountering during implementation. The intermediaries also found they employed both their Support System and Synthesis and Translation System functions by increasing the capacity, ability, and appetite of the Policy System to access and use research evidence and increased their knowledge and understanding about implementation science and the process of implementation.

Often cross-sectoral work is approached with considerable hesitation and perceived as too complex to tackle, and despite the best of intentions, groups tend to fall back into familiar silos, especially during times of change and limited resources. But it is especially during these times that cross-sectoral work becomes most critical to ensure efficient use of available resources in the interest of promoting child and youth mental health. The *Open Minds, Healthy Minds* example is provided as an illustration to highlight the power of implementation science within the complex work of transformation to scale across sectors. This example is presented as a reflection of a learning journey, rather than as a definitive guide, but perhaps some of the principles and experiences noted will spark ideas in other jurisdictions and system initiatives.

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6 Schools and Mental Health: Is Some Necessary Reexamining in Order?

Stan Kutcher, Yifeng Wei, and Mina Hashish

Abstract

The need to effectively address the mental health needs of young people in a school setting is complex and requires formally historically separate domains, such as education, public health, and clinical care, to work cooperatively. From the public health perspective, schools can be sites where interventions address health and mental health promotion and the modulation of negative social, geographic, and economic impacts (the social determinants of health) on health/mental health and prevention of social morbidity can be delivered. From the clinical perspective, schools are sites where health care and mental health care and the possible prevention of mental health disorders can be delivered.

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The Need for an Effective Child and Youth Mental Health Response

Mental health in young people is a topic of concern. An important response to this need is for effective and frugal investment in supporting the healthy development of young people and ensuring the availability of readily accessible effective care for those who demonstrate the presence of a mental disorder. This response should be a combined education and health priority of the modern state. In Canada, how to address this issue has traditionally been the sole purview of provincial and territorial authorities. However, recent changes in the Canada Health Transfer funding process, instituted by the federal government which links funds to specific purposes (such as investment in mental health), have now been agreed to – signaling a larger national interest in this matter (Dacey & Glowacki, 2017).

Recent publications (Davidson, 2011; Kutcher, 2011) examining innovations that have the potential to bring together education and health sectors have stressed the importance of considering a number of separate but related domains. Kutcher (2017a) has argued that health and education investment addressing mental health needs must be primarily directed "in the front end," meaning a distinct focus is necessarily placed on the first quarter of the life span. To accomplish this, effective involvement of schools is a necessary but not sufficient action.

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The Argument for Situating Mental Health Interventions Within Schools

The need to effectively address the mental health needs of young people in a school setting is complex and requires formally historically separate domains, such as education, public health, and clinical care, to work cooperatively. From the public health perspective, schools can be sites where interventions address health and mental health promotion and the modulation of negative social, geographic, and economic impacts (the social determinants of health) on health/mental health and prevention of social morbidity can be delivered. From the clinical perspective, schools are sites where health care and mental health care and the possible prevention of mental health disorders can be delivered. This latter component is brought into its starkest context given the reality that most mental disorders can be diagnosed prior to age 25 years (Fig. 6.1) and that the greatest burden of mental disorders is found in age cohorts between the ages of 12 and 25 years (Fig. 6.2). Both considerations and the need to be guided by the best available evidence and developmentally sensitive considerations need to be kept in mind in tailoring mental health-related interventions for school settings.

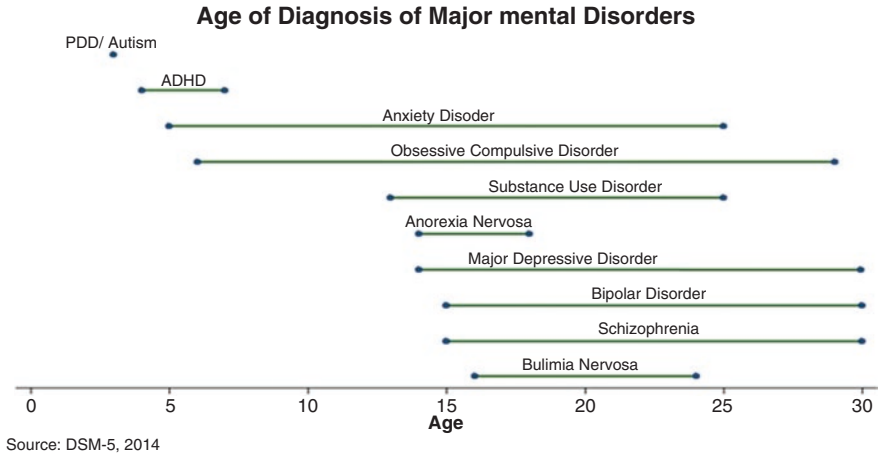

Fig. 6.1 Age of diagnosis of major mental disorders. (Source: American Psychiatric Association, 2014)

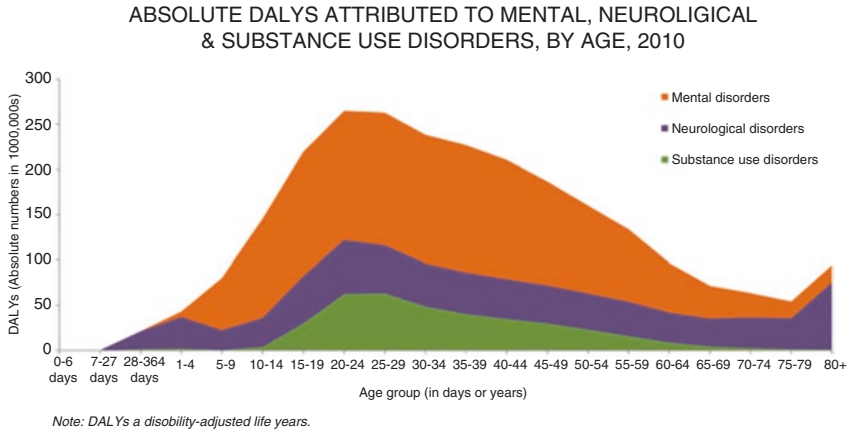

Fig. 6.2 Absolute DALYs attributed to mental, neurological and substance use disorders, by age, 2010. Note: DALYs = disability adjusted life years

The importance and necessity of this focus on schools was first brought to policy attention by a World Health Organization report over three decades ago. Hendren, Birell Weisen, and Orley (1994) laid out a broad but incomplete framework of the potential role of schools in addressing mental health promotion along with certain aspects of early intervention for youth with mental disorders.

In Canada, this need has also been recognized in two key monographs. First, the Standing Senate Committee on Social Affairs, Science, and Technology (2006) produced its seminal report *Out of the Shadows at Last* and noted that young people were arguably the most important demographic in which increasing investment for improvement of rapid access to effective mental health care in Canada was needed. More recently, this insight was echoed as a global health priority (Chisholm et al., 2016), with the first global school mental health monograph illustrating the maturation of school mental health worldwide being published in 2016 (Kutcher, Wei, & Weist, 2016).

Second, arising from the Standing Senate Committee Report, the Mental Health Commission of Canada, through its Child and Youth Advisory Council, commissioned the development of a national child and youth mental health framework. The report *Evergreen: A Child and Youth Mental Health Framework for Canada*, based on a broad national consensus, developed a set of core values (Fig. 6.3) to advance the identification of strategic directions and apply a variety of best available evidence-based responses that could be expected to parsimoniously achieve improvements in various domains of youth mental health (Kutcher & McLuckie, 2013).

This concise non-prescriptive document identified the importance of addressing various mental health needs for young people through numerous innovative approaches, including interventions that could be embedded and delivered in schools. A recent example of how Evergreen has been implemented to help create and support provincial and territorial child and youth mental health policy in the Yukon can be found in the work of Mulvale and her colleagues (2015).

More recently, the understanding that standalone mental health interventions applied in schools may not meet the various, complex, and different needs of young people has resulted in the development of the *Pathway Through Care Model* that demonstrates how schools could be

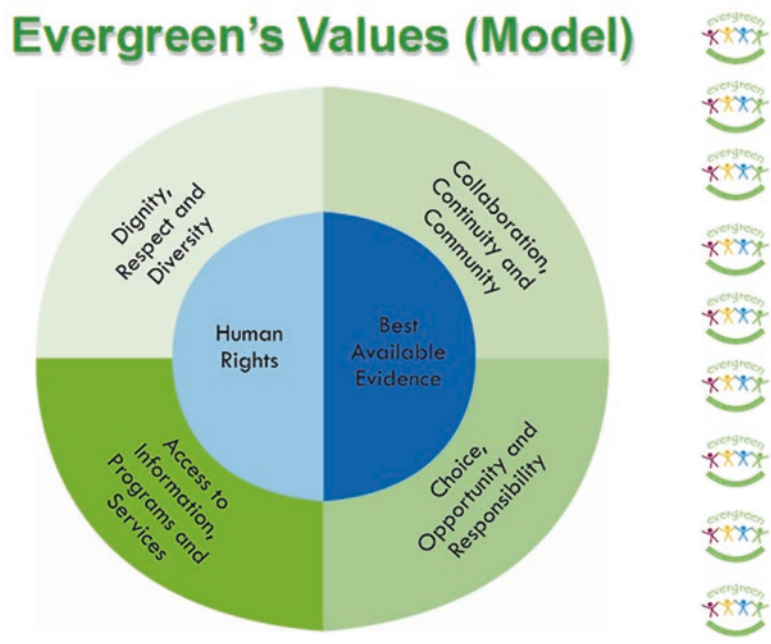

Fig. 6.3 Evergreen's values (model)

one important element of a comprehensive, horizontally integrated approach to help address youth mental health needs (http://teenmentalhealth.org/pathwaythroughcare/). First described by Wei et al. (2011) with a primary focus on the role of schools, the more recent iteration of the Pathway Through Care Model identifies a number of key domains in which schools can effectively and parsimoniously address the mental health needs of students and teachers alike. Key to this approach includes the integration of families, primary health care, schools, and specialty mental health services in the promotion of mental health, prevention of mental disorders or social failure, early identification, support and triage for youth at high probability of having a mental disorder, and enhancement of access to effective mental health care. In this model (Fig. 6.4), schools play a role consistent with their core mandates and historical, albeit evolving, activities. These include, but are not limited to, education of students and teachers, sites for implementation of best available evidence-based health improvements (promotion, prevention, and interventions) for young people, and workplace health and mental health interventions for teachers, among others.

As the primary nonfamily institution for supporting the development of young people, schools have been brought into this integrated care approach, often unprepared and uncertain about what their roles and responsibilities should be, how they should discharge those, and how to be effectively and cost-effectively involved in addressing them.

Although various Canadian national reports have identified the concern that educators have about youth mental health (e.g., see the Mental Health Commission of Canada's "*School-based mental health in Canada: A final report*" and Canadian Teacher's Federation Report (2013, 2015), it is only recently that work has begun to promote the development of a better understanding regarding of which components need to be addressed, in what priority, and how these can be based on the best available evidence and frugally applied to strengthen existing education/health systems without creating additional silos. Some of this recent work has implications for the creation of various interventions that can be developed and delivered to address this need.

Approaches to Increase Mental Health Awareness

One of these commonly applied activities in school mental health includes mental health awareness initiatives. As mental health awareness has expanded through social marketing programs

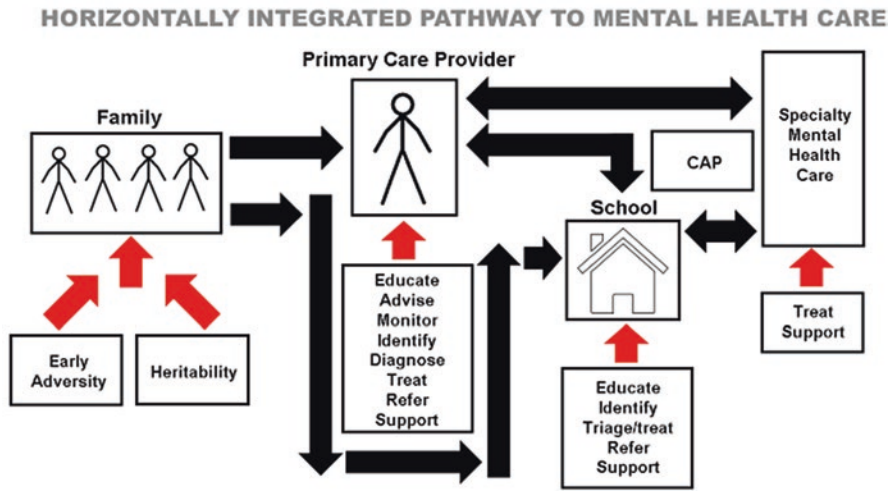

Fig. 6.4 Horizontally integrated pathway to mental health care

such as in Canada's "Bell Let's Talk" or "Mental Illness Awareness Week" in both Canada and the United Kingdom, there has also arisen widely distributed but often uninformed or uncritical discussions related to mental health awareness in social media, such as can be found on Twitter, Instagram, or Facebook. Regardless of its source, the increase in mental health awareness activities has not been paralleled by demonstrated improvements in knowledge related to mental health or mental disorders. Currently, while mental health awareness has raised the profile of mental health, the need to effectively enhance knowledge and understanding of the complexities of mental health and mental disorders and the need to rethink how rapid access to effective mental health care for youth is most usefully, effectively, and efficiently delivered have yet to be appropriately addressed.

While awareness-promoting activities have increased, an unforeseen effect of these activities has arisen regarding confusion in discerning between the presentation of mental disorders and the expected, normal negative emotions of daily living. This has had the consequence of increasing the rates of self-reported mental malaise in young people, which too has been misconstrued by the media and service providers alike as heralding alarming increases in the rates of mental disorders (Kutcher, 2017a, 2017b). Further, the overall impact of increasing awareness about mental health and mental disorders in terms of impact on population measures of mental health or improved access to evidence-based mental health care is not clear. For example, while various mental health awareness campaigns have been widely disseminated in communities and in schools for the last decade, we have not seen resultant decreases in negative mental health-related outcomes at the population level. In Canada the youth suicide rates, which had been gradually falling between the mid-1980s and the early 2000s, are now on the increase. This rise has occurred concurrently with the increased media attention toward youth suicide and the proliferation of community- and school-based suicide awareness building, often focused on young people (Kutcher, Wei, & Behzadi, 2016). In the United Kingdom, a just-published population study identified a recent rapid upswing in self-harm behaviors among young people and a relationship between these increasing rates of self-harm and early age mortality, including suicide (Morgan et al., 2017). Such correlations give cause for concern. At the very least, these data demand critical consideration and analysis in trying to determine the nature of the relationship between extensive application of mental health-related awareness-building activities and correlated increases in population indicators of poor mental health outcomes.

Also correlated with increased awareness-building activities, the demand for mental health services is increasing with concerns being persistently raised that this demand is not being met with currently available services (CIHI, 2015; MHASEF, 2017). Yet, it is not clear that this increased demand is being driven by a need for care for those who have a mental disorder. Reports from a number of youth mental health-serving organizations have identified notable increases in crisis and emergency room visits following highly promoted national awareness campaigns from youth who do not require care for mental disorders (personal communication: IWK Health Centre; BC Women's and Children's Hospital). Similar phenomenon have been reported in relationship to some community suicide awareness interventions which have reported increases in help seeking from those at low risk for suicide concurrently with decreased help seeking from those at high risk for suicide (Kutcher, 2017a, 2017b). While it is unclear that a similar phenomenon can explain the current drive toward increasing demands for mental health service, these observations underscore the need to better link mental health awareness activities with widespread and effective mental health literacy interventions. These actives need to have two additional components in their delivery. The first is to advance learning regarding when and where to access care. The second is to assist participants to also recognize when and how mental health difficulties can be effectively dealt with outside of the formal health-care system. Additionally, these data challenge us to rethink how mental health care for young people can be

most effectively and parsimoniously be delivered. In all of these considerations, schools are at the epicenter of this challenge.

Mental Health Stigma

A further consideration from the emerging data when providing mental health awareness approaches relates to how mental health-related stigma is being addressed by educators. Many currently applied and highly popular mental health-related stigma reduction programs are based on a social marketing model focused on mental health awareness-building activities. However, the evidence for the impact of these initiatives on significant and sustainable stigma reduction across the many components of stigma (e.g., public stigma, perceived stigma, social distance, self-stigma, treatment stigma, etc.) is lacking. For example, a search of the most common academic databases did not identify any peer-reviewed publications demonstrating the effectiveness of these social marketing types of awareness-building interventions. A recent systematic review (Mehta et al., 2015) could not identify any of the commonly applied social marketing-based stigma reduction approaches so popular in mental health circles as clearly effective. Similarly, an earlier analysis conducted by the Ontario Centre for Excellence for Child and Youth Mental Health was unable to show that, of the many popularly applied social marketing-based anti-stigma interventions, any had demonstrated significant and sustained positive impacts (2012). There is thus a call for research to address the effectiveness and safety of these types of interventions.

It is of relevance that these social marketing approaches directed at mental health do not mirror those effective interventions that have been identified as successful in addressing other health-related stigma such as cancer and HIV/AIDS (Holland & Gooen-Piels, 2003). Other types of anti-stigma interventions that have shown some positive impacts may be at risk of underemployment as focus is put on social marketing approaches. Unfortunately, questions addressing this concern have been generally overshadowed by the cacophony of voices that enthusiastically promote social marketing-based activities.

One potential negative impact of mental health-related social marketing programs is that they may possibly and inadvertently contribute to the continuation of inadequate investment in improving rapid access to effective mental health care for those most in need. Substantial and necessary improvements in best available evidence-based mental health care that efficiently and effectively address the mental health care needs of young people have not occurred. This is despite at least a decade of social marketing awareness activities (CIHI, 2015; MHASEF, 2017). This fact runs counter to the assumption that greater awareness necessarily leads to improvements in service provision. While it would be premature to accept this concern at face value, due consideration must be given to better understanding this correlation.

Such correlational findings, however, may suggest that the hoped-for impact of current anti-stigma social marketing interventions not only may not be achieving some important outcomes but may perhaps be unwittingly contributing to negative mental health markers in young people and may possibly be negating the impact of those anti-stigma interventions based on other approaches (such as direct personal contact). Should this prove to be the case, a potential explanation for this can be found in the concept of virtue signaling, a social interaction construct based on evolutionary psychology (see, e.g., Barrett, Dunbar, & Lycett, 2002; Pentland, 2008) – in which highly visible socially desirable activities may become a substitute for the hard work needed to change social conditions, improve human rights, and decrease economic inequities, all social determinants of health that contribute to poor mental health outcomes at both the individual and population levels (Bulbulia & Schjoedt, 2010; Peters, 2015). For example, if teachers and students all wear a pink shirt on anti-bullying day, this virtue signal may be either consciously or subliminally considered to be doing enough to solve the problem. The hard work needed at the policy, school climate development, and personal responsibility level may thus be avoided.

This concerning possibility, however, must be subjected to critical empirical research, both quantitative and qualitative, before the above argument is accepted or rejected; but it merits consideration. Certainly, schools need to become aware of the impact that activities with a high degree of virtue signaling create. They may either be positively affecting or not affecting the mental health outcomes of teachers and students alike. They may be having a negative impact. At the very least, good empirical research on the effects of virtue signaling activities should be undertaken, and the results widely distributed.

Effective Mental Health Literacy Approaches

Potentially effective redress of this situation may include the embedding of best available evidence-based, developmentally appropriate mental health literacy initiatives into everyday school activities. Mental health literacy is defined as a concept that addresses four interrelated components: knowledge about mental health and mental disorders, stigma against mental illness, help-seeking efficacy, and positive mental health (Kutcher, Wei, & Coniglio, 2016; Kutcher et al., 2016). While mental health literacy is not sufficient on its own, tempering mental health awareness with robust mental health literacy may be expected to achieve results as good or better than those that can be expected from social marketing-based stigma reduction campaigns alone. If this is combined with other types of evidence-based anti-stigma interventions, the impact may prove to be substantially positive. Research to address this question is currently being planned.

Such a possibility has been described in the peer-reviewed scientific literature. For example, Canadian research has demonstrated that, for both students and teachers, when best evidence-based mental health literacy interventions are applied in classrooms, knowledge improves, and so does attitudes, meaning stigma was reduced (Carr, Wei, Kutcher, & Heffernan, 2017; Kutcher et al., 2016; Kutcher, Wei, & Morgan, 2015; Milin et al., 2016; McLuckie, Kutcher, Wei, & Weaver, 2014). This finding is consistent with other mental health stigma research, albeit not conducted in similar populations (Kidger et al., 2016; Naylor et al., 2009; Pinfold et al., 2005; Wright et al., 2006); it is further consistent with the relationship acknowledged with stigma in other health-related fields such as AIDS (Brown et al., 2003). This suggests that including best evidence-based mental health literacy interventions as part of a route to stigma reduction may be an effective way to enhance knowledge, while concurrently decreasing stigma, especially in the school setting. Such an approach has the added benefit of limiting virtue signaling and, in addition to helping enhance a variety of mental health outcomes, can include exposure for both students and teachers in learning how to apply effective advocacy for improving access to mental health services for those in need (http://teenmental-health.org/curriculum/wp-content/uploads/2014/07/module1_web.pdf; Kutcher et al., 2016). Comparisons of such school-integrated MHL interventions with traditional stigma reduction social marketing campaigns should be the focus of future research in schools.

These considerations need to be kept in mind when schools engage in the development and application of heretofore untested interventions designed for mental health promotion or other related interventions. As Kutcher, Wei, & Weist (2015) has noted, considerable activity in school-based mental health promotion has been activated in the last decade globally. Internationally, this has included a number of highly regarded organizations, such as the World Federation for Mental Health and the Global Consortium for the Advancement of Promotion and Prevention in Mental Health (Vince-Whitman et al., 2007) as well as the International Alliance for Child and Adolescent Mental Health and Schools (INTERCAMHS). To be globally successful, attention needs to be paid to the realities of the locations in which school mental health interventions are applied, as well as to the evidence used to support their interventions (Weist et al., 2014a, b) and critical scientifically valid evaluation of their impacts widely disseminated. Application of evidence-based interventions is foundational, but

these need to be effectively applied in existing school ecologies (Fazel, Hoagwood, Stephen, & Ford, 2014). As always, challenges to implementation and political realities will also apply (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

However, until very recently, we have not known what the baseline levels of mental health literacy that includes knowledge and stigma were for Canadian teachers who were charged with addressing youth mental health concerns in their classrooms, as well as teaching various mental health-related topics to meet provincial and territorial learning outcomes using resources for which no evidence of effectiveness may be available. Such information is key – if classroom teachers demonstrate high degrees of mental health literacy, then it could be expected that the knowledge transfer occurring in classrooms may be of sufficient quality and quantity to improve various components of student mental health literacy as well. Simply put, if teachers do not have good mental health literacy and the classroom resources that they are using have not been demonstrated to effectively improve mental health literacy for students, how can we expect positive outcomes?

Unfortunately, although published research on this topic is scant, what is available is not comforting. Globally, data suggests that regardless of the measure used, teacher mental health knowledge is problematic (Kutcher, Wei, & Weist, 2015). Studies of baseline mental health literacy in Canadian educators are currently being conducted by our research group. Early findings from two cohorts, one of student services providers from one province (n = 125) and one from junior high and secondary school teachers from four different provinces (n = 876) have revealed that, on a validated measure of mental health knowledge, test scores of student service providers averaged less than 50%, while test scores of teachers on the same test averaged about 40%. Of interest, in these same cohorts, a measure of attitudes toward mental illness showed very low stigma. Thus, the emerging picture is that of low mental health knowledge paired with low levels of stigma in Canadian educators.

We are currently extending this analysis in cohorts of teachers from various Canadian provinces with sample sizes in some studies reaching over 2000 participants. Should these early results prove to be similar in these larger samples, we will need to reexamine how we have been and, in many cases, still are addressing mental health-related education in classrooms.

First, given this reality, it would be naïve to expect that teachers, who may have a low level of mental health knowledge, would be able to effectively help students develop a solid knowledge base related to mental health and mental illness. Indeed, we would be remiss in not being concerned as to what the student outcomes actually would be, should these same students be exposed to a classroom application of mental health resources that have not been shown to be based on solid evidence of having a positive impact when delivered by teachers whose own level of mental health knowledge may be disconcertingly low. In such a scenario, not only would it be possible that students may not receive the quality of educational exposure to mental health knowledge needed, but indeed they may be provided with information that actually decreases their existing knowledge and understanding. Although it is not known if such a scenario currently exists across Canada, a recent controlled study of mental health literacy interventions in Ottawa showed that students who were exposed to the existing Ontario mental health curriculum resources taught by usual classroom teachers actually decreased the students' mental health knowledge and increased their mental health-related stigma (Milin et al., 2016).

Findings such as these should raise concern among educators and education policy makers alike. However, this concern does not seem to have registered in mental health education policy and curriculum delivery. There is a very strong likelihood that across Canada, provincial and territorial mental health learning outcomes are being addressed by teachers who are not trained in mental health literacy *and* using resources that have not been shown to effectively enhance student knowledge or decrease stigma.

Unfortunately, our current available data is based on a sample of educators involved with students at the junior high and secondary school levels. No research to our knowledge is available that addresses this issue with primary school teachers. While some components of mental health knowledge may be similar between the primary and secondary school panels, there are also different mental health knowledge needs based on age cohort and developmental differences between primary and postprimary students. Similarly, data on this issue regarding postsecondary educators is also lacking. To our awareness, there are neither studies nor indeed any validated mental health knowledge measures specifically addressing this issue in primary or postsecondary educators (Wei et al., 2016). Clearly, this could be an area of fruitful research in Canadian schools.

Well-Being Approaches

The importance of applying effective and useful mental health-promoting interventions in schools may be more challenging in the current cultural climate that has made emotional positivity a virtue while brandishing normal negative emotions as either signs of ill health or reasons for ill health (e.g., see Hoffman, 2015; Martino, 2014; Thaik, 2014). In the school setting, the focus on positive emotions as being consistent with good mental health and negative emotions as indicative of poor mental health has developed concurrently with the growth of the positive psychology phenomenon (Beiser, 1974; DeNeve and Cooper, 1998; Fredrickson, 2003).

Arising from this well-being/wellness ethos, the construct of *flourishing mental health* (Keyes 2002) has often been used to justify or support the development of positive emotional focus school-based mental health frameworks (Boniwell, 2016; Brooks, 2015; Engel, n.d.; Reschly, 2008; Seligman, Ernst, Gillham, Reivich, & Linkins, 2009). However, the flourishing model is more a hypothetical construct based on positive psychology considerations rather than representing a rigorous validated construct that has been tested against controlled conditions. But, this construct has been widely accepted and generally applied, without due consideration to its lack of rigorous controlled empirical support, nor with little or no analysis of potential negative impacts. For example, as Keyes himself noted, this model "defined mental health as a syndrome of positive feelings and positive functioning in life" (p. 207). By definition then, the presence of normal negative feelings is not considered to be a component of good mental health.

Such a construct flies in the face of reality, where negative feelings are often, actually, a signal of good mental health. After all, feeling positive when a loved one dies would be a bit strange, no? Environmentally appropriate grief, disappointment, sadness, etc. are actually all normal components of good mental health. The consideration that only positive feelings are a sign of good mental health is not only a chimera, it can be both unhelpful and potentially harmful (e.g., see Rodrigez, 2013; Shpancer, 2010).

In addition, the work conducted by Keyes that introduced this concept was unable to differentiate the symptoms reported by individuals who had a diagnosed mental disorder from symptoms reported by those who did not. Indeed, this construct ignores the reality that an individual can have a mental illness and negative feelings (e.g., sadness and/or disappointment) that result not from the illness but are a healthy and positive response to a negative life event (e.g., doing poorly on an examination or a job interview). A follow-up study by Keyes (2007) confused causality with correlation; yet its impact, driven by a positive psychology industry (see, e.g., Cederström Spicer, 2015; Davies, 2015; Whippman, 2012), was considerable.

Indeed, this hypothetical structure of flourishing, and languishing, which has never undergone rigorous controlled null hypothesis-driven experimental testing, has permeated much of the activity underway in the Canadian school mental health domain today. For example, school resources such as Well Aware (Carney, 2015) use the work of Keyes as foundational for positive mental health, without addressing the fundamental issue

of negative emotional states as an essential and important part of positive mental health. Additionally, even if the construct was untarnished by these concerns, available Canadian data shows that about three-fourths of Canadians are flourishing (Gilmour, 2014). The recent Positive Mental Health Surveillance Indicator Framework conducted by the Public Health Agency of Canada (PHAC) demonstrates similar results in young people (2017). This then raises the uncomfortable question – if the great majority of Canadian youth are mentally well, why are schools applying universal interventions focusing on wellness instead of targeting the needs of youth who may need additional support? Perhaps this reflects a sociocultural shift away from addressing the social determinants of health to providing life enhancements to those who are already doing well.

This approach may have contributed to an unrealistic consideration currently shared by many schools, students, and parents alike that unless a student is persistently feeling positive, their mental health is likely to be poor. This construct, enabled by simplistic considerations derived from positive psychology, for example, focusing on positive emotions instead of addressing all the PERMA components identified by Seligman (2011), has the potential to actually create negative outcomes in the name of promoting good mental health.

Positive psychology has been effectively criticized by key leaders of the movement as having many shortcomings (Fourth World Congress on Positive Psychology, 2015; Kashdan & Biswas-Diener, 2014; Miller, 2008) including its lack of experimental rigor in controlled testing of the null hypothesis, confusion of causation with correlation, and its focus on self-actualization rather than on the social, economic, and structural considerations that are known to create or support ill health. These considerations include, but are not limited to, poverty, racism, and inequality of all kinds. Instead, the focus has turned toward individual self-realization directed toward "feeling good," ignoring that the opposite, "feeling bad," is actually a preexisting condition for individual and social initiatives that can effectively address the social determinants of health. Or, as the author Oliver Moody, writing in the Times of London (June 2, 2016), put it "we have replaced the good citizen with subjective well-being."

This confusion has been more recently amplified with the increasing use of another construct now popular in the school setting that blends with the positive psychology framework described above, that is, well-being or wellness. This construct, sociology critics have pointed out, actually diverts attention from the social determinants of health and the challenges of addressing health and the health-care needs of populations and individuals alike (Cederström and Spicer, 2015; Davies, 2015).

While initially focused on proactively addressing the many different components that support the development and deployment of a healthy lifestyle in which environmental factors known to increase poor health outcomes are a focus for intervention, the wellness concept has gradually shifted away from these considerations of social determinants of health to focus on individual self-actualization (Anspaugh, Hamrick, & Rosato, 2004; Ardell, 2002; Corbin and Panganzi, 2001; Dunn, 1959, 1977; Watt, Verma, & Flynn, 1998; WHO, 1986). This change has not been unnoticed by an ever-expanding wellness industry marketing largely unproven products that promise to fulfill consumer's desire for this now commonly accepted concept of wellness.

Wellness, as it is played out in the marketplace, is now no longer focused on addressing environmental factors that increase the risk for poor health outcomes for individuals nor on vulnerable or disadvantaged groups where the need is greatest but on self-actualization or optimization of self-reported emotional states that are often focused on marketing of products to those who have disposable income readily at hand. These wellness states are presented as positive emotions. Hence, wellness and well-being becomes a state in which negative emotions are not only unwelcome but are considered to be signs of poor health (see, e.g., Cederström & Spicer, 2015; Davies, 2015; Falhberg & Fahlberg, 1997).

This wellness focus has now culturally become a real-life modern-day utopia similar to the town of Pleasantville in the Truman Show (directed by Peter Weir and starring Jim Carrey: 1998). However, this fantasy, as in the movie,

brings with it its own dystopia. Keeping with the movie theme, Verbinski's recently released (2017) A Cure for Wellness paints both a darker and more concerning picture.

Problematic Definitions for Well-Being and Wellness

Despite decades of wellness theory activity and many thousands of learned articles, it is difficult to find consensus on what the terms "well-being" or "wellness" actually mean. They are used as synonyms and show up repeatedly in school publications, in policy documents, and even in the titles of some roles that educators play. In some schools, these terms are used as originally directed (WHO, 1986), to denote key considerations based on reasonable evidence that directs interventions such as exercise, nutrition, sleep hygiene, and mental health literacy (see, e.g., Edmonton Catholic Schools, 2017). Noting that confusion about what wellness/well-being means, the Centers for Disease Control and Prevention (USA) has recently tried to focus the discussion and has provided the following definition:

> There is no consensus around a single definition of well-being, but there is general agreement that at minimum, well-being includes the presence of positive emotions and moods (e.g., contentment, happiness), the absence of negative emotions (e.g., depression, anxiety), and satisfaction with life, fulfillment and positive functioning.

In simple terms, well-being can be described as judging life positively and feeling good. This wellness/well-being construct merely serves to continue the popular confusion about the meaning of the term and continues to ignore the reality that negative emotions are not usually a sign of poor mental health but actually can often be a sign of good mental health. This definition, with all its inadequacies, however, is more clear than others that have been suggested. For example, here is a definition of well-being reported by Marks (2012):

> Wellbeing is not a beach you go and lie on. It's a sort of dynamic dance and there's movement in that all the time and actually it's the functionality of that movement which actually is true levels of wellbeing.

Such is not the stuff that science can address.

Questioning the Effectiveness of School-Based Wellness Programs

Of additional concern is the paucity of any robust critical and controlled (using at least attentional controls) research conducted to clearly determine the impact of a host of mental wellness interventions on carefully defined mental health and other outcomes (such as academic performance) in school settings. Yet, these frameworks have been widely applied nonetheless.

A recent review of the impact of similar wellness programs in workplace settings has demonstrated mixed results, reporting that different types of interventions may result in different types of outcomes (Mattke, Liu, & Caloyeras, et al., 2013; O'Donnell, 2014). That means that not all wellness programs provide positive results. For example, one study addressing teachers and school employee outcomes in wellness programs found that health-care claim costs actually increased in those participating compared to controls (Merrill & LeCheminant, 2016). Those involved in the program were seeking professional care for health concerns that did not reflect actual health status.

Results can be both highly program and target outcome specific. Those interventions that address well-recognized health outcome factors (such as exercise) may have more robust specific and overall outcomes than those that focus on more poorly constructed components (such as happiness). Additionally, critical analysis of studies that have reported positive outcomes find them to frequently be offered with a high risk of bias, poorly designed, and selective in their reporting of outcomes (see, e.g., Begley, 2016; Mattke et al., 2013).

As to the presence of robust, controlled studies or critical systematic reviews of the evidence for the impact of mental wellness programs in improving mental health in schools, we were not able to locate any substantial evidence supporting their positive impact. We used common search engines with various combinations of keywords, such as wellness, well-being, schools, programs, outcomes, mental health, and systematic review, in both ERIC and PUBMED systems, yet were unable to find the necessary evidence. This lack of evidence however stands in stark contrast to

numerous publications describing how to implement wellness programs into schools or describing how these were implemented (e.g., see Cowen, 1997; Miller, Gilman, & Martens, 2008; Young & Lambie, 2007). This lack of evidence is even more surprising considering how many education authorities use a mental health and wellness framework to shape their interventions.

At the very least, before further widespread application of these school-based mental health wellness interventions are continued, systematically applied, robust controlled research evaluations need to be conducted to determine if they have any positive impact and, if so, in what domains. In the meantime, given the lack of positive data and the above concerns about possible negative impacts, establishing a moratorium on their implantations might be considered.

Some Potential Strategies to Promote School Mental Health

Schools or school authorities that use terms such as wellness or well-being need to make sure of three important things: (1) that they operationalize them in a useful manner; (2) that they do not promote the mistaken idea that negative emotions are not part of positive mental health; and (3) that students, teachers, and parents learn critical thinking about health claims so that they are less likely to get swept up in the frenzy that is the wellness/well-being marketplace today, where detoxification of your armpits and the purchase of specially labeled bottles of water – wellness water, wellness scents, or even wellness cannabis – are all promoting how to optimize self-realization. This last point cannot be overemphasized as marketing of wellness products and programs has become not only a rapidly growing industry but a culturally mesmerizing process as well (Krom, 2016; Murrow & Welch, 1997; The Hartman Group, 2015).

More useful strategies include helping students and educators learn that negative emotions in response to environmental stressors are often, and usually, normal and indeed helpful in triggering the adaptation response that leads to resilience. Recent research has identified that not only are negative emotions that arise in response to environmental stimuli normal and expected, but that people can use them to help solve problems and to develop new and useful competencies that can promote the expression of health/mental health (Bergland, 2017; Shallcross, Ford, Floerke, & Mauss, 2013).

As part of eudaemonic constructs, negative emotions are considered to be as crucial as positive emotions in engaging fully in life. Suppressing, avoiding, or denying the useful role that negative emotions play may have negative health outcomes (Rodrigez, 2013; Topor, 2017).

One of the outcomes of approaches that exclude negative emotions applied in the school setting has been the characterization of the normal stress response as pathology and confusing this resilience-promoting necessity with anxiety, for example, using the phrase “exam anxiety” instead of the phrase “expected response to the normal stressor of an examination.” Faced with this, the student experiencing this phenomenon is encouraged to consider the experience to be negative and thus attention is focused on extinguishing or diminishing the stress response, often through techniques that engage parasympathetic nervous system activity, such as box breathing, or through heavily marketed programs such as MindUP or Learning to BREATHE (http://teenmentalhealth.org/wp-content/uploads/2018/01/CESMH-mindfulness-one-pager.pdf).

This conceptualization and its resultant interventions ignore the fact that the usual/everyday stress response has a purpose – to promote adaptation through solving the problem that created it and to reach out to others for assistance, engage in social interaction, and thus help create social cohesion, a key determinant of health and mental health (Gordeev & Egan, 2015; Kawachi, 2006; Kawachi & Kennedy, 1997; Osberg, 2003).

Indeed, this type of stress response is not only the most common type of stress response most Canadian students encounter, but it is the driving force behind adaptation and the development of resilience. Each successful solving of the challenge or opportunity that has created the stress response leads to the learning of a new competency that can be applied in other situations, not only in the present, but in the future.

Instead of rushing immediately to focus on decreasing the experience of the stress response, schools may more helpfully teach students that the stress response is mild in comparison to other more rare types of stress, such as toxic stress (Center on the Developing Child: Harvard), and that its purpose is to alert people that adaptation is needed and that a challenge or opportunity has to be addressed. This cognitive reappraisal (Campbell, Johnson, & Zernicke, 2013; LeBourg & Rattan, 2008) of the stress response may be more likely to lead to healthy outcomes and help students learn to use the stress response as a signal to initiate problem-solving techniques and build social relationships leading to resilience and the development of competencies, both of which are foundational for healthy aging (Lavretsky, 2014; McGonigal, 2015).

Simply changing how schools address the issue of the stress response, unpacking the difference between the common and normal stress response and chronic, severe, and toxic stress, encouraging appropriate cognitive appraisal of the stress response, and providing students with problem-solving strategies might be expected to make a substantial improvement in mental health outcomes for young people and help them better identify the relationship between normal negative emotions and the life challenges and opportunities that create them (see Fig. 6.5). Well-being can now become the art of successfully negotiating the seas of life, not the exclusive domain of only positive emotions, a building of resilience instead of a living in Pleasantville.

Addressing Clinical Needs

Schools can also be sites where health/mental health delivery can take place. As such, schools can become effective and essential components of the pathway through mental health care (http://teenmentalhealth.org/pathwaythroughcare/). This includes (1) identification of students who may need mental health care, (2) in-house triage/support, (3) referral to community-based health-care providers, AND/OR (4) provision of health care within the school. The Go-To Educator approach that trains teachers who students usually go to when they have a problem has been demonstrated to effectively meet this need (Wei & Kutcher, 2014). Recent research from Alberta suggests that this school-based model can effectively triage youth with the most prescient mental health care needs and link them to required services (Kutcher et al., 2016).

In many Canadian jurisdictions, mental health providers have been added to existing school-based student service providers in an attempt to help address the mental health-care needs of

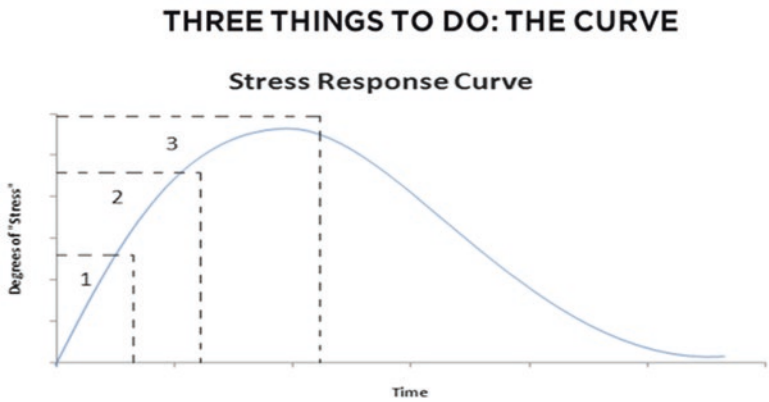

Fig. 6.5 Three things to do: the curve. (1) cognitive appraisal of the stress response as mild, normal, and positive instead of severe, abnormal, and toxic. (2) problem-solving to address the life challenge or opportunity that the stress response has identified. (3) stress response signal reduction, only in addition to items 1 and 2, not in isolation from items 1 and 2

students. While no peer-reviewed studies describing the impact of these approaches are, to our knowledge, yet available, nonetheless, such additional and trained resources are prima facie likely to be helpful. What has been less considered and applied in the Canadian context has been a school-based intervention with demonstrated positive impact on health, mental health, and other important outcomes such as academic success along with a variety of social and health markers. Such interventions may be realized through the school-based health center (American Academy of Pediatrics, 2012; Mason-Jones et al., 2012; Strunk, 2008).

School-based health centers can be established in schools as either full-time or part-time facilities, depending on the size of the school, the needs of the student population, the location of the school (urban, rural, remote), and other factors. Providing full-service health care through such a site may also potentially improve access to mental health care due to stigma reduction compared to sites that only deliver mental health care (Heflinger & Hinshaw, 2010).

See Figs. 6.6 and 6.7 for a pictorial representation of potential ease of access between community and school-based integrated health service provision.

Located in a school setting, such centers can be readily accessed by students. This may increase care utilization simply due to proximity and ease of access. Such resource availability stands in contrast to the complexities of access that occur for a young person who tries to access care after school hours. This can include long distance to the care provider, challenges in obtaining travel support, reliance on parents/caretakers, additional cost, etc. A health center located in the school can become a "health for all just down the hall" concept. Compared to a community-based youth health center, the school-based health center has the advantage of proximity to large numbers of youth, frugality (uses existing infrastructure), and site sustainability (funding can be shared among different third-party payers and even philanthropic organizations).

This potentially effective and relatively well-studied service delivery vehicle is, as of yet, uncommon in Canada. In the many places where school-based health centers do occur, they may not hold the capacity to provide the full spectrum of care needed, and thus do not function as a full-service integrated care option (Korenblum, Vandermorris, Thompson, & Kaufman, 2013; Santor, Short, & Ferguson, 2009; Szumilas, Kutcher, LeBlanc, & Langille, 2010). It is not

Fig. 6.6 Community access point (1)

Fig. 6.7 Community access point (2)

clear what ideological, policy, funding, or structural barriers exist that impede the development and establishment of these evidence-based structures. Perhaps new initiatives related to school-based health centers such as those identified in the recent recommendations in the province of Nova Scotia's advisory panel on mental health innovation (2016) may, if properly implemented, be evaluated and results widely communicated, advancing the wider consideration of this potentially effective approach.

Conclusions

The development of school-based mental health considerations has moved rapidly from its earliest constructs as expressed by the World Health Organization in 1998. However, careful critical review of what has been applied, what has been accomplished, and what may have to be changed, modified, or exchanged for other approaches now needs to be applied to interventions being rolled out across Canada and, we suspect, in most other jurisdictions. Particular attention needs to be paid to the models of intervention used, the evidence available to support their implementation, and the strength and weaknesses of the theories being used to support and direct certain approaches. This process is no doubt as uncomfortable as it is necessary.

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Part II

A Focus on Educators

7 Yet One More Expectation for Teachers

Karen Weston, Mary Ott, and Susan Rodger

Abstract

There is no doubt that teachers are frontline workers in child and youth mental health. They are there, "in loco parentis," one-third of the day, two-thirds of the year, charged with the safekeeping and education of our young. To those who argue that a school's primary function is education, and not mental health promotion or support, we respond that learning happens through participation within a social context. Students learn when they feel safe and connected to a learning community and are more motivated and engaged when they learn in an environment characterized by positive relational structures. Clearly, the emotional climate of the classroom is important to the educational processes that occur within it.

When we tell our teacher friends that we are working on projects involving school mental health, the general reaction goes something like this: "People need to understand what we're dealing with!" It doesn't matter if they are working in schools in economically depressed or wealthy neighborhoods, in preschool to secondary settings, or in classrooms for the provision of specialized services; teachers are feeling the strain of teaching students who are challenged by non-academic issues that interfere with learning. For example, reflecting on her time as a special education teacher in elementary schools, Mary noticed that her role gradually shifted from supporting students with learning needs to supporting students with mental health needs. A typical "good" day ran the gamut from following students who ran out of class to problem-solving with students who did not want to be in class. On a "bad" day, it included linking to crisis intervention services because students were harming themselves or others.

There is no doubt that teachers are frontline workers in child and youth mental health (Phillippo & Kelly, 2014; Ringeisen, Miller, Munoz, Rohloff, & Hedden, 2016; Rothi, Leavey, & Best, 2008). They are there, "in loco parentis," one-third of the day, two-thirds of the year, charged with the safekeeping and education of our young. And to those who argue that a school's primary function is education, and not mental health promotion or support, we respond that learning happens through participation within a social context, the tenor of which has been demonstrated repeatedly to influence academic achievement (Kutsyuruba, Klinger, & Hussain, 2015). Students learn when they feel safe and

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connected to a learning community (Shanker, 2013). And they are more motivated and engaged when they learn in an environment characterized by positive relational structures (Engels et al., 2016; Maulana, Opdenaker, & Bosker, 2013; Thijs & Fleischmann, 2015). Clearly, the emotional climate of the classroom is important to the educational processes that occur within it (Reyes, Brackett, Rivers, White, & Salovey, 2012).

But it can be confusing for teachers, working in the space between education and health care/social work, to understand the expectations and limitations of their role (Graham, Phelps, Maddison, & Fitzgerald, 2011; Rodger et al., 2014). Teachers are aware that they have an increasing number of students with mental health needs in their classrooms (Mazzer & Rickwood, 2015; Reinke, Stormont, Herman, Puri, & Goel, 2011), yet they lack knowledge of the resources available in their school to attend to such needs (Stormont, Reinke, & Herman, 2011) and lack confidence in their skills to go beyond a baseline level of helping students navigate social-emotional issues (Alisic, 2012; Kidger, Gunnell, Biddle, Campbell, & Donovan, 2010; Mazzer & Rickwood, 2015; Reinke et al., 2011). And in the face of demands for perpetual growth in achievement indicators, addressing the connection of learning to well-being can seem like "one more thing" added to an already overflowing plate. The question becomes, then, how to support teachers to "put first things first," by integrating mental health literacy into their existing pedagogy. We argue that there is a need for a comprehensive, multipronged approach that sustains teacher practices of mental health literacy (MHL) throughout their careers, from preservice teacher preparation programs to ongoing participation in professional learning communities (PLCs).

In previous work (Weston, Anderson-Butcher, & Burke, 2008), Karen Weston and colleagues discussed a framework for teaching school mental health literacy to teacher candidates, which has been recognized as a significant contribution yet justifiably critiqued for being more descriptive than explanatory (Whitley, Smith, Vaillancourt, & Neufeld, 2017, this volume). This chapter considers our subsequent work in answering the "how-to" question. If we are to help teachers on the front lines, we must understand what they are really thinking, doing, and feeling. In so doing, we problematize the notion of a mental health system-based approach with teachers, with a focus on deficits and diagnoses, arguing instead for adopting the more school-based notion of "mental health literacies." We begin with a brief overview of mental health literacy (MHL) to reveal the lens through which our views in this chapter are constructed. Next, we examine the complexities of today's North American classrooms and how mental health impacts teaching and learning. We then situate mental health literacies within a *pedagogy for resiliency*, based on our experiences developing mental health literacy curricula for preservice and in-service teachers in Canada and the United States. In all of this, we aim for a developmental perspective on the capacity-building of teachers. This begins with being ready to learn about mental health, which requires changing mind-sets and letting go of long-held deficit conceptions of mental health, as well as traditional beliefs about the role of teachers and schools in supporting social-emotional development. We discuss what "being ready to learn" might look like for teachers and educational systems and attending to key support mechanisms for school MHL readiness from the literature on educational policy and leadership.

In our discussion of developing MHL capacity, we attempt to keep the voice of the teacher at the forefront, as so often the perspective of the teacher is considered only superficially and reactively, without deliberate attempts to empower them to design their own pathways to MHL competency (Burke & Paternite, 2007; Phillippo & Kelly 2014). It is our fervent belief that change in schools is not sustainable unless we work through the lens of teaching professionals. As mental health professionals seeking to develop capacity in teachers, we must learn to think like teachers, honor their work and the contexts in which they do that work, and understand the contextual and constructive nature of professional learning.

Mental Health Literacy (MHL)

While mental health literacy (MHL) has been broadly conceptualized as knowledge or beliefs about mental health disorders that aid in their recognition, prevention, and management (Jorm et al., 1997), it is recognized that MHL must be applied contextually. In Canada, school mental health literacy (MHL) is operationalized as "the knowledge, skills, and beliefs that help school personnel to create conditions for effective school mental health service delivery; reduce stigma; promote positive mental health in the classroom; identify risk factors and signs of mental health and substance use problems; prevent mental health and substance use problems; and help students along the pathway to care" (SMHSA Consortium, 2012, p. 4). Clearly, this is a tall order that encompasses many competencies – perhaps not all of these, such as "prevention," are even reasonable expectations for schools and teachers. As mental health professionals, we have work to do to understand that our health-care implementation models do not mesh readily with educational systems (Ott, Hibbert, Rodger, & Leschied, 2017). Diagnoses and treatment plans are too often imposed on schools without a situated understanding of how schooling itself constructs ability and possibility. However, the common ground is the impetus to care. Following Rodger and colleagues (Rodger, Hibbert, & Leschied, 2014), we argue that MHL must be nested within an understanding of the relationship educators share with students and their communities. We also agree that school MHL must be expanded to include the development of teacher resiliency in the profession. Burnt-out teachers lack the resources to care for themselves and others (Chang, 2009; Maslach, Schaufeli, & Leiter, 2001). What is needed, when we look at the complex settings teachers work in, is less discussion of a single "definition" for school MHL and more thinking about ways to help *teachers make professional judgments* that integrate the relational work they have always done in their classrooms of getting to know, and in a very real sense, living with, their students, with the many evidence-based programs available today. These judgments – about what is working and what is not, what is needed, and what is available *and* appropriate – are what goes into building a comprehensive MHL pedagogy.

The backdrop to developing the MHL capacity of teachers is both promising and challenging. In our collective work, we have found teachers to be quite receptive to learning more about mental health. However, the hurdle to establishing a widespread MHL capacity is not as much in the "learning part" as it is in the "doing part" of changing the way teachers and schools operate. In the next section, we examine the contextual features within the educational system that have the potential to derail even the best capacity-building efforts.

The Current Educational Landscape

It is not our intent to review at length the prevalence rates of mental disorders in children and adolescents or the prevalence of those in this population who are at risk for developing a mental disorder. Studies of prevalence have remained steady in recent years, with most finding a prevalence of approximately 13% for diagnosed disorders and another approximately 7% for those at risk of developing a mental disorder prior to adulthood (Centers for Disease Control and Prevention, 2013; Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015). The bigger story to us is the number of children and adolescents in schools who are struggling with mental health issues, either diagnosed or undiagnosed, or at risk with milder symptoms, who are in the general classroom setting with little, if any, support. For example, in the United States, 354,000 children ages 3–21 were served in public schools under the special education category "emotional disturbance" during the 2013–2014 school year, with over 82% spending time in the general classroom setting for at least a portion of the day and most (45%) spending four-fifths of their time in the general classroom (U. S. National Center for Educational Statistics, NCES, 2016). Further, the

number served represents merely 0.7% of the total school population (U. S. NCES 2016), nowhere near the prevalence estimates for mental disorders. The frustration teachers feel when support is lacking for students in the general education setting is exemplified by this teacher's comment:

> *We are responding to kids with significant problems, but not those at-risk. We miss kids because so much emphasis is placed only on those who are severe. For example, we call police on a child in kindergarten 10 times, but no help is given until 4th grade.*

In Canada, it is estimated that 12.6% of children and youth ages 4–17 may be experiencing clinically significant mental health disorders at any given time, which translates to 678,000 school-aged children and youth, only 31% of whom are likely to be receiving specialized mental health services (Waddell, Shepherd, Schwartz, & Barican, 2014). Using these figures, it seems probable that we have over 450,000 school-aged children and youth in Canada who are attending school in the absence of treatment and, very likely, in the absence of any support for them – or their teachers – in the classroom. This adds to the weight of the demands placed on teachers and the strident call that reverberates throughout educational systems: meet the needs of every student, at all times, no matter how complex those needs might be.

Certainly, the tensions and workload pressures at a macro level play out in the daily life of classroom teachers as they grapple to meet the emotional needs of their students. In a recent survey of Canadian teachers, an astonishing 95% reported they lack the time needed to respond to the individual needs of their students (Canadian Teachers' Federation, 2014). One educator we worked with on a research project described her split grade 7 and 8 classroom of 32 students, 12 of whom were identified with special education needs, as "mission impossible." Another told us that she knew the student population she worked with as a First Nations consultant needed "medicine wheel teachings" as a priority for their social and emotional health, but her system was so focused on improving accountability testing scores in math that "If I don't tweet #math, I don't have a voice." And although many teachers, like this one, are willing to play a part in supporting students' well-being (Kidger et al., 2010), when the mental health needs are significant, a reluctance to serve this population can rise to the forefront, as one teacher we spoke to admitted:

> *When we had our first bipolar kid come through the door it was just 'freak-out time'. [The attitude was], 'We shouldn't have this kind of kid in this school.'*

Or, other teachers in the building might view attempts to support a student with significant needs as undeserved "coddling," as this teacher notes:

> *I remember having one student a few years ago who had, like, multiple diagnoses all at the same time. He had ODD, ADHD, he was bipolar, he was on all these medications and he would have these massive meltdowns, and it was always, like, trying to calm him down, trying to calm him down. He would get really rude with other teachers in the hall, and I would try to calm him down and the teachers would be like, you know…, you're allowing him to behave badly.*

But how are teachers supposed to react to the increase in the number of students who need continuous emotional reinforcement and require a skill set that may go beyond their training? And how might this unwritten expectation contribute to teacher stress, burnout, and retention, as well as teacher recruitment? According to Ingersoll, Merrill, and Stuckey (2014), the teaching workforce in the United States is increasingly unstable. And although keeping good teachers may be challenging for school districts, attracting teachers in the first place poses a more significant hurdle, with the teacher pipeline shrinking steadily during the last decade (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). One teacher told us the following:

> *Some kids are so dysfunctional…it takes all of our efforts and I don't see it getting any better. That's why people don't go into teaching. They are not paid well, they're not appreciated, and it's stressful.*

It is true that teachers experience more job stress and higher rates of depression than most other professions, and this plays a role in teacher attrition (Kidger et al., 2016). In a recent systematic review of teacher well-being research from across the globe, McCallum, Price, Graham, and Morrison (2017) examined the rates at which teachers leave the profession and reported the following: "While there is some localized variation in attrition rates, in general the rate of loss to the profession in many countries is around 40–50% over the five years post entry (Gallant & Riley, 2014, p. 563)" (p. 14). Yet some teachers who choose to stay despite difficult working condition are confronted by an additional set of pressures, as this teacher notes:

> *I felt very much in my first five years, like, you should be so grateful…. but meanwhile you're dying. You are just trying to survive, and thinking, should I even be here if there's, like, a hundred people knocking on the door, wanting my job? Like, maybe they'd be better at it than I would.*

This teacher's colleague echoed these sentiments:

> *And there's also…sometimes the undertone of, like, we're lucky to have the jobs because there's so many people competing for them. So just be grateful, and be quiet.*

It is obvious to those of us working with teachers that cracks are appearing on the surface of their capacities to cope with the demands of classrooms today. Work absenteeism due to teachers' own mental health is on the rise (Office of the Auditor General of Ontario, 2017). Further, although we know there is a direct association between teachers' level of burnout and student achievement (Arens & Morin, 2016), teacher well-being has not been a priority for most education systems (Ball et al., 2016). Even in schools that have embraced a focus on promoting students' emotional health, a concern for staff well-being is often overlooked (Kidger et al., 2010; Ott et al., 2017), a situation that discourages teachers, as one told us:

> *As teachers, you're supposed to have this persona [that] you know everything and you're a professional, and where's it okay for us to talk about, like, our mental health? Inside the school? In certain schools you can, but other schools no one would ever.*

Another teacher was forced to leave the profession for a while, due to her own mental health issues, but felt she had to hide the true cause of her need to step away:

> *I ended up taking an extended parental leave that was really a mental health leave that rolled nicely into it—because I didn't feel safe [admitting] I'm taking a mental health break. But it was okay to say I need to take care of this baby inside me, so I'm going to take a little extra time off, get a doctor's note.*

Teachers quickly get the message that personal well-being is a private, not public topic to be openly addressed within the school environment (Sharrocks, 2014). As Sharrocks (2014) found in her interviews of teachers, "not coping or being seen to be mentally unhealthy was described in weighty and emotive terms and staff referred to "admitting" poor mental health and poor well-being conferring a "death penalty" from which "you can never come back"" (p. 28). This adds further complexity to teachers' willingness to seek support in the face of students' challenging emotional behaviors. The bottom line is that teachers may want to support the mental health needs of their students, but doing so can create additional emotional stress (Kidger et al., 2010). It may make more sense, therefore, for teachers to adopt a stance in which they narrow their perspective on what constitutes in-role duties (Kidger et al., 2010) and engage in strategies to distance themselves from troubled students in order to protect their self-worth (Parker, Martin, Colmar, & Liem, 2012) and prevent emotional exhaustion (Maslach et al., 2001).

Not surprisingly, a high level of teacher stress has been shown to predict a low level of teacher readiness to enter into efforts to support the mental health of students (Ball, 2011). In this context, schooling becomes one of the biggest challenges for young people with mental health needs. A child identified in first grade as being at risk for developing a mental disorder experiences a 5% drop in academic performance over the next 2 years (Murphy et al., 2014), and students with diagnosed mental disorders are more likely to earn lower grades than "typical" peers, and they are more likely to drop out of school than any other disability groups (38.7% vs. 21.1%; Child Mind Institute, 2016). The impact on high school

graduation rates is critical; Levin, Belfield, Muening, and Rouse (2006) found in their meta-analysis that the best predictor of future success for students is not school achievement but length of schooling. Furthermore, school dropout is embedded in a tangled relationship with mental disorders and involvement with the criminal justice system. A 2016 report from the Child Mind Institute states that 70.4% of youth within the juvenile justice system in the United States display symptoms matching the criteria for at least one mental disorder, and Aizer and Doyle (2015) were able to demonstrate that involvement in the juvenile justice system significantly impedes attainment of a high school diploma. They reason:

> Once incarcerated, a juvenile is unlikely to ever return to school, suggesting that even relatively short periods of incarceration can be very disruptive and have severe long-term consequences for this population. Moreover, for those who do return to school, they are more likely to be classified as having a disability due to a social or behavioral disorder, likely reducing the probability of graduation even among those who do return to school and possibly increasing the probability of future criminal behavior. (pp. 31–32)

The societal impact of both school dropout and youth mental illness is staggering.

Thankfully, in the current push to increase high school graduation rates and equip students with the twenty-first-century skills, education leaders have come to realize that the workforce demands for today's students include not only high-level cognitive skills but also noncognitive or "soft" skills, which cross over into the social-emotional skills domain (Kraft & Grace, 2016). According to Kraft and Grace (2016), the structural transformations in the economy are increasingly compelling education systems to "prepare students with a broader and more complex set of fundamental skills than the traditional domains of reading, writing, and arithmetic" (p. 35). Evidence suggests that noncognitive skills contribute not only to academic success but also to workforce and earning success (Garcia, 2014). Indeed, most frameworks for the twenty-first-century learning are aligned to the definition for the twenty-first-century skills put forward by a special committee of the National Research Council (2012), which includes three domains for organizing competencies: cognitive, intrapersonal, and interpersonal. The last two of these overlap with mental health supportive elements that involve regulating behavior and emotions (intrapersonal) and communicating and collaborating with other individuals (interpersonal). The implications for human capital development are enormous, as suggested by Knudsen, Heckman, Cameron, and Schonkoff (2006):

> The workplace of the 21st century will favor individuals with intellectual flexibility, strong problem-solving skills, emotional resilience, and the capacity to work well with others in a continuously changing and highly competitive economic environment. In this context, the personal and societal burdens of diminished capacity will be formidable, and the need to maximize human potential will be greater than ever before. (p. 10161)

Although we might view these nods toward the importance of building students' social-emotional skills to be somewhat narrow, clearly the door is open for developing comprehensive MHL initiatives within schools, if not for the promotion of mental health, then at least for the promotion of high school graduation and future career success. It is hard today, in fact, to find a school that does not have one, if not many, form of social-emotional learning (SEL) or wellness initiatives: from "Wellness Wednesdays" where students can choose from a menu of self-care options to social skills clubs, to character development programs, to bullying prevention strategies, to teaching about mental health in Physical and Health Education curricula. However, from a teacher's perspective, the ways these programs are continuously added to workloads without a streamlined or cohesive approach can feel like "reinventing the wheel" (Noble, 2014). Furthermore, we agree with Weston et al. (2008) that these programs tend to be fragmentary in nature, rather than located in systemic approaches with clear connections to the academic mission of the school. In Karen's experience, it is not uncommon to have academic and behavior support teams functioning separately in the same school, even though, more often than not, they are working with the same students.

There are notable exceptions: in the United States, many systems are beginning to align their positive behavioral intervention and support (PBIS) systems with their academic response to intervention (RTI) models. Another model that is more cohesive is the comprehensive school health (CSH) framework developed in Canada by a joint consortium of government ministries of health and education, which has a mission of integrating health and academic goals and tools to drive school improvement planning (Morrison & Kirby, 2010).

However, Mary Ott and her colleagues found in their analysis of school mental health frameworks in Canada that cohesion is difficult to achieve even at the policy formation level between different government jurisdictions and research initiatives. For example, the Joint Consortium for School Health (JCSH) was intended to be a collaboration between ministries of education and health to promote the CSH framework, yet there were inevitable tensions between the different mandates to promote achievement versus health-care outcomes (JCSH, n.d.). Meanwhile, larger jurisdictions such as Ontario, Quebec, and Alberta developed their own wellness frameworks, but the Mental Health Commission of Canada used the number of schools implementing CSH as a pan-Canadian indicator for improvement in school mental health outcomes (Jones, Goldner, Butler, & McEwan, 2015). Furthermore, while some research and policy efforts are directed toward developing specific skills in educators to identify, "triage," and support students with mental health issues (Wei & Kutcher, 2014), other initiatives focus more generally on the teacher's role in fostering classroom environments that promote positive mental health (Morrison & Kirby, 2010). The result of these differing frameworks is that teachers are unsure of their exact place in the promotion and support of students' mental health (Ott et al., 2017).

Changes in role expectations for teachers have set up an ever-increasing demand for school mental health interventions and professional learning initiatives (Weston et al., 2008; Rodger et al., 2014). Building teacher capacity to engage in MHL practices, however, must consider the complex nature of teacher work environments, acknowledging the policy pressures, the changing needs of students and families, the role ambiguity resulting from these changing needs, and the "code of silence" that surrounds teachers own mental health needs and help-seeking behaviors. Next we will examine the concept of building capacity and then discuss the application of capacity-building to MHL for teachers.

Building Teacher Capacity

"Capacity-building" as a construct has been used in the education literature to mean a variety of different things. For example, Cooter (2003) uses capacity-building to describe the process of teacher development from novice to expert, where, at the expert stage, teachers serve as coaches, change agents, and advocates for innovative practices. Elmore (2002) refers to capacity as knowledge and skills and capacity-building as the reorganization of school systems so that teachers and administrators can engage in observing practices outside of their immediate settings and bring these outside practices into the workings of schools. In recent years the focus is less on individual capacity and more on organizational or "social capacity," such that capacity-building is viewed as the process of developing collective competencies to bring about improvements and a means for educational reform (Anfara & Mertens, 2012; Fullan, 2005; Fullan & Hargreaves, 2012; Johnson, Kraft, & Papay, 2012; Stringer, 2008). According to Fullan and Hargreaves (2012), "Social capital is more important than individual human capital because it generates human capital faster, among all teachers and for every child" (p. 30). The rise of professional learning communities is an acknowledgment of capacity-building as an organizational and social endeavor and is supported by research indicating that collaborative learning can improve instructional practice and lead to better outcomes for students (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Poekert, 2012).

A focus on building teacher capacity typically allows for the complexity of professional learning variables to be studied within varying and authentic contexts and minimizes the research-to-practice gap (Darling-Hammond et al., 2009; DuFour, 2004; Hatch, 2009; Johnson, Lustick, & Kim, 2011; Wenger, 1998). However, in the area of MHL, the field has yet to agree on the professional learning variables of most importance, the characteristics that define teacher capacity. And, unfortunately, assessing teachers' professional learning needs is difficult, as needs change with the varying classroom and school contexts (Smith, 2012; Timperley, Wilson, Barrar, & Fung, 2007). A teacher must adapt constantly to the dynamic arena of the classroom, adjusting and differentiating for the wide range of student backgrounds and managing a social and emotional climate that can change dramatically within the briefest of moments. Naturally, different teachers are going to have different learning needs based on their individual circumstances and on the different resources to which they have access. Ball and Cohen (1999) refer to this dilemma as a problem of "particulars." That is, the professional learning needs of teachers are inextricably intertwined with particular students and particular situations in light of particular resources.

Despite the contextual nature of teachers' learning needs, professional learning is often provided in whole-group, one-size-fits-all fashion, typically of short duration, and often disconnected from authentic practice (Ball & Cohen, 1999; Coggshall, Rasmussen, Colton, Milton, & Jacques, 2012; Klentschy, 2005; Loucks-Horsley & Matsumoto, 1999). On the other hand, when professional learning is collaborative, related directly to practice, intensive, and sustained over time, gains are seen in student achievement (Darling-Hammond et al., 2009). The relationship between professional learning and student achievement is not yet well understood, however, and, until recently, the research has been oddly disconnected from the research on effective teaching (Grossman & McDonald, 2008; Guskey & Yoon, 2009). Increasingly the evidence points to the effectiveness of high-quality professional learning that is embedded in daily practice as a means for improving instruction and student learning (Coggshall et al., 2012; Croft, Coggshall, Dolan, & Powers, 2010; Darling-Hammond et al., 2009; Guskey & Yoon, 2009).

In our combined experiences over the last several decades, we have sometimes stumbled in our attempts to implement quality professional learning in schools related to student and teacher mental health and could probably fill an entire chapter with just our "lessons learned." Early on, the focus was on content – what *we* thought teachers should know about mental health (or really, as it were at the time, mental illness). We conducted sequences of workshops, avoided the "one-shot" problem, and provided examples of strategies that teachers could put to immediate use in their classrooms to support students with their mental health needs. Teachers were excited about the new information and gave top ratings to these learning experiences.

But we had to admit after a time that nothing was really changing in schools. Teachers' awareness of and attitudes toward mental health issues had improved, but they were not implementing the strategies we provided, nor were they seeking out resources to assist them. Through a series of candid discussions with teachers, we found that beyond the time constraints that were ever-present for teachers, there were also issues of efficacy, and many underlying obstacles related to school processes, which we had not taken enough time to understand. We had lost credibility with some teachers, who initially thought we could make an immediate and enormous difference in the challenges they faced in their classrooms. And for some teachers, having the awareness about mental health problems but not having the skills to address them left them frustrated and angry.

We realized we had to do more than merely provide information. We had to let teachers guide us and had to solve the problem of particulars, meeting particular teachers' needs around supporting particular students in a "just-in-time" manner. We did this by moving to a teacher consultation model that gave teachers immediate and sustained support and using a scaffolding process

to build new skills. Once teachers were fully involved in the development of practice-embedded professional learning activities, co-constructed with mental health professionals, we began to see shifts in teaching practice that reflected increasingly deeper conceptions of MHL. This was a critical step in our path toward understanding of the essential components needed for our work. In the next sections, we discuss these essential components for building teacher MHL capacity, drawn from our extensive work with teachers and schools.

Building Teacher MHL Capacity: Essential Components

The misstep in our early attempts to educate teachers highlights what can go wrong with professional learning experiences to build MHL capacity. Teachers were not ready to innovate and adopt new skills, the system was not ready to support teachers to innovate and adopt new skills, and teachers were not empowered to make innovation-specific adaptations to their daily practice. We have discovered through the years that there are five critical features that buttress successful implementation of a sustainable MHL initiative: (1) the readiness of systems; (2) the readiness of individuals; (3) social and organizational support; (4) collaborative, often embedded, professional learning; and (5) a teacher-driven pedagogy for resiliency. This list is not meant to be exhaustive. Certainly there are other important factors to be addressed in this complex work, many of which will vary from school to school and teacher to teacher. We have found these five components to be universal, however, and framed within a strength-based, resiliency approach, they offer a core set of guidelines for effective MHL implementation.

Readiness of Systems Much has been written about the necessary infrastructure to support innovation and change within school systems. Fullan (1993) examined organizational change within the context of school reform, noting the failure of efforts to increase teacher effectiveness was due to a lack of consideration for systemic change. In other words, a system is a whole made up of interrelated parts, and when change happens in one area (e.g., educating teachers to identify students with mental health problems), this change puts pressure on other areas of the system. If not planned for at the outset, then the intended change falls apart (e.g., teachers are now identifying students, but there are no processes in place for accessing support). Systems thinking is an ecological approach that allows us to consider the complex and dynamic nature of educational settings (Banathy, 1992) and confront existing mental models of how schools and teachers should function (Senge, 1990). Systems which are ready to engage with student and teacher mental health will employ best practices of implementation (Santor, Short, & Ferguson, 2009) and systems thinking (Leithwood, 2013; Senge, 1990), considering all the structural impacts that a change introduces to the system.

What is needed at a policy planning level for education systems is a shift in focus from "being well" at school to making school a "well place to be" (Ott et al., 2017). There can be no resiliency apart from resilient systems. In relation to children and youth, Ungar (2011) argues that "the study of resilience should involve context first and the child second" (p. 4), since we know that "well-resourced families and communities produce better child outcomes than poorly resourced ones, even if the children face similar barriers to development" (p. 11). Taken to the level of school planning at the system level, administrators must consider not just the (already present in abundant supply) knowledge resources available to educators on mental health, but the other human and material resources that contribute to wellness. Are there safe places to play? Culturally relevant materials and approaches? Clean bathrooms? What is the workload like for students and teachers? How will a new initiative impact on existing workloads? (Ott et al., 2017).

Another factor in policy planning for resiliency is establishing system priorities. For example, we heard from a teacher who, because her students had so many social-emotional needs, told her principal that academic achievement was

not going to be a priority for the year. In fact, it was a year when many students made gains, because creating a positive classroom climate and making sure the students had access to interventions was not just the teacher's priority, it became a team effort supported by the principal. But not all of the steps students make toward resiliency will be academic gains on standardized tests of literacy and numeracy. In "measuring what matters," an Ontario education advocacy group supports research on measurement models which can evaluate growth in school climate and positive mental health (Shanker & People for Education, 2014), a view that resonates with many educational assessment experts: the things we choose to evaluate reveal what we value the most (Delandshere, 2002; Kelly, 2009). The other side of this, of course, is that the things we do not evaluate are the things we do not value. Therefore, if improving competencies for effective school mental health practices, such as identifying risk factors, helping students access care, reducing stigma, and creating classroom environments that support positive mental health (SMHSAC, 2012) are what we expect from schools, then school systems must support these expectations by evaluating positive mental health outcomes. In order to do this, system leaders may need to invest less time and effort on some other accountability measures; we cannot ignore time as a rate-limiting step in MHL efforts (Skaalvik & Skaalvik, 2010). Building capacity for acting on MHL knowledge takes time to teach and time to care into the school day – not necessarily always in equal amounts but in equitable amounts. School system administrators, like the principal in our example, must demonstrate to teachers through supportive actions that helping students be ready to learn is a priori to improving achievement.

Finally, a critical aspect in our work related to a school systems' capacity for readiness to implement an MHL involves assessing existing programs and processes for student support. A team of teachers and administrators can provide valuable information by mapping existing mental health resources onto a three-tier model: school-wide prevention and promotion on the first tier, targeted prevention for at-risk students on the second tier, and intensive intervention for diagnosed or multi-symptomatic students on the third tier. More often than not, what we have found in our work with schools is a significant duplication on the first tier (e.g., an elementary school with character education, a "fight-free" curriculum, bullying prevention, and a social skills curriculum), as well as several supports for students on the more severe end of the triangle, or third-tier interventions. What we rarely found were sufficient resources to address students in need of second-tier resources; the second tier of the triangle was typically a gaping hole in the system of supports. Moreover, there were few processes that allowed teachers to access resources for tiers two and three, and the processes that were in place were highly inefficient. For example, one school required teachers to complete an 11-page form in order to access help from the counselor or student support team, which obviously inhibited teachers' help-seeking behaviors, at least until a student's behavior became extreme.

The assessment of system readiness at the pre-planning stage of implementing an MHL initiative is important for the effective use of an often limited number of resources (Flaspohler, Meehan, Maras, & Keller, 2012). The system must be ready to support the change in mind-sets that will be needed and to resolve conflict that is inherent in change processes (Senge, 1990). And the system must be ready to invite teachers into the leadership for systemic change, to empower them to chart the course for adopting MHL practices, and, most importantly, to make teacher well-being a priority in the process. Initially, however, teachers need to see themselves as having a critical role in mental health efforts.

Readiness of Teachers: Resolving Conflicting Roles

One of the ongoing conversations we hear is one about the role of the teacher in school-based mental health. On one hand, as has been cited elsewhere, there are system-wide expectations and assumptions that teachers are on the "front

lines" of mental health. Conversely, the lack of initial teacher education or professional development opportunities and the barriers to teachers being considered as part of a team competency related to mental health in schools signal ambiguity. One has only to look at the gaps between professional education, professional responsibilities, and the policies that direct learning, teaching, and working to recognize that we have important work to do in clarifying not only the role of teachers in school mental health but also in including teachers on the front end and inviting their voices to be heard.

Role clarity, which encompasses not only the role played by a person in a particular setting but also the role of that person within the organization or system, is a necessary component for any high-performing workplace or team. The opposite of role clarity can range from role ambiguity, where the role is not clearly defined or there is overlap with the roles of other professionals, to role conflict, where someone is expected to play two different yet incompatible goals. Both role ambiguity and role conflict have been shown to lead to a number of negative outcomes for teachers, including anxiety and burnout (Papastykianou, Kaila, & Polyschronopoulos, 2009) and, more generally, project failure (Taghavi & Woo, 2017), and diminish positive outcomes such as job satisfaction and teaching efficacy (Shepherd, Fowler, McCormick, Wilson, & Morgan, 2016). When it comes to expecting employees to "go the extra mile," as is often the case when we ask teachers to take on "one more thing," it is important to look at the conditions that might support these additional efforts. For example, using a well-known meta-theory of motivation, researchers have demonstrated that autonomous (self-determined) motivation was most strongly related to job satisfaction when role ambiguity was low (Gillet, Fouquereau, Lafreniere, & Huyghbaert, 2016).

Of interest here, the lack of clarity for the teacher role in MHL practices can lead to stress, role ambiguity, and role conflict, where the expectations of different groups clash regarding teacher behavior. New teachers, in particular, are vulnerable to feelings of inadequacy, as they struggle to display what Scaglione et al. (2016) refer to as "collegial dispositions":

> Collegial dispositions may refer to any extra-role behavior that represents individuals' behavior that is discretionary, not recognized by the formal contract and that, in the aggregate, promotes the effective functioning of schools. (p. 401)

These authors discuss the importance of collegial dispositions to the acceptance of new teachers into the school culture and acknowledge that new teachers are often left to figure out these dispositions on their own. However, in the study by Scaglione and colleagues, out of 47 collegial dispositions that were rated by K–12 teachers (n = 157) for their importance, missing from the list of the 4 dispositions rated as being most important was any direct reference to perceived "extra-role" collegial behaviors that would promote the healthy emotional functioning of both teachers and students in schools. In fact, rated among the four least important collegial dispositions was "communicates fears about succeeding" (p. 403). As a result, Scaglione and colleagues admonish new teachers to "show no fear!" (p. 404) and to recognize that other teachers do not want to hear about their performance struggles (p. 404). It is into environments where this is often the prevailing attitude that we send our most vulnerable teachers.

How teachers negotiate role ambiguity and role-bound expected behaviors within the context of students' mental health needs is not yet well understood. There is a paucity of research that examines teachers' understanding of mental health and their perceptions of how MHL fits into their daily practice, although this is changing. Teachers readily acknowledge the strong connection between the social-emotional competencies of students and their academic success (Hoagwood et al., 2007; Phillippo & Kelly, 2014), yet the term "mental health" is often negatively construed (Ekornes, Hauge, & Lund, 2012), and teachers may be more inclined to identify externalizing behaviors (e.g., anger, defiance, and emotional outbursts) as emotional problems than internalizing behaviors (e.g., anxiety and sadness; Williams, Horvath, Wei, VanDorn, & Jonson-Reid, 2007). In addition,

although research findings reveal that many teachers are willing to take on the role of caring for students' well-being (Franklin, Ryan, Kelly, & Montgomery, 2012; Reinke et al., 2011; Rothi et al., 2008), other findings indicate that there is a nebulous boundary that exists between *wanting* to support students and *feeling capable* of supporting students (Kidger et al., 2010; Rothi et al., 2008). Overwhelmingly, teachers report that they lack the capacity to competently address the emotional and mental health needs of their students (Hoagwood et al., 2007; Kidger et al., 2010; Koller, Osterlind, Paris, & Weston, 2004; Martinussen, Tannock, & Chaban, 2011; Reinke et al., 2011; Stoiber, 2011). According to Kidger et al., "If…[reluctant teachers] are to be convinced that…this is important work in which they should be involved, then they need to be shown the links between this and other aspects of their role, with concepts such as emotional health and whole-school approaches much more clearly defined" (p. 931). We agree and argue that building teacher capacity for MHL, which is currently not a part of the formal contract of teachers, requires collegial dispositions that provide the social and organizational support necessary for addressing challenging student behaviors and balancing the often competing demands to "meet all needs of all students" and to ensure that "all students meet all learning objectives."

Social and Organizational Support Social and organizational support, in general, leads to greater job satisfaction for teachers (Eldor & Shoshani, 2016; Kinman, Wray, & Strange, 2011; Skaalvik & Skaalvik, 2017). Pomaki, DeLongis, Frey, Short, and Woehrle (2010), for example, found social support for new teachers was negatively associated with an intention to leave the job or profession, whereas no significant association was found between workload and intention to leave. Similarly, Johnson et al. (2012) found that teachers who have good collegial relationships and feel supported by administrators are more satisfied with their job and intend to remain longer in their current position. These factors – along with a school environment marked by mutual trust, respect, openness, and commitment – were found to be far more important than any other aspects of working conditions, such as instructional resources or planning time. The social context for work may be even more important for teachers than for other professions, as so often teachers describe their job as a "calling." According to Duffy and Autin (2013), there is a difference between "perceiving a calling," or the extent to which one believes that she is called to do a certain job, and "living a calling," or the extent to which one is currently working in a job to which she is called (p. 220). They found that organizational support mediated individuals' ability to choose their work, despite challenges, and subsequently live their calling. "It may be that a supportive work environment that nurtures individuals' callings is key in shaping their ability to live out that calling" (p. 221). Insofar as the workplace does not "make space" for the affective component of teaching, the conflict between how teachers actually feel about their ability to live their calling and whether organizations allow the display of such feelings becomes critical for teachers and frames the internal dimension of "emotional labor."

Emotional labor is defined as the emotional acting used by professionals in order to follow organizational and professional rules and achieve workplace goals and, for teachers, involves "modifying and controlling one's feelings (especially during interactions with students) in ways that support organizational goals and optimize student behavior and academic performance" (Levine Brown, Horner, Kerr, & Scanlon, 2014, p. 206). Emotional labor is enacted in two ways: "surface acting" is undertaken when a teacher pretends to feel a certain way during a work interaction, and "deep acting" happens when teachers adjust the way they feel in response to a situation at work. Both deep and surface acting create conflict within teachers, who feel the pressure to suppress true feelings and either revise them so they are more acceptable or ignore them and present false feelings instead (Levine Brown et al., 2014). The impact of emotional labor for teachers is exhaustion, emotional distancing, dread, and self-doubt (Kerr & Brown, 2015; Kinman et al., 2011). Emotional labor appears to be intertwined

with the concept of burnout (Keller, Chang, Becker, Goetz, & Frenzel, 2014; Kinman et al. 2011) and has been found to play a role in teachers' intentions to leave the profession (Lee, 2017). This seems significant in light of the extent to which teachers engage in emotional labor strategies. For example, Keller et al. (2014) found that out of 794 lessons sampled, teachers reported utilizing surface-acting tactics in approximately one-third. However, the levels to which teachers experience emotional labor may not be the priority issue in creating the conditions in which teacher MHL capacity-building can flourish. Instead, organizational and social support mechanisms may attenuate the emotional strain fundamentally inherent to teachers' work (Kinman et al., 2011).

Kinman et al. (2011) found that workplace social support served as a buffer between teachers' use of emotional labor strategies and the deleterious impacts those strategies have on well-being. They highlight the need to extend research to focus on specific social support interventions, such as "enhancing teacher support networks to increase group cohesion and the provision of emotional mentoring" (p. 852). The emotional experiences of teachers should not be pathologized nor deemed taboo as a point of discussion. Creating the space for teachers to openly discuss emotionally charged workplace situations and their resulting "true" feelings within the context of social support could minimize the risks to health caused by stress and provide an opportunity for strengthening coping skills (Grandey, 2000). Moreover, a supportive, collaborative environment leads to collective efficacy among teachers, which has been shown to lower the level of stress that teachers experience in response to students' challenging behaviors (Klassen, 2010). Teacher collective efficacy also has direct benefits for students, as it harnesses the individual capacities of teachers to jointly reduce barriers to student learning. For example, Gibbs and Powell (2012) determined that in schools where there were high levels of collective efficacy beliefs about teachers' ability to effectively address the adverse influence of certain home and community factors, students were less likely to be subjected to exclusion from school as a form of discipline. Urton, Wilbert, and Hennemann (2014) found an association between teachers' collective efficacy and positive attitudes toward inclusion models of supporting students with disabilities. Finally, collective efficacy has been linked to the sustainability of student mental health programs within a school system (Lance, 2015).

Focusing attention on MHL capacity-building models that increase social supports for teachers and improve their collective efficacy lends itself to viewing students' mental health needs from a strength-based, empowerment perspective. We have found in our experiences working with teachers that this type of approach is more productive in that there are fewer elements of resistance, greater alliance between mental health professionals and teachers, and more rapid scaling across and between student- and family-serving partners in the community. Further, it allows for placing teachers at the heart of not only providing mental health promotive experiences for students but receiving mental health promotive supports for themselves. We argue that in a system where the caring feel cared for, exhibiting strength and positive attitudes in the face of stressful conditions becomes the norm. In order to speak about the teacher learning component of this empowerment approach, which we view to be comprehensive in nature, we use the term "pedagogy for resiliency."

A Pedagogy for Resiliency Karen Weston once asked a group of educators – elementary and secondary teachers and principals who attended a summer workshop on teacher wellness – to talk about what resiliency in the profession looks and feels like to them. Three of the ideas that resonated with the group were "like a river, I can flow around the rocks and keep going," "feeling 'at home' when I'm at work," and "starting with 'why?' - then putting your feet on the gas." These educators were not always happy or even always mentally well. They told us stories about problems they had overcome, especially in their early careers, which we developed into a list of "resiliency tips" for new teachers (https://tinyurl.com/yabmmutb). One of them said, "I've been teaching for 20 years,

and this is the first time anyone has asked me about my wellness in this profession." In our experience, by silencing these types of conversations, whether overtly or by cultivating a perception that they run counter to the organizational tenor, teachers may be more likely to turn to self-protective mechanisms when they experience high levels of stress, such as blaming students and parents for classroom problems or increasing their emotional distance from students. There is little room in such an atmosphere to grow resiliency and then to capitalize on teachers' collective resiliency to move the MHL agenda within schools.

Of course, the idea of resiliency is not new to mental health professionals, and it is not our intention here to provide a substantive literature review. The notion of resiliency in teachers is similar to that of "growing through adversity" in the general population: using energy productively to achieve school goals in the face of adverse conditions (Patterson et al., 2004), remaining in the field, and maintaining commitment and engagement, despite experiencing challenges (Gu & Day, 2007; Gordon & Coscarelli, 1996; Howard & Johnson, 2004). Resiliency for teachers also has been conceptualized as skills which can be learned to cope and grow in the presence of adversity (Masten & Coatsworth, 1998; Sharplin, O'Neill, & Chaplin, 2011; Ungar 2004). Bobek (2010) and Sumison (2004) describe teacher attributes that predict resiliency, such as a strong sense of competency, agency, and humor. Related to resiliency is the concept of "engagement" in the workplace, defined as feeling purposeful and positive about one's work and having manageable expectations about occupational stress, lending further support to the idea that adopting certain beliefs or attitudes can reinforce teacher resiliency (Bakker & Bal, 2010; Hakanen, Bakker, & Shaufeli, 2006). Acceptance of stress, for example, as an inherent aspect of the teaching role, can be liberating. It allows space to acknowledge the realities of today's classrooms, but from a position of strength not defeat. Resiliency does not mean being well all the time; it reflects the capacity, like a structure under stress, to "bounce back." Skills for resiliency include mindfulness strategies (among many others), and supports needed for resiliency include the necessary resources to meet the requirements of positive psychological health: competency, autonomy, and relatedness (Ott et al., 2017; Ryan & Deci, 2000; Ungar, 2011).

Whereas the concept of resiliency is well-defined, there is a gap in the literature on how resiliency might be developed in teachers and, in particular, developed not only as an individual characteristic for (in this case) teachers but as a characteristic embedded in, and held by, culture and community. We suggest a "pedagogy *for* resiliency" as a core concept that might help to organize the development of MHL for teachers. Pedagogy is the work of putting theories of learning and teaching into practice. In order for MHL to be more than a fragmentary, reactive response to student social-emotional needs, teachers must see MHL as a foundational component of their pedagogy, and the mental health professionals who support them must also work within a pedagogical framework. Similar to the pedagogy of multiliteracies (Cope & Kalantzis, 2015; The New London Group, 1996) and the work of Michael Ungar (2004, 2011) toward a socio-ecological understanding of resiliency, we conceptualize a pedagogy for resiliency as the work of supporting both student and teacher resiliencies through teaching practices which build on the strengths and interests of individuals and draw on their ecological resources – the social networks and material resources available to them. Examples include competencies about promoting thriving, social connectedness, coping and emotional self-regulation, and the competencies of trauma-informed and compassionate teaching, any of which could become wholly integrated into the business of schools. When we speak of a developmental approach to MHL, we do not assume a chronological progression of beginner to mastery levels or one pathway to follow. Competencies are situated within a context and become more sophisticated over time, a developmental progression that may differ among individual teachers and between individuals and the collective. We have met seasoned teachers who are masters at accelerating the achievement of typically developing students, who stumble

when faced with students with social and emotional challenges. On the other hand, we know many early career teachers who have had intensive, immersive experiences working in challenging classrooms, who model a pedagogy for resiliency. Context is key.

An example of enacting a pedagogy for resiliency is the unique, collaborative effort between university researchers, mental health professionals, and educators to develop a way of thinking, learning, and doing about mental health in schools that provides a place to explore, build, share, and ask questions. Susan and her colleagues (Ott et al., 2017) invited educators to design a website of resources for school mental health literacies. Through a process of "upvoting" design ideas (Hokanson & Gibbons, 2014), the teachers decided that the resources they needed would be searchable, social, and digestible. In regard to searchable, the teachers gave the website builders a list of "teacher-friendly" search terms they would look for when they needed information on mental health. "Anxiety," "stress," "depression," "trauma," and "mindfulness" were all topics teachers were looking to for more information. An "I need help with…" search bar was built into the site. Socially, the teachers were looking for content that would be and feel similar to the social media they consume: they wanted to be able to share their own ideas (like Twitter and Facebook), to include audio and visual resources (similar to the infographics on Pinterest, videos on YouTube and Instagram, and podcasts), and to access the content in digestible formats, such as push notifications. One teacher said "bring the content to me." Another said, "I maybe have time to listen to a podcast on the way to work, or read a top 10 list of strategies." These educators also brought up the issue of coaching, in the idea of having a safe space to ask questions of an expert moderator. One teacher said of the overall vision for the website: "it would be like a virtual staffroom: a place to share ideas, to go and get help and support."

One of the most important and surprising findings from our work with these educators was the way their engagement seemed related to their mental state. When we began by asking teachers "what do you need to know about mental health?", the energy left the room. However, when we invited them to create their own knowledge resources, while at first, they felt they lacked the capacity to begin, they began to break into interest groups, find collaborators, and work positively and productively. We surmise that affording this opportunity to "invest in" their learning about mental health by co-designing the website and cocreating the resources supported the educators' positive mental health by creating an opportunity for their competency, autonomy, and relatedness needs to be met (Ott et al., 2017; Ryan & Deci, 2000).

One of the factors we had to overcome when working with the educators on the website was their initial feelings of inadequacy about dealing with student mental health. We heard statements such as "mission impossible," "I'm struggling too," and "I'll have to ask my school board mental health lead if I can participate." Mental health professionals must remember that building teacher capacity in MHL feels overwhelming to teachers as learners: they are not experts, they know it, and the problems are severe. We must learn from teachers, who know that learning must be broken into manageable chunks, that learning is co-constructed, that learners' needs differ, and that personalized feedback is essential. This is what we mean by adopting a developmental approach to learning MHL. Furthermore, we also need to ask critical questions about how our messages regarding school mental health position teachers and students. Do we help them to recognize and build on their strengths or view them as incompetent until they measure up to our models of mental health competency? In general, a managerial mind-set driven by accountability pressures has contributed to a "deskilling" of teachers to exercise professional judgment (Rodger et al., 2017, this volume). A pedagogy for resiliency, however, positions teachers as experts in understanding the needs of students, including their emotional needs, and empowers them to engage in the MHL agenda to increase self and collective capacity.

Further empirical research is needed in the use of a pedagogy for resiliency to build MHL teacher capacity, particularly in terms of the specific

types of organizational and social supports needed; the maximization of professional learning supports through embedded, authentic, and collaborative activity; and the necessary balance between teacher care and student support in learning experiences. However, we strongly suspect that teachers will be more open to engaging in co-constructed learning experiences with mental health professionals if the efforts are grounded in resilience and respect for teachers as knowledgeable and capable professionals. Below we offer several additional recommendations for those seeking to build teachers' capacity for engaging in, leading, and sustaining the MHL agenda.

Recommendations for Building the MHL Capacity of Teachers

In this chapter we have presented many of the complexities of teachers' work, their competencies and learning needs, and the system-level requirements for creating schools that are "well places to be." Taking all of this into consideration, we offer the following recommendations for those who are bringing mental health supports, resources, and programs into the schools and school system:

1. Using a comprehensive school health approach can be valuable in meeting teachers where they are, speaking the language of education, and drawing the connections between learning, working, and health. Examples of these comprehensive school approaches include Ontario's *Well-being Strategy for Education*, in which understanding and supporting well-being are promoted in four developmental domains – cognitive, social, emotional, and physical (Government of Ontario, 2016) – and the *Comprehensive School Health Model* that considers social and physical environment, teaching and learning, policy, and partnerships and services as four interrelated but distinct components. This approach can help school mental health researchers and professionals, as well as schools and systems, create a well-supported and coordinated system of care that encourages transdisciplinary collaboration, leverages the strengths and opportunities for all involved, and promotes shared responsibility for improving and sustaining wellness in schools.
2. A teachers-as-partners approach to school mental health will include their experiences, voices, learning needs, and understanding of the impact of good mental health. By focusing on engagement through partnership, we consider teachers as co-learners, co-researchers, co-developers, co-inquirers, and co-designers (Healey, Flint & Harrington, 2016). Teachers are engaged in research, curriculum design and pedagogy, and student success within their classrooms and school, but their participation in supporting student mental health can be uncertain and is reinforced by organizational structures that place barriers between teaching and school mental health (Phillippo & Kelly, 2014).
3. Build relationships that are mutual, growth-oriented, and built on your sense of common purpose – making schools a place where mental health promotion, prevention, and early intervention are implemented with system support and based on both evidence and practice. This could mean inviting teachers to be part of an advisory group, building in "release time" (funding for an occasional teacher to take over the class, so a classroom teacher can participate in meetings, consultations, and professional development), and working together to ensure that treatment fidelity and reporting can fit within the time and opportunities that busy classroom teachers have.

Conclusion

It is harder today to find the "naysayers" – those teachers who say they came into the profession to teach, not to be social workers. It is easy, however, to find teachers who are exhausted, who view another professional development session or program initiative related to mental health, or the myriad other initiatives they are required to

participate in to be "just one more thing." We know from our own survey of Canadian teachers that "policy" – realized to teachers as those "one more things" on the to-do list – was rated as the greatest source of stress in the workplace (Marko, 2015). We have learned from our own hits and misses in researching school mental health initiatives that the way to confront that "one more thing" attitude is twofold: first, to invite teachers to make their own wellness a priority and, second, to engage with them as co-inquirers. What this means, for mental health professionals who are teaching educators about school-based mental health, is that if we want teachers to *buy in*, we need to afford them the opportunity to *invest in*. They must be collaborators in their learning, begin by identifying their problems of practice, and be supported to apply their learning over time. Finally, we strongly believe that developing teacher capacity in responding relationally to the mental health needs of their students must never be a proxy or "cheap fix" to meeting the critical need for more clinicians working in education systems and creating more pathways to mental health treatment for children and youth. There must be room at the consultation table, in the schools, and in child and youth mental health agencies and services, for each discipline and professional to bring their best and work together for wellness and effective intervention.

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8

Mental Health Literacy as a Fundamental Part of Teacher Preparation: A Canadian Perspective

Susan Rodger, Kathryn Hibbert, Alan W. Leschied, Melanie-Anne Atkins, E. Robyn Masters, and Jasprit Pandori-Chuckal

Abstract

School is increasingly looked to as a natural place within which to promote health and well-being for our young people. Those who lead and teach in our schools must have the knowledge, skills, supports, and resources with which to manage this obligation.

In Canada each year, thousands of new teacher graduates take their place as leaders in the classroom, and many will go on to initiate innovative strategies and programs at the school and school district levels. Initial teacher education (ITE) provides teacher candidates with not only the knowledge and skills for their entry into practice, but in addition, they also gain the knowledge of a complex and integrated system within which they will practice.

As the role of teachers expands to include supporting student mental health, mental health literacy is increasingly identified as a critical part of the ITE within a comprehensive school health framework. This chapter defines and operationalizes mental health literacy for educators as part of a comprehensive school health approach in bringing knowledge, abilities, and attitudes to the next generation of teachers.

Schools, Teachers, and Mental Health

Canada's first national strategic plan for mental health reflects the level of attention being given to the emotional and behavioral well-being of individuals in the society. *Changing Directions, Changing Lives* (2012) is the Mental Health Commission of Canada's national strategy for mental health. Among the strategic directions included is the promotion of child/youth mental health that includes the active participation of schools.

The number of children and adolescents worldwide who are expected to experience mental illness has been recently estimated at 13.4%, with an acknowledgment that there are many more youth who experience symptoms at a subclinical level (Flett & Hewitt, 2013; Polanczyk, Salum, Sugaya, Caye & Rohde, 2015). Importantly in the area of school mental health is the connection between mental health, student engagement, and academic success. Evidence of these connections is seen at the policy level where, for example, the Ontario Ministry of Education has funded mental health leaders in all 72 school boards (Government of Ontario Press release, Sept. 5, 2017).

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Actions such as these acknowledge not only the prevalence of mental illness among children and youth but also the extent to which emotional distress can seriously compromise a student's learning potential, reflected in higher rates of absenteeism, student dropout or incompletion of academic attainment, and poor school adjustment (Atkins, Fraizer, Adil, & Talbott, 2002; Koller & Bartel, 2006; Perfect & Morris, 2011; Repie, 2005; Weist, Goldstein, Morris, & Bryant, 2003). On the other hand, positive student mental health has been linked to increased social competency, behavioral and emotional functioning, and academic success (Greenberg et al., 2003; Hoagwood et al., 2007; Weist & Murray, 2008; Wilson & Lipsey, 2007). From the school community perspective, there is evidence that a positive school climate and student connectedness and engagement are associated with significant gains reflected in a student's academic test scores and performance in reading, writing, and mathematics (Osher, Kendziora, Spier, & Garibaldi 2014; Spier, Cai, & Osher, 2007.

The Canadian Context of Initial Teacher Education

By way of orienting the reader unfamiliar with Canadian education policy and systems, it is important to point out that all education and school systems, from early childhood through postsecondary levels, are a provincial responsibility. Each province and territory sets their own standards for teaching, learning, and student success. For example, in British Columbia, student social-emotional competencies such as self-regulation and self-awareness are part of each K–12 student's annual assessment (https://curriculum.gov.bc.ca/competencies). The Ontario College of Teachers accredits all teacher education programs in the province and requires instruction to teacher candidates on child and youth mental health. Standards regarding competencies, or indeed the competencies themselves, are firmly located within each provincial education system and are not necessarily consistent across Canada.

Canadian expertise in the preparation of teacher candidates allowed for the growth of specific knowledge and skills in advancing student learning. However, among the unintended effects of this growth has been the fragmentation of our knowledge of the "whole" child (Ng et al., 2015). Such fragmentation has created confusion regarding who holds what knowledge about the child and how this knowledge is moved across a system of experts in focusing on the needs of the child.

Added to this is the gap in school mental health research and policy concerning teachers, teacher education, and the ways in which systems that include education, health, child welfare, and youth justice can be supported (Rodger, Hibbert, & Leschied, 2014). This chapter situates the role of teachers in school mental health and, particularly, the role of initial teacher education (ITE) in preparing the next generation of teachers to take their place in schools in actively supporting the emotional and behavioral well-being of both students and teachers.

Two Contemporary and Complementary Approaches to Education and Health

Twenty-first-century learning is the latest version in a series of education or school reforms. It has been described as a "tidal force in education" (Christou, 2016, p. 62). It contains a reflection of contemporary thinking regarding the knowledge economy and those who are at the center of that economy, the knowledge workers.

The concept of competencies, the concrete, observable behavioral criteria that are the evidence of learning, is used to describe what success "looks like" for teachers and students alike. Examples of these competencies according to the Organisation for Economic Co-operation and Development include self-regulation, leadership, teamwork, health, and wellness literacy (Schleicher, 2015). As adapted for use in Ontario, the competencies for twenty-first-century learners include learning to learn, self-awareness, and self-directed learning. Competencies for students that are related to mental health and wellness include:

- Learns the process of learning (metacognition)
- Believes in the ability to learn and grow (growth mindset)
- Perseveres and overcomes challenges to reach a goal
- Self-regulates in order to become a lifelong learner
- Reflects on experience to enhance learning
- Cultivates emotional intelligence to understand self and others
- Adapts to change and shows resilience to adversity
- Manages various aspects of life – physical, emotional (relationships, self-awareness), spiritual, and mental well-being (Government of Ontario, 2016)

Comprehensive School Health

Comprehensive school health (CSH) is an overarching approach to service delivery that, according to the *Canadian Joint Consortium on School Health*, "addresses school health in a planned, integrated, and holistic way in order to support improvements in student achievement and well-being" (http://www.jcsh-cces.ca/). CSH is referred to both nationally and internationally by various names, including systems of care, health promoting schools, interconnected frameworks, and healthy schools. The guiding principles of CSH include a recognition that multiple systems can best meet the complex needs of children and youth within the strengths of a transdisciplinary approach. Weist et al. (2017) suggest that such frameworks can lead to cross-sectoral problem-solving in an effort to address students' learning and emotional and behavioral needs. Such approaches have distinct economic and service delivery advantages. In a comprehensive school health model, there are multiple intersecting components including the social and physical environment, policy, teaching and learning, partnership, and services (Joint Consortium on School Health, n.d.).

Such transdisciplinary approaches have value for ITE in the move toward a common language and shared understanding of systems of care that include child welfare, health, and education, in the development of mental health literacy. In bringing the comprehensive school health model to ITE and positioning mental health literacy as a key competency, the next generation of teachers is supported into the professional system of care where they are oriented to their role in supporting the mental health needs of their students while coincidentally attending to their own personal and professional wellness. Is it possible to effectively combine holistic views of education, learning and wellness with comprehensive school health? The place to begin is in orienting the mental health sectors to the role, realities and opportunities of teachers and teaching.

Teacher Education and Teaching

Teachers have a vital role in not only their students' learning, but equally as important, in their personal, social and emotional development (Ball & Anderson-Butcher, 2014). This role is unique and distinct from that of a parent or mental health professional since throughout the school year a teacher's extended daily contact with their students builds relationships and provides a unique window into their lives, the lives of their families, and the community. By teaching groups of similar-aged children year after year, teachers become aware when a student is not progressing at the same rate as their peers or they are revealing struggles of a personal nature.

The relationships that teachers build with their students provide the foundation for student learning and success, and the support from teachers is vitally important in this foundational learning. In a study involving nearly 800 senior elementary students that examined student perceptions of emotional support from their teachers, students reported that their teacher's support was significantly and positively related to personal adjustment and academic achievement and negatively related to emotional constructs such as internalizing problems, school problems, and emotional symptoms (Tennant et al., 2015).

Mental Health Literacy and Inclusive Education

The cornerstone of mental health education for teachers is rooted in inclusive education. Fundamental to a belief in inclusive education is that all students belong, and are part of, the community (King et al., 2010). Most students with identified exceptionalities, including mental illness, spend considerable time in a regular classroom. The Canadian Council of Ministers of Education (2001) identified the critical values in education of equal access, uniformity of educational resources, and cultural pluralism, and these are the values that should be inherent in every classroom. Specht et al. (2016) noted, "Preservice teacher education programs have a responsibility to graduate teachers who can teach in those classrooms" (p. 2).

Initial education for teachers offers a unique opportunity to engage new professionals as they develop their sense of identity as a teacher. Bostock, Kitt, and Kitt (2011), in their development of a mental health education program in preservice teacher education in the United Kingdom, concluded, "This seems like a good time to capture them—before the experienced teacher habitus is formed" (p. 113).

Positioning Preservice Teacher Education

Almost two decades ago, internationally renowned educator Linda Darling-Hammond advocated for coherence in teacher education: teacher education ought to encourage prospective teachers to investigate learning and the lives of learners, build knowledge, honor practice, reflect on research, and "reach beyond their personal boundaries to appreciate the perspectives of those whom they would teach" (p. 171).

Research is increasingly recognizing the unique role of teachers in being situated to support identification, prevention, and early intervention in support of successful learning and development from a strengths-based model (Lilijequist & Renk, 2007; Rodger et al., 2014; Weston, Anderson-Butcher, & Burke, 2008). The current challenge lies, in part, in the gap between what teachers are expected to know, understand, and support in the context of their students' mental health and what their exposure is in regard to formal education about mental health in schools.

Teachers recognize the areas in which they feel underprepared, yet are willing to learn (Froese-Germain & Riel, 2012). Rothi, Leavey, and Bests (2008) reported that teachers "demanded (a) expert advice on recognition and sources of support, (b) information on appropriate referral agencies and (c) practical training on how to manage children with mental health problems in the classroom" (p. 1223). However, Rothi et al. (2008) also found that in-service teachers cited a lack of time as a major barrier to devote to learning these strategies. Reinke, Stormont, Herman, Puri, and Goel (2011) examined teachers' perception of their knowledge in supporting child mental health, reflecting that only 4% indicated they "strongly agreed" that their level of knowledge was at least adequate in meeting student mental health needs (). Similarly, 93% of teachers surveyed reported that their initial teacher education did not prepare them to support child mental health; yet 85% reported their student's mental health as their biggest concern (Andrews & McCabe, 2013).

A lack of consistent and effective professional development in mental health leaves many teachers reporting that they are inadequately prepared to support student needs (Rothi et al., 2008). Both experienced and novice teachers report having received little to no formal training in mental health while also indicating a desire to increase their knowledge and skills (Froese-Germain & Riel, 2012; Whitley, Smith, & Vaillancourt, 2013).

Defining Mental Health Literacy

Jorm et al. (1997) introduced the concept of mental health literacy as reflecting "knowledge and beliefs about mental disorders which aid their recognition, management, or prevention." This concept was born from the domain of health literacy and the recognition that it is related to

health and social outcomes (Baker, Wolf, & Feinglass, 2007; Berkman, Sheridan, Donahue, Halpern, & Crotty, 2011). More recently this definition was broadened to include knowing how to "get and keep" mental health, knowing about the causes and treatments of mental health disorders, the importance of reducing stigma, and how to seek help (Kutcher, Wei, & Coniglio, 2016).

While this definition of MHL has evolved, it still consists largely of increasing individuals' knowledge related to mental health and illnesses. However, MHL is not a one-size-fits-all model, but instead represents a dynamic and evolving concept that reflects the context and population to which it is applied. While healthcare researchers speak about mental health literacy from a medical model of *deficits*, illness, and treatment, mental health and education researchers consider teacher competencies and dispositions that *promote* healthy development and school success among students using a strengths-based model.

An expanded definition of mental health literacy was developed by the Canadian School Mental Health Literacy Roundtable (2012) and provides guidance for schools and systems as they focus on education sector staff. This definition is operationalized, describing "the knowledge, skills, and beliefs that help school personnel: create conditions for effective school mental health service delivery; reduce stigma; promote positive mental health in the classroom; identify risk factors and signs of mental health and substance use problems; prevent mental health and substance use problems; and help students along the pathway to care" (SMHSA Consortium, 2012, p. 4). This definition highlights the value of teachers' MHL as a resource or asset without placing educators in the role of expert; rather, it "is a means to enabling individuals to exert greater control over their health and the range of person, social, and environmental determinants of health" (Nutbeam, 2008). The belief is that a definition of MHL embedded in education more readily considers how mental health literacy is integrated into initial teacher education (ITE) where it is viewed as part of a comprehensive school health (CSH) approach.

CSH presents four components of school health, namely:

1. Social and physical environments. This includes the quality of relationships between staff and students at school, the emotional well-being of students, relationships with families and community, and the importance of building competence, autonomy, and connectedness.
2. Teaching and learning. The facilitation of student learning and wellness, and teacher education, with school health policies and guidelines that are culturally relevant and access to school community assets.
3. Policy. It is the structure and management of schools and teaching that will promote student wellness and achievement and shape a healthy school environment for all, sustainably.
4. Partnerships and services. At the community and school-based level, health and education sectors can work together toward student and community wellness, and communities have much to offer schools by way of volunteer work, support for programs or initiatives, and donations of time, goods, and energy (Hornby & Eber Kelly, 2013).

Mental health literacy can and should be developed and leveraged as part of the teaching and learning component of CSH through a partnership between the health/mental health and education sectors. The health sector brings expert knowledge and resources about child and youth mental health and the promotion, prevention, and interventions that are possible within the context of schools. Education brings awareness of the unique setting of education and the challenges and opportunities at school, including twenty-first-century learning and the professional role of teachers and teaching that are critical in understanding how schools can be a critical partner in child and youth mental health.

Initial Teacher Education (ITE)

Initial teacher education programs take a number of forms across Canada, but most are commonly undertaken with an undergraduate degree as a prerequisite and are 16 months (2 academic years) in length. Teacher candidates spend a large

proportion of their in their school placements; in the majority of provincial and territorial jurisdictions, applicants will seek enrolment in one of four streams based on grade level: primary (prekindergarten to grade 3), junior (grades 4–6), intermediate (grades 7–9), and senior (grades 10–12), with some slight variations. Only those applying to intermediate and senior streams are required to have expertise in particular knowledge content areas, referred to as "teachables," such as history or mathematics. Programs generally do not require previous coursework in psychology, health, or child development. Provincial standards dictate the number of hours of coursework in the program, the nature of mandatory courses, and the practice teaching experience necessary for successful completion of the program. There are currently 66 teacher education programs in Canada.

With this in mind, it is important to note that ITE is, as noted by Gambhir, Broad, Evans, and Gaskell (2008), "embedded in a complex network of regulatory bodies (including) provincial governments, accreditation agencies, and universities" (p. 8). Some provinces such as Ontario, British Columbia, and Saskatchewan have professional regulatory colleges, and there are multiple teachers' federations in most provinces. There is government legislation in all provinces and territories that controls education, for example, Ontario's Education Act and British Columbia's Teaching Profession Act (). Tensions and discussions arise regarding the admission criteria for ITE programs, the courses to be taken, and how many days the candidates will spend in supervised practice. What constitutes meaningful ITE is contested on many levels outside of any calls to include mental health in the curriculum.

ITE is designed to provide *initial teacher preparation* while also providing the license for new teachers to practice through instruction, practice, and an orientation to the profession of teaching. It is replete with opportunities to influence not only knowledge about pedagogy and curriculum but also healthy child development, mental health, professional practice, and self-care. The *Association of Canadian Deans of Education* (ACDE, 2016) has an accord on initial teacher education which positions becoming a teacher as a "developmental process" that positions ITE as preparing teachers for their continuing professional development. It includes as one of their 12 core principles that, "An effective initial teacher education program ensures that beginning teachers understand the development of children and youth (intellectual, physical, emotional, social, creative, spiritual, moral) and the nature of learning" (p. 3).

The importance of self-reflection, critical thinking, and inquiry is appearing in much of the literature about "good" teacher education (Castro, Kelly, & Shih, 2010). According to Darling-Hammond, "Developing the ability to see beyond one's own perspective, to put oneself in the shoes of the learner, and to understand the meaning of that experience in terms of learning is perhaps the most important role of universities in the preparation of teachers" (p. 170). In addition to opportunities to develop the self-reflective capacities, it is also critically important to provide opportunities to learn about mental health and supporting mental health in schools. Simply put, this is where there is an opportunity to help the next generation of teachers understand that they have an important role to play in school mental health.

Competencies are also seen in teacher education and as systems define what a "good teacher" looks like and provide a way to determine the success of initial or ongoing teacher education. Such competencies for teachers working in expanded school mental health contexts, according to Weston et al. (2008), can be organized into six overarching principles that include being able to identify early indicators of mental health problems or atypical social-emotional development among students. This approach, and one that includes a considerable range of social, cognitive, physical, and emotional competencies, is one in a long line of school reforms (e.g., earlier reforms were based on the civil rights movements, accountability, and equity) and is the latest to bring new demands, language, and priorities to schools, classrooms, and teachers.

Initial teacher education, as mentioned above, affords an important opportunity to orient new teachers to mental health and wellness for both their students and themselves. The challenge in Canada is that few opportunities are available. An

environmental scan undertaken by Rodger et al. (2014) explored the opportunities for a teacher candidate in Canada to take a (unrestricted) course that clearly addressed mental or emotional health or wellness. A review of 600 course offerings at 66 teacher education programs was completed. Of these, only two met the full criteria: the course was available to any candidate, regardless of program; the course was not offered as part of a "special education" or "exceptional student" approach; and the course offered research and strategies related to relationship building and the influence of mental health on learning.

When there are so few ITE opportunities available, it is important that a commitment to a program of research is made that includes offering such courses to our teacher candidates. Such courses and curriculum are beginning to appear and be evaluated; these will be discussed later in the chapter. Further, it is important that these ITE courses offer instruction and resources in both supporting student mental health and well-being and self-care. As the authors have stated previously, "It is important to prepare Canada's future teaching workforce with the knowledge and tools needed to not only promote mental health for children and youth, but remain healthy and resilient themselves. When teachers are supported and healthy themselves, they will be more effective in their ability to support students' mental health and wellbeing and, ultimately, student success" (Rodger et al., 2014, p. 6).

It is important also to note that there is emerging evidence that we can shift some of these competencies in teacher education, such as emotional intelligence, promotion of inclusion, and reduction of stigma through ITE. Vesely, Saklofske, and Nordstokke (2014) showed evidence to support an increase in emotional intelligence for teacher candidates who took part in an emotional intelligence education experience. Rodger and colleagues demonstrated significant shifts in knowledge, pro-inclusion attitudes, and stigma reduction among teacher candidates enrolled in a mental health literacy course (manuscript in preparation). Specht et al. (2016) cite research that supports the connection between experiences during practice teaching and positive attitudes toward inclusion of students with exceptionalities, including the promotion of mental health needs. Atkins and Rodger (2016), in an evaluation of a mental health literacy course in an ITE program, found that the course successfully developed many components of mental health literacy including understanding the essential features of mental health and mental illness, the prevalence of mental illness among children and youth, and the educator's role as a caring professional. As one candidate stated after the course, "Because our founding responsibility is to educate students and support their welfare, an inability to recognize the impact that mental illness has on academics is also a failure to fully respond to the requirements for students' academic success" (p. 103).

Teacher Wellness

Teaching has been recognized as a stressful occupation, and teachers often report feeling burned out and isolated in their roles (Ellis & Riel, 2014; Froese-Germain & Riel, 2012; Johnson et al., 2005). It is widely recognized that mental health concerns can impact an individuals' job satisfaction as well as their productivity, performance, and absenteeism (WHO, 2014). In the Ontario College of Teachers' 2006 survey findings, 13% of Ontario's teachers reported "feeling stressed all the time," compared to only 7% of the general public workforce (Jamieson, 2006). In a study on teacher mental health workload, student behavior and employment conditions were found to be significant predictors of depression and anxiety symptoms for teachers (Ferguson, Frost, & Hall, 2012). Chang (2009) noted that teachers must feel supported in their own emotional health in order to perform to the best of their ability and support the complex needs of their students.

This is especially true for new teachers, as the organizational model of schools brings with it the expectation that one teacher will be in one classroom where they are isolated from peers and responsible for all aspects of learning, teaching, and behavior management with "the expectations placed on beginning teachers that are identical to those placed on very experienced teachers, a situation unheard of in other professions" (Crocker & Dibbon, 2008, p. 117).

There are economic costs for any chronic illness, and in this regard mental illness is one of the leaders. Estimates of the cost of mental illness in Canada converge at about $30 billion annually, with mental illness accounting for the majority of stress leaves for teachers. Medication for anxiety and depression form the bulk of all prescriptions paid out by insurers for this group.

Beyond the burden, both financial and personal, of mental illness, there are additional and important costs that are shouldered by the students in classes where the teacher is struggling with emotional exhaustion or burnout. In British Columbia, Oberle and Schonert-Reichl (2016) demonstrated that the morning cortisol levels (saliva samples) of grade 4 students were elevated in relation to their teachers' levels of self-reported stress and burnout. A large-scale study by Arens and Morin (2016) demonstrated the connection between lower academic engagement and achievement and decreased feelings of support among senior elementary students relative to higher levels of teachers' self-reported emotional exhaustion and burnout. Further, emerging evidence is indicating a connection between high levels of stress and attrition through either leaving the profession of teaching within the first few years of practice or retiring early (e.g., Alberta and Quebec studies). The source of such stress is unclear. Froese-Germain & Riel (2012) indicated in a large-scale survey of Canadian teachers that for too many, professional demands, coupled with a shortage of resources, led to the common belief that it is simply not possible to meet the needs of students.

Changing Professional Practice and Teacher Expectations

In Ontario, a standardized school curriculum was introduced across the province in the mid-1990s. At the same time, the *Ontario College of Teachers* (OCT) was formed which further defined the expectations of teachers. While the introduction of the college sought to elevate professionalism, the parallel introduction of what many viewed as a prescriptive curriculum paradoxically, if perhaps unintentionally, "de-skilled" teachers. Teachers who had previously understood their role to include that of curriculum maker increasingly shifted to understanding their role more in terms of being technicians.

This shift could be seen in the language used in descriptions of expected interactions with what was formerly thought of as professional development. Language introduced at this time included terms adapted from the business world reflected in the use of teacher training, curriculum delivery and implementation, covering the curriculum, and so on. Commercial interest in education as an economic market led to an increase in the number of products developed and sold to schools that included training in the materials. A decrease in resources and a reallocation of available funds led boards of education to reduce the number of curriculum specialists available to support program changes at the school level. Following the introduction of the standardized curricula, curriculum specialists assumed clearly defined roles as trainers of ministry curricula. The training provided was exactly the same for each school and each board across the province. Since that time, ministry initiatives have largely occupied the type of professional development that teachers receive.

For a number of years, this training revolved around improvements in literacy, and while this is understandably an important focus in education, it assumes that attention to content areas is sufficient for improving learning. The subtle shift positioning teachers as receivers of knowledge (Belenky, Bond, & Winestock, 1997) has profoundly influenced their views of themselves as professionals – even in the ways outlined and defined by the Ontario College of Teachers. In a very real sense, there has been a loss in the notion of coherence that Linda Darling-Hammond (2000) described. "Professional development" days, the teacher in service education opportunities built into every K–12 school year, have largely been devoted to curriculum training, with some more recently focused on the practices and benefits of teaching students to develop knowledge of coding. New initiatives are continually added to the school day, but rarely does anything get removed. This curricular intensification (Apple, 1988) has resulted in

some subjects getting squeezed or rushed, in an effort to "cover" everything that has been deemed to be important. Parr (2004) notes, "Underpinning this approach to teachers' professional development is a conceptualisation of teacher knowledge as a stable and fixed commodity, unconnected to the social or cultural context of teachers" (p. 23). Critics of the standardization-accountability movement "have suggested that teacher commitment to the profession is likely to be the main casualty of these control-based reform strategies, as the occupation of teaching is deskilled" (Smith & Rowley, 2005, p. 127).

Contextualizing the Sources of Stress for Teachers

Situating these educational challenges at a time when teachers compete for dwindling job opportunities where they prepare their students for an unknown future in a globalized, increasingly technical world has exacerbated stresses experienced by teachers and students alike. As a result, teachers are uniquely positioned in being on the front line to influence student health and wellness. However, this positioning is juxtaposed to the traditional curricular focus that socializes teachers into roles that separate their skill and practice from a professionalism that includes attention to wellness. Mental health team members looking to work with teachers need to understand the significant ways in which an emphasis on content knowledge and skills has defined teachers' understandings of their role.

The null curriculum considers what is not being taught, frequently suggesting what is not explicitly valued in education. The shift to what has been termed the "knowledge economy" led to an increased focus on content and skills that aligned with future employability. Largely ignored in this curricular shift was any attention to individual well-being. The coincidental introduction of standardized provincial testing for students and teacher performance assessments created an audit culture that sharpened compliance with many school boards in North America; Ontario's Ministry of Education was not a stranger to this move toward curricular initiatives that would enhance traditional academic outcomes.

The nature and quality of initial teacher education is complex and requires the careful alignment of multiple systems, including public education, postsecondary education, internship experience, and ideologies related to personal qualities, the helping profession, mental health, social justice, and equitable education, to name a few (Kaur, 2012; Macbeath, 2011; Pereira, Lopes, & Marta, 2015; Tang, Wong, & Cheng, 2016;). Failure to provide this high-quality introduction to the profession may lead to reduced success within the field, including detrimental long-term effects throughout an educator's career progression (Macbeath, 2011; National Research Council, 2000; Tang et al., 2016). For example, what is absent in the curriculum in initial teacher education is reflected in emotional wellness, burnout and emotion exhaustion, poor stress management, as well as difficulties with supporting complex student needs and understanding how to promote social justice, equality, and diversity (Ballou, 2012; Davari & Bagheri, 2012; Kaur, 2012; Van Droogenbroeck & Spruyt, 2015).

The Future of ITE, Mental Health Literacy, and Comprehensive School Health

ITE is arguably the most opportune time to initiate mental health literacy as it coincides when teacher candidates are learning about their scope and role. Koller, Osterlind, Paris, and Weston (2004) recommend that upon completion of their certification requirements, teacher candidates should know and demonstrate a number of competencies related to mental health literacy and school success. However, despite the recognized need for, and importance of, knowledge about mental health for teachers, the fields of both education and mental health have not been very influential in preparation of new teachers in the area of mental health.

In a recent review of the teacher education accreditation standards across North America, the authors concluded that few state or provincial

systems included even basic information about child and youth mental health (ref). In the absence of such policy, it is up to the education and healthcare systems, working together, to fill this gap (Levine et al., n.d. manuscript in preparation). One approach to filling this gap is to support teacher candidates in developing a mental health literacy tool to support comprehensive school health.

The research on the development of teachers' agency, professional identity, value for research, and attitudes and abilities for professional collaboration points to the importance of ITE as a time when lifelong habits, attitudes, and practices are formed (Hulme, Baumfield, & Payne, 2009). As Parker Palmer (1997) stated in *The Courage to Teach*, "…good teaching cannot be reduced to technique: good teaching comes from the identity and the integrity of the teacher… good teachers join self and subject and students in the fabric of life" (pp. 10–11). Such foundations are important in a successful entry into the profession: research has demonstrated that new teachers can struggle with stress, a sense of isolation, help-seeking, and a sense of competency (Castro et al., 2010).

As professionals in the schools, teachers who receive support in the form of education about health promotion are more involved in health promotion efforts and have more comprehensive perspectives on school-based health promotion (Jourdan, Samdal, Diagne, & Carvalho, 2008). However, these researchers also noted that in order for health promotion initiatives to be successfully integrated and sustained within schools, it was critical to embed such initiatives within the socialization, learning, and daily life of the school. Failure in achieving these outcomes was most commonly identified when they were introduced as additional or supplementary add-ons to existing school curricula. It was also noted that school-based health initiatives need to be made meaningful to educators as well as relevant to their educational perspectives and to the necessity of the specific school context (Jourdan et al., 2008). Positioning teachers as an integral part of the school mental health team is necessary for the related initiatives to be successful.

The resulting awareness is that initial teacher education will not be served by teaching mental health literacy alone: it must be considered as part of an integral component of both twenty-first-century learning and comprehensive school health. To that end, we offer three pillars upon which an understanding of mental health literacy can be constructed: culture, knowledge, and relationships.

Culture ITE can provide the context for mental health and school success through explicit inclusion of culture in the curriculum. We propose that teacher candidates learn about the importance of culture in both learning and teaching, healthy development and prevention, and promotion and early intervention for mental health, through principles of cultural humility. Far from being another content-heavy component of an expansion of the teacher education curriculum, cultural humility is defined as a process of self-reflection or to understand personal and systemic biases in the service of developing and maintaining classroom processes and relationships based on mutuality, respect, and vision of the whole child (adapted from Hook, Davis, Owen, & Worthington, 2013). Schön (1983, 1987) describes this as an epistemology of practice where, as professionals, we each reflexively bring a special kind of knowing to bear on how we interact with real people to solve problems in the world. Schön's approach asks "What is the kind of knowing in which competent practitioners engage" (1983, viii).

Knowledge Schön argues that in return for the extraordinary knowledge accumulated by professionals, they are granted "extraordinary rights and privileges … [but that] professionally designed solutions to public problems have had unintended consequences" (1983, p. 4). While personal and professional growth and well-being has been identified as an important teacher disposition by Weston et al. (2008), there is little evidence that attention to well-being has been integrated into most preservice education curricula. It is important that preservice teacher education include attention to mental health, since, "When students and teachers are healthy, the school environment is healthy, and the conditions for learning are present so that students and teachers alike can flourish" (Weston et al., 2008) (p. 33).

To consider well-being throughout the system requires attention to the ways in which we have positioned teachers: holding them to high professional and ethical standards on one hand and creating conditions that undermine their capacity to enact that professional integrity on the other. The tensions that result when teachers are caught between the often competing pressures expressed as ministry or board goals (e.g., increasing test scores), within a context complicated by issues like poverty, insufficient resources, and unhealthy learning environments, can paradoxically worsen the "well-being" of teachers and, therefore, of the students they serve. Several factors have been shown to be significant predictors of teacher stress including internal factors such as emotional awareness (Vesley, Leschied, & Saklofske, 2013) and external factors such as workload (Ferguson et al., 2012), organizational uncertainty (Phillippo & Kelly, 2014), lack of support from colleagues (Kovess-Masfety, Rios-Seidel, & Sevilla-Dedieu, 2006), student behavior, and perceptions of student support systems (Ball & Anderson-Butcher, 2014). Developing mental health literacy acknowledges the development of a social practice embedded in a variety of institutions including families, schools, and communities as well as in the broader network of government agencies, professionalized bodies, and corporate culture.

Relationships A key aspect to teaching is in the relationships that are embedded within both organizational and community cultures. These relationships have their own strengths, challenges, and language. In the context of comprehensive school health, the language and terminology that pertain to mental health professionals and the terms relevant to mental health concerns need to be carefully considered. Commonly in educational settings, these professionals are described by a variety of titles such as school or mental health counselor, psychologist, social worker, therapist, mental health leader, or school support counselor.

These terms are often used in an interchangeable manner that implies, albeit erroneously, a common base of knowledge, skill, and training. Yet, there are regional, generational, societal, and political pressures that have influenced the way that mental health supports have been used in educational fields. Becoming familiar with the specific titles of the mental health professionals in the school and local community remains important. Sullivan (2012), for example, found that school counselors interacted with a wide variety of staff regarding the delivery of mental health services and supports in their schools, and while the majority of service providers were psychology or social work staff, additional professionals included mental health counselors, behavioral consultants, substance abuse counselors, community health providers, nurses, family therapists, and psychiatrists. As teachers become familiar with the action needed to activate care and the circle of support in their school communities, there is less pressure to feel like they bear the sole responsibility for care.

Opportunities in Preservice Teacher Education

The timing of preservice teacher education provides the opportunity to influence these new professionals in comprehensive school health approaches in multiple and important ways:

1. Encourage development of a view of self as a researcher, inquirer, and knowledge builder.
2. Teach for the development of the dispositions such as prosocial values, attitudes, and beliefs that will inform and guide their practices as an effective, inclusive, and culturally sensitive teacher.
3. Teach for the development of mental health literacy within a comprehensive school health framework, encouraging both knowledge building and professional collaboration.
4. Teach the skills of relationship building and encourage ways of being that will sustain them in their lives and through changes in their work and personal contexts.
5. Develop their identity as a helping professional where their flexibility, responsivity, and caring does not compromise them or their professional identity as teacher.
6. Plan for challenges so that where they may experience working and living in systems that

may be at different places in the conditions for support of 1–5, they are prepared.

In traditional teacher education programs, students take classes in education policy, the history and philosophy of education, laws relevant to education, and, of course, curriculum and pedagogy. However, we are presented with an ethical issue: we have a great deal of evidence to suggest that many children and youth are struggling (Kessler et al., 2007) and increasing evidence that there are prevention, promotion, and intervention strategies that can make a real difference (Durlak & Weissberg, 2011; Horner et al., 2009). Darling-Hammond (2016) suggests that:

> ...schools of education must design programs that help prospective teachers to understand deeply a wide array of things about learning, social and cultural contexts, and teaching to be able to enact these understandings in complex classrooms serving increasingly diverse students in addition, if prospective teachers are to succeed at this task, schools of education must design programs that transform the kinds of settings in which novices learn to teach and later become teachers. (p. 302)

To commit to a curriculum that is inclusive of both traditional and more contemporary elements, however, is a challenge for teacher education programs as they struggle to do more with less:

> Content knowledge can be gained to a large extent in the preservice classroom. But place-based cultural competency- the ability to function well and respectfully amidst those things that define a people and a place and make them unique- is more difficult to teach in a preservice course. (Williams, 2012, p. 27)

Such knowledge and learning approaches can include relationships, culture, and context to present preservice teacher candidates with complex and rich learning opportunities that will provide preparation for the complex communities and relationships within which they will practice. Preparing new teachers to take their place in a comprehensive school health system approach means a shift in the way teachers are prepared, supported, and included. The responsibility must be shared by a number of sectors including health, K–12 and postsecondary education sectors, and professional teacher regulatory bodies, as well as policy makers.

While teachers are regularly a part of "school-based teams" that address student needs, and include professionals from a variety of other areas including, for example, speech pathology, mental health professionals, and pediatricians, they are usually positioned as sources of information and not as partners in decision-making. Their own professional code of ethics around issues of privacy, for example, are not considered to be equal to that of other members of the team, and they are frequently not included in full conversations about a student's needs (see, e.g., Ng et al., 2015). They are instead providers of information that others review, and then they are expected to implement decisions made by others. Ironically, the recommendations provided to teachers in many cases are practices that teachers themselves have already put in place. "Identity and integrity are … subtle dimensions of the complex, demanding, and lifelong process of self-discovery. *Identity* lies in the intersection of the diverse forces that make up my life, and *integrity* lies in relating to those forces in ways that bring me wholeness and life rather than fragmentation and death" (Palmer, 1997, p. 13).

This is a missed opportunity. Mental health literacy in an educational context is understood in reciprocal ways. Literacy is not only understanding and following directions; in education, literacy also seeks to understand the knowledge, experiences, and attitudes of those with whom they are engaging. It has a strong social justice foundation to it, and teachers value their ability to participate fully as professionals in the discussion.

If we want to see change in terms of mental health literacy in education, we must value the input of teachers as professionals. Preparation should begin at the preservice level in supporting this next generation of educators to be part of a team of professionals who understand that they have a role to play in the wellness of their students. We have to raise awareness of their ability to monitor and address their own mental health in a very complex and demanding job. However, we cannot prepare teacher candidates in this way, only to have them enter a profession that excludes their input and ignores teacher wellness. The approach must be holistic and aims for "coherence" in the sense Darling-Hammond described.

We cannot expect change when the existing infrastructure in schools remains the same.

Working Together to Prepare the Next Generation of Educators

The opportunities for collaboration in the initial – and ongoing – education and professional development for teachers are numerous, and the power of such collaborations has been discussed in this chapter. Working together to address the needs for child and youth mental health in schools is not only integral to school mental health but to the future of education and health. However, there is a caveat to these high expectations: "Despite its promise, the success of SMH (school mental health) programs can be jeopardized by ineffective collaboration between school- and community-employed professionals. Strategies to overcome marginalization, promote authentic interdisciplinary teamwork, build effective coordination mechanisms, protect student and family confidentiality, and promote policy change and resource enhancements should be addressed in SMH improvement planning" (Weist et al., 2012, p. 97).

As we plan, implement, evaluate, and improve school mental health interventions, programs, and approaches in Canada, we must include those who design, lead, and teach in teacher education. Our teachers are part of an interdisciplinary system and team that support student mental health, and sharing knowledge, practice, and goals allows each of us to be part of a working, dynamic service of support for students. For initial teacher education, this means explicit inclusion of mental health in the curriculum, developing a common language so that all disciplines can engage, and recognizing and understanding the unique contributions, role, and responsibilities that each profession and professional brings to the table. For all involved, such collaboration will require changes in what we do, how we prepare, and how we challenge ourselves and each other. For teacher education, Parker Palmer sets out our challenge:

> How can we who teach reclaim our hearts, for the sake of our students, ourselves and educational reform? That simple question challenges the assumption that drives most reform -that meaningful change comes not from the human heart but from factors external to ourselves, from budgets, methodologies, curricula and institutional restructuring. Deeper still, it challenges the assumptions about the reality and power that drive Western culture. The foundation of any culture lies in the way it answers the question, 'Where do reality and power reside?' There is an alternative… we can reclaim our belief in the power of inwardness to transform our work and our lives … now we must remind ourselves that inner reality can give us leverage in the realm of objects and events. (Palmer, 1997, p. 19–20)

All indications suggest that we are at a precipice: awareness of mental health issues has never been greater, and neither have the challenges. We need to collectively take up the call to work across traditional knowledge and practice boundaries, for a healthier workplace, healthier classrooms, and a healthier society.

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9 Promoting Mental Health Literacy Among Educators: A Critical Aspect of School-Based Prevention and Intervention

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Abstract

Teachers play key roles as partners in the prevention, identification, and intervention of mental health difficulties among children and youth. However, it is essential that teachers are equipped with sufficient mental health literacy to engender effective practices in these areas. This chapter explores the literature related to mental health literacy with respect to the perceived preparedness of teachers, as well as approaches that have been taken or are underway to improve literacy. A specific focus on social-emotional learning and bullying as key elements of mental health literacy is highlighted. Finally, suggestions emerging from current research as to the elements of effective approaches to teacher preparation are explored along with recommendations for future research in the area.

Over the years, my students have entrusted me with their most harrowing moments: psychotic hallucinations, sexual molestation, physical abuse, substance abuse, HIV exposures, and all sorts of self-injurious behavior ranging from cutting to starvation to trichotillomania. When students write about delicate and dangerous experiences, there are decisions to be made and judgments to be called. And yet, for much of my career, I have been horribly unprepared and have failed to secure the services my students needed as a result. (Lahey, 2016)

Mental Health Needs Among Children

Many students in elementary and secondary schools are struggling to succeed academically and socially due to disengagement from school, limited social-emotional competencies, and mental health difficulties (Archambault, Janosz, Morizot, & Pagani, 2009; Ungerleider & Burns, 2016; Vaillancourt, Brittain, McDougall, & Duku, 2013). The term 'mental health crisis' has been used by many researchers, practitioners, and policy-makers for over a decade to refer to the growing need to address the mental health needs of children and youth (Hacker & Darcy, 2006; Mitka, 2001; Young, 2017). Although estimates vary widely, the percentage of children and youth experiencing mental health difficulties, including anxiety, depression, or attention-deficit/hyperactivity disorder (ADHD), is suggested to be between 13% and 33% and rates continue to rise (Arboleda-Flórez, 2005; Boak, Hamilton, Adlaf, Henderson, & Mann, 2016; Leitch, 2007; Merikangas et al., 2010; National

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Research Council and the Institute of Medicine, Lawrence, Gootman, & Sim, 2009; Roberts, Stuart, & Lam, 2008; Waddell & Shepherd, 2002). A recent meta-analysis of the international prevalence rates for mental disorders among adolescents, which represents every world region, indicated that 13.4% of youth are affected (Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015). Suicide continues to be the second leading cause of death among American children and youth aged 12–17 (Centers for Disease Control and Prevention, 2017) and Canadian youth aged 10–19 (Health Canada, 2009).

Despite the need for support and treatment, various studies have reported high rates of insufficient or inappropriate health-care services for children and youth. For example, in 2012, approximately one third of Canadians aged 15 years or older reported their mental health-care needs as only partially met or unmet (Sunderland & Findlay, 2013). Counselling services were the least likely to be sought, medication the most likely. The Mental Health Commission of Canada (2017) estimates that only 20% of youth receive the treatment they require. Data from the United States indicate that 64% of youth with major depression *did not receive any* mental health treatment. State prevalence of youth with untreated depression ranged from 42% to 77% (Mental Health America, 2017), and findings from the National Health Interview Survey suggest that approximately 75% of children and youth in the United States have unmet mental health needs (Kataoka, Zhang, & Wells, 2002).

The barriers facing timely and potentially life-saving service delivery are numerous and wide-ranging. The fragmentation, or disciplinary 'silos' in the health-care system, and insufficient numbers of qualified professionals, inadequate funding and insurance coverage, and long wait times constitute system-level barriers to adequate care (National Research Council and Institute of Medicine et al., 2009; Reid & Brown, 2008; Sterling, Weisner, Hinman, & Parthasarathy, 2010). Individual- and community-level barriers include geographic location, socio-economic status, family health, stigma, and the 'fit' between youth-specific needs and available services (Kutcher & McDougall, 2009; Mukolo, Heflinger, & Wallston, 2010; Reid & Brown, 2008). Researchers have also underscored that there is a mismatch between the prevalence of mental health difficulties and service utilization that may be related to both help negation and inappropriate or insufficient help-seeking behaviour (Rickwood, Deane, Wilson, & Ciarrochi, 2005). Help negation occurs when youth in need of help do not use available support and services due to factors such as fear or perceptions of negative judgement. Inappropriate and insufficient help-seeking behaviour is often the consequence of youth only seeking help from untrained sources of support, such as family and friends, even though these individuals may be poorly prepared to address emerging mental health difficulties.

Many of these and other barriers, as well as potential solutions, are detailed in a Canadian report that summarizes the findings and recommendations of the Standing Senate Committee on Social Affairs, Science and Technology, chaired by Kirby and Keon (2006) based on their investigation into the state of mental health in Canada. Kirby and Keon's report, subtitled *Out of the Shadows at Last*, recommended drawing on the untapped potential of school sites in facilitating mental health prevention and intervention. Kirby and Keon suggest that teachers 'be trained so that they can be involved in the early identification of mental illness' (p. 19) and that resources and supports necessary to take on this role be provided. Similarly, a position statement by Mental Health America states that: 'Because teachers…have extended contact with children on a daily basis, they are often in the best position to recognize early patterns of behavior that pose a risk for a child's academic, social, emotional or behavioral functioning…While teachers…are not and should not become diagnosticians, their candid communication with the family is vital in promoting students' well-being, including their mental health' (2016, p. 14). The Ontario Ministry of Education (2013) also recognizes the important role educators play in promoting mental health awareness, prevention, and intervention and in connecting students to community services (p. 6). This recognition of educators and schools as key players

in the broader community-wide effort to respond to the mental health needs of students has long been echoed by researchers and practitioners alike (Atkins, Hoagwood, Kutash, & Seidman, 2010; Mental Health America, 2016; Power, Cleary, & Fitzpatrick, 2008; Schonert-Reichl & Hymel, 2007).

Mental Health and Schools

The detrimental impact of mental health issues on education-related outcomes has been documented in a number of studies. Students with mental health difficulties are more likely to experience lower academic achievement, less school engagement and participation, poorer peer and family relationships, and more likely to drop out of school (Meldrum, Venn & Kutcher, 2009; Vaillancourt & Boylan, 2017; Volk, Craig, Boyce, & King, 2006). Long-term outcomes, including for employment and education, are also significantly poorer for individuals with unmet mental health needs (Fergusson & Woodward, 2002).

At the system level, the mental health needs of students are addressed in a number of different ways. General school-wide efforts aimed at improving mental health and preventing the worsening of mental health problems include improving school climate, creating safe schools, addressing the whole child, character education, social-emotional learning, and bullying prevention, and teachers are integrally involved in these approaches (Durlak, Domitrovich, Weissberg, & Gullotta, 2015; Kull, Kosciw, & Greytak, 2015; Whitley & Gooderham, 2015).

For those students experiencing significant emotional, social, and behavioural difficulties in schools, needs would traditionally be addressed within the *special* education system. The term 'emotional disturbance' is one of 13 categories in the Unites States covered by the *Individuals with Disabilities Education Act* (IDEA), which requires appropriate, individualized services. Emotional disturbance can include students with anxiety disorders, schizophrenia, bipolar disorders, conduct disorders, etc. (National Dissemination Center for Children with Disabilities, 2012). In Canada, special education categories are defined provincially, but similarities exist across the country. Similar to the IDEA categories, many provinces include a generic 'behaviour' category that encompasses internalizing or externalizing issues and can be applied to those students identified with mental health problems or illnesses (Ontario Ministry of Education, 2017). Some provinces have addressed mental health more specifically within their special education legislation. In British Columbia, for example, students can be identified as having a mental illness or a serious mental illness and thus receive an individual education plan and be provided funded services through the BC Ministry of Education (2016). Individual education plans created for students with these special education identifications may include social, emotional, and/or behavioural supports, as well as coordinated service delivery alongside health-care professionals. Beyond or in addition to the special education system, many jurisdictions rely on a method of referral by which students who show signs of difficulty are assigned to the caseload of school social workers or counsellors.

For any approach to be successful, be it prevention or intervention-focused, school personnel need to have the knowledge and skills to promote positive mental health. In addition, they must be able to recognize mental health difficulties and know the appropriate steps to take to both include identified students in their classroom and to ensure that students receive the support they require. Furthermore, it is also becoming increasingly clear that teachers can best support the mental health needs of their students when they attend to their own mental health needs (Hills & Robinson, 2010; Kipps-Vaughan, Ponsart, & Gilligan, 2012).

Mental Health Literacy of Educators

The role of schools, and specifically teachers, in the prevention, identification, and intervention of mental health difficulties among children and youth is an essential one. Teachers and other school personnel are often the first to observe

behaviour that indicates either the development or worsening of mental health problems. These problems impact on the functioning of students in many ways including their ability to learn and participate in positive ways in school and the wider community (Meldrum et al., 2009). A recent review of K-12 teaching standards in the United States revealed that all states included content related to school mental health, although content varied (Ball et al., 2016). The most frequently identified competencies were the collection and use of data (measuring student behaviour, affect, and attitudes); provision of academic, social-emotional, and behavioural learning supports; and engagement in multiple systems and cross-system collaboration.

In order for teachers to be able to support students, and enact competencies such as provision of appropriate supports, it is important that their beliefs, knowledge, and competencies related to mental health be taken into consideration. These elements comprise mental health literacy which has been defined most recently by Kutcher, Wei, and Coniglio (2016) as 'understanding how to obtain and maintain positive mental health; understanding mental disorders and their treatments; decreasing stigma related to mental disorders; and enhancing help-seeking efficacy (knowing when and where to seek help and developing competencies designed to improve one's mental health-care and self-management capabilities)' (p. 155). This definition reflects an evolution over the past decade or so, moving beyond knowledge and beliefs about mental disorders (e.g. Jorm et al., 1997) to encompass a more complex, holistic, and action-oriented focus on ways that mental health can be facilitated both for oneself and for others (Jorm, 2012; Kutcher, Wei & Coniglio, 2016).

A small research base exists that directly assesses the views and preparation of educators in regard to mental health issues in the classroom. One study based on interviews with 32 teachers in England documented the need for teacher training to recognize and address mental health issues (Rothi, Leavey, & Best, 2008). A second study, conducted by Walter, Gouze, and Lim (2006) colleagues in the United States, involved a needs-assessment survey of 119 elementary school teachers regarding students' mental health problems. Teachers reported that they lacked information and training, which hindered their ability to solve mental health problems. They also showed a limited amount of overall mental health knowledge, particularly with regard to ADHD, depression, and oppositional defiance disorder. One study in Italy illustrates how teachers' limited knowledge of psychiatric services for youth displaying early signs of psychotic illness in the school context continues to be a barrier to early intervention and proper care for them (Masillo et al., 2012). In the United States, several studies have documented a perceived lack of pre- and in-service preparation in mental health literacy by teachers (e.g. Koller, Osterlind, Paris, & Weston, 2004).

The Canadian Teachers' Federation, working in collaboration with the Mental Health Commission of Canada, conducted a survey of over 3900 teachers across the country (Canadian Teachers' Federation, 2012). The goal of the study was to assess teachers' perceptions of barriers to the provision of mental health services for students and their level of preparedness to address the mental health issues in their classrooms. Results indicated that the vast majority of teachers perceived that mental health issues, such as stress, ADHD, anxiety, and depression, were serious concerns in their schools. As well, 87% of teachers agreed that a lack of adequate staff training in dealing with children's mental illness was a potential barrier to providing mental health services for students in their schools. Sixty-eight percent of teachers reported that they had received no training in mental health literacy, a shortfall that was even more evident among less experienced teachers, 75% of whom reported that they never received training. However, these numbers are not an indication of their desire to learn about the mental health needs of their students, as nearly the entire sample of respondents expressed wanting to increase their skills and knowledge in the domain.

Teachers have expressed the desire to gain a greater understanding of the nature of mental health problems that might be experienced by

their students, as well as strategies to deal with difficulties when they occurred. In addition, attention has recently been paid to another key element within the definition of mental health literacy, namely, a focus on the 'prevention of mental health problems' (Canadian Alliance on Mental Illness and Mental Health, 2007, p. 4). In addition to developing literacy in terms of recognizing mental health problems and identifying appropriate next steps in supporting students, educators should also have a solid understanding of their role in prevention. Two examples of areas where school personnel can focus in order to have a significant impact on reducing mental health difficulties include social-emotional learning and bullying prevention.

Social-Emotional Learning The broadening of school mandates to focus on elements of development beyond the narrow domain of traditional academics is not a new phenomenon (e.g. Payton et al., 2000). However, efforts by groups such as the Collaborative for Academic, Social, and Emotional Learning (CASEL) have brought the infusion and targeted teaching of social and emotional learning (SEL) into the research spotlight. Many schools across North America and beyond have adopted whole school approaches to mental health promotion that include a focus on SEL (e.g. Power et al., 2008; Wells, Barlow & Stewart-Brown, 2003). A rapidly growing research base has mirrored these efforts. In fact, a seminal meta-analysis of the impact of enhancing the SEL of students in K-12 identified 213 studies with sufficient rigour to be included (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

Social-emotional learning is defined as a process through which 'children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions' (CASEL, 2017a, p. 1). In theory, integrating SEL into all aspects of teaching, learning, assessment, and school life will serve to strengthen the skill set of an individual child and will also contribute to the overall climate of a school, thus serving as a key approach to mental health promotion (University of British Columbia, 2016). Research findings demonstrate that students who have participated in school-based, universal programs targeting specific SEL skills develop more positive social behaviour, have fewer conduct problems and less emotional distress, and have improved academic achievement compared to students who have not been exposed to SEL programming (Durlak et al., 2011). A recent extension of the original Durlak et al. (2011) meta-analysis was conducted focusing on follow-up effects of SEL programs (Taylor, Oberle, Durlak, & Weissberg, 2017). Taylor et al. (2017) reviewed 82 programs involving 97,406 K-12 students with outcomes assessed between 6 months and 18 years post intervention. As in their earlier analysis, participants in SEL programs displayed significantly greater levels of social-emotional skills, positive attitudes towards teachers and schools, and well-being compared to non-participants, with the greatest effects seen for SEL skills and academic performance.

Interestingly, of particular pertinence to the current chapter, SEL-focused programs that were delivered by teachers were found to be more effective than those delivered by non-school personnel (Durlak et al., 2011; Han & Weiss, 2005). The need for effective preparation of teachers to provide programs, as well as ongoing support, has also been listed as a key feature of high-quality, effective SEL-focused programs (Han & Weiss, 2005; Payton et al., 2000). According to Han and Weiss (2005), 'a major determinant of success in school program implementation is the amount and quality of the training that teachers receive in regard to the program' (p. 670).

Moving beyond discrete SEL programs, SEL-based policies, initiatives, and curricula have recently emerged at multiple levels of government and school systems (CASEL, 2017b; Vaishnav, Cristol, & Hance, 2016; Whitley & Gooderham, 2015). Historically, explicit SEL expectations have been the purview of preschool and kindergarten programs (Hemmeter, Ostrosky, & Fox, 2006; Rimm-Kaufman & Pianta, 2000). More recently, however, as the links between SEL and mental health have been recognized and

the lack of skill development evidenced by many students in elementary and secondary settings (and beyond) have been highlighted, a focus on SEL development beyond the early years has been noted. Several states and provinces have included SEL expectations in learning standards or required curricula, thus ensuring a sustained focus on par with more traditional subject areas such as mathematics and language arts. For example, Illinois was the first state to include SEL standards in 2004; Kansas and Pennsylvania followed in 2012 (Dusenbury, Weissberg, Goren, & Domitrovich, 2014). Many Canadian provinces include SEL goals in areas of personal and social development that are infused within curricular areas such as language arts, social studies, and physical and health education. Some provinces have explicit SEL skills limited to non-graded or overarching areas (e.g. learning skills, work habits; Alberta Education, 2012; Saskatchewan Ministry of Education, 2010).

Many applaud the positioning of SEL expectations within mandated, consistent curriculum. However, while teachers are expected to instruct and assess student performance in these areas, there is only modest attention being paid to the ways in which teachers might facilitate development of complex skills such as 'build healthy peer-to-peer relationships' or 'assess and reflect critically on their own strengths, needs, and interests' (Ontario Ministry of Education, 2010). Teachers may not have the skills, training, or resources available to teach and implement SEL curricula (Guyn Cooper Research Associates, 2013). And importantly and too often overlooked are the teachers' own social-emotional competencies which are central to these processes (Jones & Bouffard, 2012; Shapiro, Rechtschaffen, & de Sousa, 2016). Teaching students about, for example, relationship skills requires more than a theoretical explanation – it requires modelling and opportunities for practice in a safe and supportive environment. Jennings and Frank (2015) noted that many teachers are able to set the tone of the classroom by developing supportive and encouraging relationships with their students, designing lessons that build on students' strengths and abilities, reinforcing intrinsic rather than extrinsic motivation, coaching students through conflict situations, and encouraging cooperation among students.

Although approaches vary, teachers have an important role to play in terms of promoting mental health among students through the development of SEL skills. Ensuring that teachers and all school personnel have an understanding of the potential impact of SEL on the health of their students and the specific approaches that can facilitate SEL is a key step in ensuring school-wide promotion. As well, teachers require their own social-emotional competencies to be able to model, facilitate, and explicitly develop these within their classes.

Although SEL approaches focus on universal health promotion, the role of teachers as part of a more targeted approach to preventing mental health difficulties has also been explored. One area which has been the focus of attention for communities, educators, and researchers is that of bullying and peer victimization.

Bullying

Bullying is a serious and ubiquitous universal problem in schools and extends far beyond an occasional fight or disagreement between peers. Bullying is a subtype of aggressive behaviour that entails the repeated and intentional harm to a person who has less power than his or her aggressor(s). Dan Olweus (1993), a pioneering bullying researcher, identified these three key characteristics of bullying as follows:

(a) Bullying is an aggressive behaviour that involves unwanted, negative actions.
(b) Bullying involves a pattern of behaviour repeated over time.
(c) Bullying involves an imbalance of power or strength.

The power imbalance in bullying derives from many different sources. Physical attributes are an obvious source of power, and this includes physical size, sex, strength, and age. Less obvious, but nonetheless well-documented, sources

of power are derived from social and psychological attributes of the aggressor. Vaillancourt, Hymel, and McDougall (2003) studied these aspects of power in bullying relationships and reported that power can be derived from perceived wealth and socio-economic status, attractiveness, stylishness, popularity in the peer group, and perceived aggressiveness.

Craig and Pepler (2007) broadened this conceptualization by defining bullying as a 'relationship problem'. This perspective invites a more nuanced consideration of the social dynamics in bullying relationships beyond the circumscribed interactions that occur between the students involved in bullying. The bullying relationship evolves over time such that relationship roles (e.g. perpetrator, target, bystander, etc.; Salmivalli, 1999) become consolidated, and victimized children are increasingly powerless to defend themselves against the bullying. Chronically victimized children are drawn into a downward spiral of fear, despair, social isolation, and school avoidance. This relationship perspective provides perhaps the most convincing account of the long-term damage caused by bullying to target personal and social development (McDougall & Vaillancourt, 2015).

Craig and Pepler (2003) contended that the lessons children learn in bullying relationships generalize to other important relationships (e.g. friendships, romantic relationships), and recent research supports this claim. For example, Foshee et al. (2014) examined longitudinal links between bullying behaviour and later dating violence and found that perpetrating direct bullying (hitting, slapping, and teasing) in grade 6 predicted the perpetration of physical dating violence in grade 8. Consequently, interventions that curb bullying may also reduce other types of interpersonal aggression.

Research over several decades shows that bullying occurs at alarming rates among Canadian students. In a population-based Canadian study of approximately 17,000 students in grades 4–12, Vaillancourt et al. (2010) reported that 32% of students admitted to bullying others and 38% of students reported being bullied. These statistics are unfortunately consistent with other population-based studies. Craig, Lambe, and McIver (2016) reported bullying prevalence findings of the Health Behaviour of School-Aged Children (HBSC) survey administered to nearly 30,000 students across Canada. The HBSC is an international study examining the well-being and health behaviour of children and youth. It is conducted in collaboration with the World Health Organization. Results of the Canadian data indicated that 30% of youth respondents (age 10–16) reported being involved in bullying (in bully, victim, or bullying-victim roles) two to three times per month or more frequently. Rates of cyberbullying ranged across grades 6–10 from 11% to 19% for boys and 17% to 19% for girls, with higher rates among older students and among girls. The most recent American results from the HBSC indicated that 30.9% of children aged 10–16 were bullied at school and 14.8% were bullied electronically (Iannotti, 2013). In terms of bullying perpetration, 31.8% of students reported bullying others and 14.0% cyberbullied other students. Comparing the prevalence rates across 29 economically advanced countries, UNICEF (2013) ranked Italy as having the lowest peer victimization rates among 11-, 13-, and 15-year-olds. In this comparison, the United States had far lower prevalence rates than Canada (12th vs 21st out of 29).

Bullying and Mental Health Researchers examining the effects of bullying have documented a host of negative correlates and consequences among students involved in bullying and, in particular, among those who fall victim to their peers' abuse. Studies in which the concurrent relations between bullying and health outcomes have been examined have shown convincingly that children and youth who are bullied by peers, relative to non-victimized youth, report lower self-esteem and self-worth, greater loneliness and social withdrawal, more anxiety and depression, and more somatic complaints (e.g. headaches, stomachaches; McDougall & Vaillancourt, 2015). Moreover, children involved in bullying as perpetrators or targets also fare poorly in the academic realm. They are more likely than non-involved students to avoid school, to do poorly academi-

cally, and to drop out (McDougall & Vaillancourt, 2015). The subgroup of children who are involved in bullying both as targets and as perpetrators (sometimes called bully-victims) is at the highest risk for negative outcomes. Haynie et al. (2001) found that bully-victims evidence the highest levels of psychosocial difficulties relative to other groups (i.e. victims, bullies, non-involved) on measures of problem behaviour, depressive symptoms, self-control and social competence, and school functioning.

Questions about causality have long swirled around the issues of bullying and health indicators: Do children's early mental health problems lead them to involvement in bullying, or does involvement in bullying lead children to develop mental health problems? Evidence in the research literature indicates that both pathways are likely implicated (Arseneault, Bowes, & Shakoor, 2010), although there is stronger evidence for bullying leading to problematic outcomes than for a symptoms-driven pathway (i.e. poor mental health leading to being the target of bullying; McDougall & Vaillancourt, 2015).

Children who are chronically victimized in bullying relationships are typically not selected randomly but are vulnerable to bullying via a variety of individual risk factors. For example, studies show that children who display internalizing problems (e.g. depression, anxiety, social withdrawal) and children, particularly young children, who display aggressiveness are all at higher risk of later victimization in school than other children (Krygsman & Vaillancourt, 2017; Vaillancourt et al., 2013). Conversely, there are also compelling findings from longitudinal research that strongly suggest that the negative mental and physical health 'correlates' of bullying identified throughout the literature are actually caused by the bullying (Arseneault et al., 2006; Kim, Leventhal, Koh, Hubbard, & Boyce, 2006; Sourander, Helstela, Helenius, & Piha, 2000). These studies have documented that the consequences of bullying are above and beyond any health problems that predated the bullying experiences.

Because bullying is strongly linked to poor mental and physical health, lower academic achievement, and school adjustment problems, it is important that teachers and other school personal are aware of this link and are committed to prioritizing the reduction of bullying as a way of reducing this burden of illness and improving academic achievement. In Canada, most school boards have prioritized the reduction of bullying; however, teachers nevertheless report feeling ill-prepared for the task at hand (Blain-Arcaro, Smith, Cunningham, Vaillancourt, & Rimas, 2012; Mishna, Scarcello, Pepler, & Wiener, 2005). Moreover, although many teachers are sympathetic to the plight of peer-victimized students, research also shows that this 'sympathy [diminishes] with increasing length of service' (Boulton, 1997, p. 223). Finally, research suggests that teachers' adherence to bullying prevention programs tends to be poor (Dane & Schneider, 1998), perhaps because teachers are rarely involved in the development of these programs (Cunningham et al., 2009). As suggested by Cunningham and colleagues, program success in the reduction of bullying is likely enhanced when teachers' (and students') bullying prevention program preferences are considered (Cunningham et al. 2009; Cunningham, Vaillancourt, Cunningham, Chen, & Ratcliffe, 2011). Given that bullying has been identified as a significant cause of mental health issues, and that teachers report needing additional preparation to deal with bullying, this is an area that should be included in any mental health literacy program for educators.

Improving Mental Health Literacy of Educators

Educators have expressed a desire and a need to improve their mental health literacy. However, the type of training including curriculum and method of instruction that will be most effective in terms of developing teachers' mental health literacy has yet to be determined. One teacher preparation curriculum framework proposed by Weston, Anderson-Butcher, & Burke (2008), focused on pre- and in-service contexts, comprises six principles, each speaking to knowledge and skills in the areas of key policies and laws; learning sup-

ports that promote academics, development, and overall success; collection and use of relevant student data; effective communication and relationship building; engagement of multiple systems and people; and personal and professional growth. Underlying these principles are core values of a child-centred, family-driven culturally relevant and strengths-based approach, a collaborative partnership, and a 'whole child' perspective. Although many existing initiatives and programs focus on a subset of elements of this framework, few are as comprehensive as the framework proposed by Weston and her colleagues. As described previously, Ball et al. (2016) used Weston's framework as a benchmark for a scan of state in-service teaching standards and found that standards do reflect priorities around teachers' involvement in mental health, particularly in relation to the collection and use of data, engagement in cross-system collaboration and communication, and the provision of academic, social, emotional, and behavioural learning supports. Many aspects of Weston et al.'s model are reflected in the recent definitions of mental health literacy (Kutcher et al., 2016) – particularly a focus on developing positive mental health among students and on developing competencies for teachers' own mental health and self-care.

Much of the research that does exist exploring the development of mental health literacy among teachers comes from Jorm and his colleagues in Australia (Jorm et al., 1997; Jorm, 2000; Jorm, Christensen, & Griffiths, 2005; Jorm, Kitchener, Sawyer, Scales & Cvetkovski, 2010). They created a Youth Mental Health First Aid course, which instructs teachers on how to apply an action plan when faced with a student experiencing difficulties. Thousands of educators across Australia, the United States, Canada, and numerous other countries have completed the 14-h course. The course explores the four most common mental disorders (substance, mood, anxiety, and trauma and psychotic), as well as eating disorders and self-injury, and adopts a five-step model for entering into conversations with youth about mental health. Although outcomes of the youth MHFA course delivered to teachers have received limited research attention, Jorm et al. (2010) did explore the impact of the training on 176 middle-school teachers at 7 schools. As compared to the control group, significant increases were seen in teachers' knowledge of mental health issues, intentions towards helping students, and confidence in delivering programs. Improvements were seen in teacher beliefs and endorsement of items indicating stigma. The course, however, failed to show effects of the program on teachers' individual support towards students with mental health problems or on student mental health.

Other examples of teacher preparation in mental health literacy can be found within student-focused programs, as teachers are instructed in effective ways to deliver mental health-related curriculum to their classes and thus develop literacy as a result. One example of a well-researched curricular approach is referred to as *The Guide* (The Mental Health and High School Curriculum Guide) created by Dr. Stan Kutcher in collaboration with the Canadian Mental Health Association (2009). This initiative provides information for teachers as part of a program delivered to students within the regular Health and Physical Education curriculum. Teachers receive 1 day of training in order to implement the curriculum. Results to date indicate that teacher knowledge and attitudes improved significantly after taking part in training, and satisfaction with the training was very high (Kutcher, Wei, McLuckie, & Bullock, 2013; Wei, McLuckie, & Kutcher, 2012). An African version of *The Guide* has recently been evaluated with similar positive findings (Kutcher, Wei, & Morgan, 2015; Kutcher et al., 2017). In Ontario, the School Mental Health ASSIST (https://smh-assist.ca/) program is implemented across the province. ASSIST promotes student mental health and well-being by providing leadership, resources, and coaching support to educators via their mental health leadership team that consists of a mental health leader and superintendent for *every* Ontario school board.

Myriad other examples of efforts to improve mental health literacy exist in schools worldwide; few have received rigorous assessment and evaluation attention. The two examples provided, one

aimed at improvement of mental health literacy through discrete workshops (Y-MHFA; Jorm et al., 2010) and one including teacher preparation in a student-focused program (The Guide, Kutcher & The Canadian Mental Health Association, 2009), represent common approaches seen in practice (for other examples, see National Alliance on Mental Illness (NAMI), 2017). Given the proliferation of mental health programs and curricula aimed at promoting health and well-being and reducing harmful behaviour among students in schools, many of which are delivered by teachers and require some form and duration of preparation. However, Han and Weiss (2005) suggest that the provision of teacher preparation may not be sufficient over the long term, even with structural support. They suggest a combination of classroom practice and performance feedback in order to maintain the highest levels of fidelity.

Although most mental health literacy efforts have been focused on teachers already practising in classrooms, there are also a few related initiatives that exist in pre-service Bachelor of Education (B.Ed.) programs. This is a period of time when large numbers of future educators can be better informed about the potential mental health needs of their students along with exposure to approaches that they can take to identify and support their implementation. Previous research has demonstrated the potential that pre-service programs can have in shaping the beliefs, practices, and efficacy of candidates (Brownlee, Petriwskyja, Thorpea, Staceya, & Gibsona, 2011; Darling-Hammond, 2000; Hong & Lin, 2010; Stacey, Brownlee, Thorpe & Reeves, 2005). However, pre-service candidates have described a lack of effective preparation offered within programs (Curry & O'Brien, 2012; Koller et al., 2004; Weston et al., 2008). The curricular framework described by Weston et al. (2008) describes similar necessary competencies to be addressed by pre-service as well as in-service programs but fails to address the 'hows' of ensuring this preparation is achieved successfully.

With respect to pre-service preparation, the curricula of B.Ed. programs vary both within and across countries but typically comprise courses focused on specific subjects, pedagogical approaches, educational theory and policy, assessment and evaluation, and inclusive education. Mental health-related coursework is necessary that includes a focus on prevention, health promotion, inclusive practices, relationships, roles, systems, cultural considerations, and contexts and that provides candidates with opportunities to explore their own beliefs and practices. A study conducted by Rodger and her colleagues (2014) of teacher education programs across Canada explored whether and how mental health literacy was included in course work. Through conducting an environmental scan of 66 post-secondary institutions, researchers identified a total of 213 courses with content related to mental health, most of which focused on classroom management; comprehensive or holistic health; and the screening, assessment, and diagnosis of mental illnesses. Rodger et al. rated each course based on a four-point system by identifying certain elements within the course description: (a) the topic (mental health), (b) the practice (learning about supports, strategies, resources, practice, etc.), (c) relationships (learning about forming relationships as key to well-being), (d) the title (specific mention of mental health, stress, and/or well-being). Of the 213 courses reviewed, only two met all four criteria. Authors identified a need for an increase in the number of mental health course offerings, making these mandatory, adopting a more preventative and proactive approach to mental health, and working towards greater consistency in the ways in which mental health is conceptualized across the country.

A second recent review of 20 studies evaluating the effectiveness of pre-service teacher education to promote health and well-being in schools was conducted by Shepherd et al. (2016). Drawing upon findings of research conducted largely in the UK and Australia, the authors identified common elements of training programs, such as the provision of factual information about health and teaching skills that would enable teachers to promote health. The duration of training varied from 3 h to over two school terms with follow-up over 2–3 years, while on average the training took place within an academic year.

The format of training was also mixed, with lectures/seminars, group work, and opportunities to practise in schools. Significant improvements were noted in factual knowledge, teacher efficacy, and positive beliefs about their role, although evaluations typically focused on short-term change and most studies used uncontrolled designs with varied approaches and outcome measures. The authors recommended further, more rigours research in the area.

Recent initiatives at several universities (St. Francis Xavier University, 2017; University of Western Ontario, 2016) reflect a growing movement in this area, although most coursework is offered at the graduate or specialist level and focused on health education or counselling (Florida Atlantic University, 2017; Louisiana State University, 2017). Research and evaluation based on these initiatives are limited with a notable example focused on the University of Western Ontario course published in 2016 (Atkins & Rodger, 2016).

In identifying effective practices in preparing pre-service teachers, it is also important that a range of approaches to exploring mental health research, theory, and practice in the area of teacher education are carefully considered, rather than simply or solely continuing to add courses to already intensive programs. As is the case within elementary and secondary schools, siloed mental health programs that do not deeply influence candidates' beliefs, attitudes, and practice, across all areas of pedagogy, assessment, and classroom climate, are unlikely to have a significant or sustainable impact. In considering this issue, some researchers have advocated for the infusing of mental health literacy into existing subject courses such as Physical and Health Education (Loreman & Earle, 2007; Voltz, 2003; Woloshyn, Bennett, & Berrill, 2003). A focus on social-emotional learning and bullying is also being included within some mental health-focused and Physical and Health Education courses.

Social-Emotional Learning The importance of offering professional learning to teachers who are implementing SEL principles and programs in their classrooms has been highlighted throughout the literature (e.g. Han & Weiss, 2005; Payton et al., 2000): 'Arguably, teachers are *the* critical element in creating learning environments in which children's understandings and skills in this domain are advanced' (Fleming & Bay, 2004, p. 94). Roeser, Skinner, Beers, and Jennings (2012) describe the necessity of professional dispositions for effective teaching referred to as 'habits of mind' which includes being aware of and reflecting on one's experience in a non-judgemental manner, flexible problem solving, regulating emotion, and relating to others with empathy and compassion, in other words, demonstrating social-emotional competencies. Little research, however, has documented the mental health literacy of educators with respect to SEL in particular.

Ball et al.'s (2016) review of teaching standards in the United States revealed that of the six elements of Weston et al.'s (2008) teacher preparation curriculum framework, least attention is paid to teachers' own social and emotional development. Specifically, the personal and professional growth domain was addressed in 58% of the standards, mostly through the application of reflective practices to monitor affect, values, beliefs, self-perceptions, and assumptions. None focused on identifying and explaining the factors that lead to stress and burnout, which was the second element of personal and professional growth outlined by Weston et al., and only one addressed the third element, identification and application of coping strategies.

The research literature documents only a small number of intervention studies related to teacher social-emotional competencies. Most of these have been built around mindfulness practices and mindful teaching (Jennings, 2011; Jennings, Lantieri, & Roeser, 2011; Poulin, Mackenzie, Soloway, & Karayolas, 2008; Roeser et al., 2012; Soloway, 2011). Outcomes of the few studies that have explored the impact of mindfulness-based initiatives on teachers have reported improved levels of mindfulness and well-being, higher teaching efficacy, and greater competencies in maintaining supportive relationships with students. In general, however, teachers report that they have not received sufficient high-quality

professional learning related to their own social-emotional competencies and to SEL programming and that they need greater understanding and skills in this area in order to be able to support students effectively (Schonert-Reichl, Hanson-Peterson, & Hymel, 2015).

Opportunities for a focus on SEL may also arise within pre-service education programs. Fleming and Bay (2004) describe how a focus on social-emotional learning is congruent with the professional teacher preparation standards in place in many states in the United States and could certainly be included in teacher preparation programs. However, recent reviews conducted of Canadian training programs and of US state-level teacher education standards found that the promotion of the social-emotional competencies of teachers is given little emphasis and that very few pre-service teachers receive such training (Schonert-Reichl & Hymel, 2007; Schonert-Reichl et al., 2015).

Recent initiatives at the state level (e.g. California Commission on Teacher Credentialing, 2016; Massacheusetts Department of Elementary and Secondary Education, 2015), the university level (e.g. San Jose State University Collaborative for Reaching and Teaching the Whole Child, 2017; The University of British Columbia, 2017; University of Ottawa, 2017; University of Pittsburgh, 2016), and the school board level (e.g. Sunnyvale School District, 2017) have focused on the development of social-emotional competencies among teachers. As one example, three parallel initiatives in California reflect top-down and bottom-up approaches to improving teacher social-emotional competencies. The Teaching Performance Expectations for beginning teachers were updated to include the promotion of social-emotional growth using positive supports, restorative justice, and conflict resolution practices (California Commission of Teacher Credentialing, 2016). At San Jose State University, SEL and culturally responsive lens has been adopted as an overarching framework and is infused in every subject and in the daily practices of the teacher preparation program. For example, recognition of a negative mindset that existed among many candidates with respect to teaching mathematics was explored through a social-emotional perspective (Stoltzfus, 2017). At Sunnyvale School District, teacher preparation for social-emotional competencies consists of a teacher wellness program and professional development that includes teacher support groups and mindfulness exercises (2017). There are other examples from across the United States and Canada, but virtually no research on the effectiveness of these interventions on teaching efficacy and important student outcomes. Clearly, there is an urgent need for research to assess the efficacy of these interventions and to ensure that evidence-informed interventions are integrated into policy and daily practice in sustainable ways.

School-Based Interventions for Bullying

Alongside the current focus on SEL, efforts to prepare teachers to support student mental health by focusing on bullying prevention have been ongoing for many years. Given the well-documented findings that reveal the negative and long-lasting social and psychological consequences of involvement in bullying, school districts across Canada and around the world moved decisively in the past decade to devise and implement policy solutions intended to reduce bullying and mitigate the negative effects of bullying. PREVNet (Promoting Relationships and Eliminating Violence Network, 2017a; see www.prevnet.ca), a Canadian consortium of researchers and non-governmental organizations devoted to the cause of eliminating bullying, summarizes the legislation and policy in place in each province to address bullying. As of August 2013 (when their environmental scan for bullying policy and legislation ended), seven Canadian provinces (Alberta, Manitoba, Ontario, Québec, New Brunswick, Nova Scotia, Newfoundland) and one territory (Yukon) had enacted policies and/or legislation to address school bullying. As an example of this trend towards codifying in legislation remedies for bullying, the province of Ontario requires all schools to implement bullying prevention initiatives and requires educators to report serious incidents of bullying to parents of victimized children (Government of Ontario, 2009). In 2012, the province of Québec initiated a multipronged

strategy to address school bullying including the following elements: mobilization, communication, legislation, and action (Gouvernement du Québec, 2018). The legislation provides, among other things, a clear definition of bullying determined by a consultative process as well as requirements for bullying prevention programs and measures for intervening when bullying occurs. Additionally, there are mounting social pressures on school systems to address bullying, and these are evident in parental expectations about their children's safety at school as well as an increase in law suits against school authorities related to bullying in recent years (Findlay, 2011; McKiernan, 2010). For many reasons, Canadian schools are being compelled to take serious steps to address bullying problems.

Clearly, teachers are key stakeholders in all efforts to addressing bullying, given their proximity to children and to bullying incidents when they occur. Their roles are also critical to reducing bullying, since bullying involves complex power dynamics that often defy children's capacities to solve them. Children need adult guidance and coaching to help them navigate these difficult relationship problems, which is an important part of their social-emotional development in the school. PREVNet (2017b) defines bullying as a 'relationship problem that requires relationship solutions' and suggests that adults are in the best position to help children and youth:

> When children bully, they learn to use power and aggression to control and hurt others. The children who are being hurt become increasingly powerless and find themselves trapped in relationships in which they are being abused. . . . Adults must intervene and teach children how to connect with people respectfully, in positive, healthy ways. (p. 1)

As a consequence, teachers, as responsible adults involved in children's social lives, must assist children caught in these maladaptive relationships – both victimized children and those doing the bullying – to learn more prosocial ways of relating in order to mitigate the long-term damage to everyone involved in bullying.

Although there are many arguments for a teachers' role in helping children and youth involved in bullying, there are many indications in the research that teachers struggle to meet this challenge. Findings from a number of earlier studies reveal that teachers have difficulty identifying bullying when it occurs. Researchers in the UK surveyed teachers in 51 secondary schools in which bullying prevention and intervention programs had been implemented. They found that a significant minority of teachers still had impoverished understandings of the concept of bullying, despite their involvement with bullying prevention efforts in their schools (Naylor, Cowie, Cossin, Bettencourt, & Lemme, 2006). Findings from a US study indicated that educators are, on the whole, not skilled in distinguishing bullying from other forms of aggression that lack the insidious relational dynamics of bullying (Hazler, Miller, Carney, & Green, 2001). Additionally, educators in this study were more likely to identify conflicts as bullying, when there was physical aggression versus social aggression. In a Canadian qualitative study, Mishna et al. (2005) found that teachers' stereotypes about children who are victimized (i.e. that they are depressed and unassertive) interfered with their ability to identify victimized children who did not fit the stereotypes.

In addition to these challenges in identifying bullying, many teachers also struggle in responding to bullying in effective ways. Some of these challenges appear to stem from myths that still linger in the minds of some educators. For example, Yoon and Kerber (2003) found that teachers judged indirect relational bullying as less serious than direct physical bullying. As a consequence, teachers in the study proposed to intervene less frequently and to be more lenient with children who bullied using indirect relational strategies. Blain-Arcaro et al. (2012) studied teachers' motivations for intervening in bullying situations, and they found that teachers' decisions to intervene were most strongly motivated by the degree and nature of distress victimized children displayed when they were bullied. This implies that children who hide their distress during bullying – a common response of children with internalizing problems – may be much less likely to get help from adults at school. There were also remnants of the tenacious myth that victimized children somehow deserve what they get in the

finding that teachers were much less inclined to intervene in bullying if it appeared that the victimized child had aggravated the bullying child.

Some of these shortcomings in teachers' knowledge of bullying prevention and intervention are likely explained in part by shortcomings in training. Blain-Arcaro et al. (2012) revealed that only half of their sample of Ontario teachers had ever received specific training on bullying, and this in a province in which bullying prevention had been required in schools for several years. Not surprisingly, many teachers felt underprepared to deal with bullying incidents, and the large majority of teachers wanted additional training. Similarly, in a recent study of pre-service teachers at the end of coursework in a B.Ed. program, respondents reported that only half had formal instruction related to bullying (through a class or workshop), and 10% of respondents had any instruction in bullying prevention specifically (Ihnat, 2011). On the positive side, pre-service teachers in the treatment group of this study that received brief training specifically related to bullying prevention and intervention showed gains relative to the control group in the quality of their responses to a set of bullying scenarios. This suggests that teachers can benefit from structured learning opportunities related to bullying.

Help-Seeking for Bullying The impact of bullying experiences in adolescence can be profound and disruptive, and the consequences may extend into adulthood (Craig & McCuaig Edge, 2011; Patel, Flisher, Hetrick, & McGorry, 2007; Purcell et al., 2011; Rickwood et al., 2005; Santor, Short, & Ferguson, 2009). As such, there is an obvious need to provide timely and effective interventions for adolescents experiencing victimization, bullying, and resulting mental health difficulties. Regrettably, as highlighted earlier in the chapter, there is overwhelming evidence that very few adolescents independently seek out help for problems related to bullying or mental illness (Craig, Pepler, & Atlas, 2000; Eliot, Cornell, Gregory, & Fan, 2010; Leach & Rickwood, 2009).

Studies have shown repeatedly that children and youth are very reluctant to seek help from responsible adults for bullying that they either witness or endure themselves (Hunter, Boyle, & Warden, 2004). Trends in data across studies indicate that older students and boys are more reluctant than younger students and girls to seek help from adults when bullied. Furthermore, when young people do reach out to adults, teachers and school leaders are often the last people they will turn to for help. For example, Hunter et al. (2004) found that only 4% of their sample of youth (aged 9–14 years) that sought support from others for the bullying they endured spoke to school staff. Sulkowski et al. (2014) found that less than one third of students aged 11–19 years old told an adult at school about being victimized by peers. Finally, Hoff and Mitchell (2009) found that students were reluctant about telling school staff because they feared staff would not take their report seriously, would do nothing about it, or would disclose information that would make the bullying worse. Conversely, family members and friends are people that students who are bullied reach out to most frequently for help (28% and 27% of sample, respectively). Taken together, these findings suggest that educators and school staff should commit particular attention to creating a climate in schools that encourages youth to seek help. Educators, for their part, must take reports of bullying seriously and respond in ways that mitigates risks of physical and/or social reprisals on students who report, in addition to providing involved students the support and services they need.

Of further concern is that the adolescents most at risk of negative outcomes are the least likely to engage in help-seeking for mental health difficulties (Ciarrochi, Deane, Wilson, & Rickwood, 2002; Garland & Zigler, 1994). For instance, Dowling and Carey (2013) found that over three-quarters of bullying targets did not share their negative experience with anyone. Adolescents and youth with bullying involvement also have more negative attitudes towards help-seeking and lower help-seeking intentions than their peers (Leach & Rickwood, 2009) and have been found to have insufficient social support, which is a risk factor for the development of mental health problems if the adolescent is unable to engage in appropriate help-seeking (Sheffield, Fiorenza, &

Sofronoff, 2004). Moreover, the consequences of peer victimization, namely, increased feelings of depression and hopelessness, as well as social withdrawal and isolation, contribute to making help-seeking more difficult for victimized adolescents (Leach & Rickwood, 2009).

In order to address the disparity between mental health needs and service utilization, researchers have long studied the factors that contribute to translating help-seeking intentions into actual help-seeking behaviour. In general, help-seeking involves actively seeking out another person in order to 'obtain help in terms of understanding, advice, information, treatment, and general support in response to a problem or distressing experience' (Rickwood et al., 2005, p. 4). Research has consistently demonstrated that help-seeking for mental health difficulties and psychological problems is an adaptive coping behaviour that can serve as a protective factor for many adolescent outcomes, including personal distress and suicidal ideation (Rickwood et al., 2005; Wilson & Deane, 2001). The research findings also suggest that help-seeking behaviour relies on effective interpersonal communication skills and that pathways to mental health care can be strengthened by fostering better relationships between adolescents and adult help providers (Rickwood et al., 2005; Santor, Poulin, Leblanc, & Kusumakar, 2007).

There are several key factors that influence the likelihood of adolescents seeking help for mental health difficulties, including the strength of the relationship with the help giver, perceived trustworthiness and familiarity of the help giver, and confidentiality factors (Rickwood et al., 2005; Walcott & Music, 2012; Wilson & Deane, 2001). Most saliently, a strong positive relationship with a potential help giver who is supportive and encouraging and who makes the youth feel valued and heard is critical for appropriate help-seeking (Wilson & Deane, 2001). For this reason, many youth currently prefer seeking help from family and friends for personal and emotional problems (Rickwood et al., 2005; Sheffield et al., 2004), despite their lack of the professional skills required to provide the youth in need with competent services. Nevertheless, professional adults in regular contact with young people also have a key role in promoting mental health and early intervention with youth in distress. In fact, maintaining a healthy relationship with one caring adult is a crucial protective factor for at-risk youth (Sabol & Pianta, 2012). For many adolescents, a positive student-teacher relationship can address this need while also enhancing their academic and socio-emotional functioning (Sabol & Pianta, 2012).

Summary

In addressing the complex mental health needs of children and youth, many barriers have been identified and solutions proposed (Kirby & Keon, 2006; Mental Health America, 2016). As part of the increasing recognition of the importance of focusing on the education, as well as health-care settings, the key role of teachers in the prevention, identification, and intervention of mental health difficulties has been highlighted in research and policy (Atkins et al., 2010; Mental Health America, 2016; Power et al., 2008; Schonert-Reichl & Hymel, 2007). However, many teachers report being unprepared to support the mental health needs of students in their classes (Canadian Teachers' Federation, 2012; Koller et al., 2004).

The need for the development of mental health literacy among educators, including a focus on social-emotional learning and bullying, has been endorsed by those within and beyond school walls (Blain-Arcaro et al., 2012; Hazler et al., 2001). Ongoing professional learning for teachers and all school staff is clearly warranted. However, it is not sufficient to provide 'one-off' workshops to teachers with facts about mental illnesses and bullying and expect practices and student outcomes to change substantially in school systems. Although many teachers have received some kind of training, studies continue to document the lack of efficacy on the part of teachers with respect to mental health literacy both at the pre- and in-service levels. Children and youth continue to be reluctant to ask for help, particularly those with the most serious needs (Cotter et al., 2015; Hom, Stanley, & Joiner, 2015).

The many initiatives currently in place in school boards and districts across North America and beyond speak to the high priority that student mental health and well-being currently holds. Little is known, however, about the efficacy of these initiatives. It is important to include, within the many initiatives currently being developed and implemented, a focus on research exploring ways to effectively prepare teachers, both in pre- and in-service settings. This research can extend that which exists currently by adopting a longitudinal approach and capturing elements of teacher and school practices in addition to surveys of knowledge and beliefs.

The material covered within mental health literacy development approaches needs to reflect the gaps in understanding that is evidenced in the literature. For example, teachers continue to overlook relational bullying and focus interventions on more physical forms and are also less likely to act in cases where the victimized child appears to have aggravated the bullying child; this demonstrates a lack of understanding of the relational nature of bullying and the effective means of intervention (Blain-Arcaro et al., 2012; Yoon & Kerber, 2003). In fact with bullying, as with all aspects of promoting mental health and supporting students' mental health needs, the student-teacher relationship and a positive classroom climate is positioned as paramount – many current training programs do not focus on ways of developing these. Students are unlikely to ask for help or to respond to teachers' expressions of concern, if a safe, supportive relationship and atmosphere is not in place (Wilson & Deane, 2001).

In addition, while teachers may gain knowledge and understanding of mental health issues as a result of their participation in a particular program, how this impacts their future actions within the classroom has yet to be determined. Findings from previous research indicate that the perceptions that teachers hold regarding the nature of student difficulties have a significant impact on the steps they take to resolve these (e.g. Blain-Arcaro et al., 2012; Stanovich & Jordan, 1998). Teacher beliefs and perceptions regarding mental health issues need to be considered within any training program.

It is also important to consider the preferences of teachers when developing and implementing mental health literacy programs. Cunningham et al. (2009) describe the complex preferences of teachers regarding the types of bullying prevention programs they favoured. One finding that emerged from the study was that, regardless of their particular views of the types of programs that should be adopted, teachers tended to opt for programs supported by the anecdotal reports of colleagues rather than those based on scientific evidence. The notion of professional learning communities and the strong and persistent benefits of teacher collaboration and sharing emerges throughout the literature (Dufour, 2004; Joyce, Calhoun, & Hopkins, 1999). According to Fullan (2002), 'information, of which we have a glut, only becomes knowledge through a social process' (p. 18). In order for real changes in practice and culture to take place, educators need to engage in continuous learning by observing each other's practice, discussing and reflecting upon various approaches and strategies, and sharing with other schools engaging in similar processes (Dufour, Dufour, Eaker, & Many, 2006; Fullan, 2002).

Rodger et al. (2014) identified a need for mental health courses that adopt a more preventative and proactive approach to mental health. In fact, this is an area where teachers can and should have the greatest impact – in modelling and developing the social-emotional learning skills students can draw upon in order to develop into mentally healthy, resilient youth. For example, SEL aligns with the relationship focus necessary for students, parents, and teachers to prevent bullying and to intervene effectively in situations where bullying is present. Several recent innovative programs have focused on infusing SEL across courses, programs, and schools and on developing an aligned focus on SEL at multiple levels – including state policies, universities for teacher preparation, and school board practices and structures (California Commission on Teacher Credentialing, 2016; San Jose State University Collaborative for Reaching and Teaching the Whole Child, 2017; Sunnyvale School District, 2017). In developing approaches to improve mental health literacy, the inclusion of SEL theory and practice should be

considered at both the leadership and classroom levels; modelling, teaching, and infusing SEL in all aspects of school operations are key to systemic change, uptake, and sustainability. In addition, this focus must broaden to include an emphasis on the well-being of the teachers whose roles are ever broadening and changing. This includes approaches to self-care and engaging in restorative practices as for all professionals working in stress-filled environments but also includes the development of the social-emotional competencies that teachers require in order to be truly literate in mental health.

It is important to keep in mind throughout discussions on improving mental health literacy among teachers that teachers cannot solely be responsible for promoting positive mental health, decreasing stigma, spotting early signs of mental illness, and enhancing help-seeking efficacy. Teachers are ideally positioned as key players on teams brought together to support the mental health needs of students, along with parents, clinicians, administrators, and community organizations. Mental health literacy includes a focus on effective collaboration and understanding which situations are most appropriate for referral to external services. However, given the significant influence that educators have on the development of children and the numerous documented links between academic and psychosocial development, a sustained, research-based focus on effective ways of promoting mental health literacy among teachers will help children and youth become a healthier population.

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10 Qualities of Teacher Effectiveness in Delivering School-Based Mental Health Programs: The Relevance of Emotional Intelligence

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Abstract

The promotion of school-based mental health is essential to the emotional and behavioral well-being of students, and student well-being has been strongly linked to academic success and has now become a significant focus of the current research movement in education. This chapter draws on the evidence of emotional intelligence (EI) programs that have been shown to be an effective method of building psychological strength and the capacity for teachers to effectively meet the demands of the classroom. The focus of developing EI is to promote the skills needed by teachers to both prevent and manage stressful issues as they arise. EI is viewed as a practical and "well-packaged" way of dealing with stress by providing teachers with the personal tools required to support themselves in a career that is characterized with high emotional effort.

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The promotion of school-based mental health is essential to the emotional and behavioral well-being of students. Overall student well-being has been strongly linked to academic success and has now become a significant focus of the current research movement in education (Leschied, Flett, & Saklofske, 2013). Research on the *implementation* of various prevention and intervention programs with a focus on student mental health and well-being have included anti-bullying initiatives, exercise programs, and support groups, to name a few (e.g., Albayrak, Yıldız, & Erol, 2016; Grapin, Sulkowski, & Lazarus, 2016; Leff, Power, Costigan, & Manz, 2003; Li, Chen, Chen & Chen, 2017; Swearer, Espelage, & Napolitano, 2009). Recent professional development programs, for example, related to anti-violence and anti-bullying, provide teachers with specific instruction on curriculum changes and program initiatives. Yet relatively few of these programs consider the personal well-being of the teachers themselves in delivering these programs (Tang, Wong, & Cheng, 2016). However, teachers and all other educators and allied professionals – from principals to school psychologists – form the essential core of school-based mental health. They are responsible for the day-to-day education as well as social and emotional well-being of our students in schools. While students are often the primary focus of schools, it makes inherent sense that the psychological health and

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well-being of teachers also be a priority of our educational systems.

The critical role of teachers has not only been recognized throughout time but is an essential influence that is key to successful schools as well as to society (Corbett & Wilson, 2002; Darling-Hammond, 2017; Murphy, Delli, & Edwards, 2004). Teachers' influence on student outcomes is not solely restricted to student grades and academic learning but also extends to other critical areas of student well-being such as from social and emotional development to a child/youth's safety while they are at school (e.g., Jennings & Greenberg, 2009; Murphy et al., 2004; Yoon, 2002). The recent attention focused on teacher psychological health and well-being (Vesely, Saklofske, & Leschied, 2013) has further highlighted how it is related or even dependent on a wide range of diverse factors, including school administration and organization, classroom support, parent relationships, and student characteristics, among others (e.g., Chang, 2009; Howard & Johnson, 2004; Ransford, Greenberg, Domitrovich, Small, & Jacobson, 2009). Resources available to teachers are often not adequate to support the many demands of the "everyday" classroom. Nor are resources available to support the amount of emotional labor (emotional outputs required inside and outside of the classroom) that is part of the role that teachers assume (Hargreaves, 1998) as well as that is required to teach in a modern-day classroom with all of its expectations and challenges. Additionally, the multiplicity of demands raises the question of how teachers are prepared "psychologically" both during their preservice training and "on the job" to manage these challenges.

This chapter draws on the evidence of emotional intelligence (EI) programs that have been shown to be an effective method of building psychological strength and the capacity for teachers to effectively meet the demands of the classroom. The focus of developing EI is to promote the skills needed by teachers to both prevent and manage stressful issues as they arise. EI is viewed as a practical and "well-packaged" way of dealing with stress by providing teachers with the personal tools required to support themselves in a career that is characterized with high emotional effort.

EI programs with teachers have been shown empirically to "work" (e.g., Vesely, Saklofske, & Nordstokke, 2014). EI increases one's sense of well-being and personal resources that in turn, also reduce the negative effects of stress and improve positive teacher outcomes. EI programs are increasingly seen as a viable part of the professional and personal development of teachers. Though there is empirical evidence that well-designed programs can generate a wide range of relevant and positive outcomes (Vesely et al., 2014), the details and processes of how and why they are effective remains largely unknown. In order to develop and implement EI programs that achieve their intended objectives, an understanding of the components is required that identify their effectiveness, efficiency, and fidelity.

This chapter further provides suggestions for program implementation that align with previous research. Preliminary research conducted by the authors will be summarized which in turn leads to a variety of recommendations. Emphasis is placed on the need for further research to examine specific mechanisms so that details regarding how and why these programs work with teachers can be more fully understood. As well, avenues for future research will be discussed with an emphasis on psychological health and well-being coupled with prevention in educational settings.

Previous Success of EI Programs

Various EI and EI-related programs have been shown to improve outcomes for students, teachers, and the school system (e.g., Keefer, Parker & Saklofske, 2018; Lipnevich, Preckel, & Roberts, 2016; Vesely et al., 2013). More specifically, EI-specific programs have shown a dual effect in not only increasing EI and other positive outcomes but also decreasing perceived and felt stress and its negative effects. While the EI literature (see Qualter & Dacre Pool, 2018) spans many occupations (e.g., business, athletics) and focuses on particular groups (e.g., leaders) including school children and youth (Qualter

et al., 2017), our focus here is on teachers and an evaluation of one program that focused on enhancing the EI of preservice teachers.

Relevant Evidence

Our research (see Vesely et al., 2013, 2014) in enhancing EI has been targeted specifically at preservice teachers and is intended to complement their teaching skills and subject matter knowledge by adding a focus on their personal psychological health and well-being. Preliminary findings suggested that targeted teacher outcomes could be achieved following brief EI programs that were focused on stress reduction through increasing competencies in awareness, recognition, understanding, expression, and the management of emotions. Following three different clinical trials of a 5-week, 2 h per week EI program based on the GENOS EI model (see Gardner, Stough, & Hansen, 2008), preservice teachers showed improvements in self-reported EI over the program as measured with three different self-report questionnaires (Vesely-Maillefer, 2015; Vesely, Saklofske, & Nordstokke, 2017; Vesely et al., 2014). Results of phase one of the program also indicated that teacher efficacy and resilience mastery showed an increase following program completion (Vesely et al., 2014). Within phases two and three, involving changes to improve the program based on previous observations and feedback, results were even more promising reflected in the "success in life" outcomes measured. Student teacher reports on measures of life satisfaction, task-oriented coping, stress, and teacher efficacy all improved between preprogram and at the 1-month post-program follow-up. Results from a 6-month follow-up, but only for a small sample of the students in the last two cohorts, showed that EI and life success scores tended to drop only slightly from the post and 1 month retests (Vesely-Maillefer, 2015; Vesely et al., 2017). This is particularly encouraging even with the small sample size as no further offerings of the EI program were given to the students who continued to have both academic and practicum experiences.

This further corroborates previous research showing that higher EI may not only be effective in supporting positive outcomes in areas of psychological well-being but may also impact more "teacher-specific" domains such as classroom performance and teacher efficacy (Brackett, Palomera, Mojsa-Kaja, Reyes, & Salovey, 2010, Brackett, Rivers, & Salovey 2011; Gardner 2005; Gardner et al., 2008; Parker, Hogan, Eastabrook, Oke, & Wood, 2006; Poole & Saklofske, 2009; Slaski & Cartwright, 2003).

Future Direction for Research

The evidence gathered on the change scores resulting from these EI programs is promising and certainly suggests avenues for the promotion of social-emotional well-being including the prevention of burnout in teachers. However, the evidence from most studies is based on outcome results only, whereas the role of outcome research:

> In scientific evaluation may be to allow that it can be used in evaluation of relatively simple interventions to arrive at a determination of the worth of some past program or activity for accountability purposes. This will be achieved in terms of measurable outcomes achieved by the intervention in the particular context in which it was implemented. But to do so is not scientific in any usual meaning of the term. It does not advance our understanding of how the world works and how programs or interventions may be effective. (Hawkins, 2016, pp. 276–7)

If the implementation of these programs is to be effectively supported, it is critical to appreciate "what it takes" to achieve such positive outcomes. In other words, in order to *implement* what are relatively complex interventions, it is imperative to understand how and why the programs work in determining the transferable mechanisms for their implementation in different contexts and groups.

All programs are based on explicit or implicit *theories of change*, that is, on putative mechanisms or processes on how and why an intervention should cause the desired changes (Bishop & Vingilis, 2006; Government of Canada 2012;

Vingilis, 2011). Hawkins (2016) stated that "in the social sciences, we tend to be concerned with mechanisms operating through psychological agency and sociological structure" (p. 276). Outcome evaluations, to date, have failed to look at these processes despite the fact that positive outcomes have been achieved for EI programs involving a wide range of components or potential mechanisms. For example, programs utilizing a variety of time periods (e.g., 2 days to 12 weeks), based on different EI theoretical models, some with a different number of dimensions, and including different components in training (Mikolajczak, 2015; Vesely-Maillefer, 2015), have all shown an ability to produce increases in EI scores. Though there are some fundamental ingredients that will likely be "assumed as key" given they were part of the training in most programs (e.g., the majority of programs included a lecture-style teaching component of EI as well as an experiential component), an empirically validated program indicating what exactly should comprise these programs has yet to appear in the literature.

A *comprehensible* means of presenting the more specific information regarding possible program processes is to use a theory-driven approach to evaluation as these approaches can address the shortcomings of an outcomes-only evaluation method (Government of Canada, 2012). These theory-driven approaches focus on the influence of context on program results and on potential causal mechanisms (Government of Canada, 2012). For example, realist evaluation utilizes a context-mechanism-outcome formula that discusses how program resources and activities within programs work to promote outcomes through various underlying mechanisms (Pawson, 2006, 2013; Pawson, Greenhalgh, Harvey, & Walshe, 2005). The focus of evaluation is placed on the search of these processes by looking at both context and mechanisms in relation to the outcomes. Similarly, "theories of change evaluation" (e.g., Vingilis, 2011; Weiss, 1998) use the building blocks of logic models that present hypothesized mechanisms between program activities and outcomes with identified contexts. Astbury (2013, p. 386) offers a definition of context, mechanisms, and outcomes:

> *Context* refers to **salient conditions that are likely to enable or constrain the activation of program mechanisms.** In complex social systems there can be a range of interrelated layers of contextual differences that are likely to affect for whom and in what circumstances a particular program or intervention works (or fails to work) …
> *Mechanisms* describe what it is about a program that makes it work. They are not observable machinery of program activities, but the response that interaction with a program activity or resource triggers (or does not trigger) in the reasoning and behavior of participants. Thus, mechanisms are often hidden….
> *Outcomes* or outcome patterns are the anticipated and unanticipated consequences that are brought about by the interaction of different program mechanisms in different contexts

Thus, contextual factors can include person factors, such as individual characteristics and capacities, and relationships among participants and all other stakeholders but as well include situation factors, such as rules, norms, customs, social, economic, and cultural settings of the interventions (Pawson, 2013). Mechanisms reflect on the processes by which changes are hypothesized to occur.

The underlying importance of EI lies in the fact that whatever gains appear to be made, these must be evidence-based; that is, the changes must be linked to the effects and effectiveness of the program itself, whether direct or indirect, and not some chance or placebo effect. Hence, building on the existing evidence that EI can be developed through EI training, a significant focus of our EI teacher-focused research has been to explore the possible contexts and mechanisms through which such training can lead to increases in EI and thus positively impact a range of psychological outcomes. If implementation of school-based mental health is the goal, then it follows that understanding the theories of change on how and why a program is able to make a difference is essential to its effective realization.

A large part of the primary author's EI training research (Vesely-Maillefer, 2015) utilized samples of preservice teachers where the aim of the

comprehensive program evaluation was focused on the fidelity of program implementation and exploration of the potential processes by which changes in outcomes can occur; in other words, it focused on addressing the "how and why" of EI improvement. The second and third phases of the noted research followed standard program evaluation methodology, which included a process evaluation that utilized implementation and satisfaction measures as well as an outcome evaluation (e.g., Astbury & Leeuw, 2010; Friedman, 2001; Grembowski, 2001; Lipsy, 1993; Weiss, 1972, 1997). This allowed the authors to evaluate the impact of the program as a whole on various outcomes, while also ensuring that fidelity and integrity of the program were followed. A theory-driven evaluation was utilized such that the frequent mistake of the "black-box-design," namely, *assuming* program implementation without *documentation* of its delivery and content or the parts and mechanisms that comprise it (Astbury & Leeuw, 2010), could be avoided. If we measure outcomes without confirming precise execution of delivery, participation, as well as the understanding of program content, we would always have to question if nonsignificant findings actually reflect the program or merely indicate that the program has not been administered as intended (see Vesely-Maillefer, 2015 for more detail).

What We Know So Far

While the studies used for the program evaluation component were relatively small in the number of participants (Vesely-Maillefer, 2015) and thus limited any claims regarding causality, there were a number of patterns that emerged from the additional qualitative findings that contribute to understanding the components as potential mechanisms of the program that could be critical for future program development. In this evaluation, each component that was implemented within the program (e.g., homework worksheets, reflections, goal setting, practice, psychoeducation, etc.) was evaluated as a potential mechanism in order to assess whether it happened for each individual. As a result, we identified which components were provided as fidelity measures. Additionally, we identified which components were completed and, in many cases, to what extent and how much effort by each participant was needed to complete each section of the program as measured by the potential mechanisms that contributed to the outcome. Further, using coding common in qualitative research, we were able to examine the themes that emerged. This allowed for a better understanding of some of the participants' feelings and perceptions around various aspects of the program(s) and how these were considered helpful to the participants. Generally, components were grouped into two categories: (1) assessment of whether the **program** was delivering the activities as per objectives (fidelity [process evaluation]) and (2) assessment of what the **participants** were experiencing in the program (participation in program components, understanding, application of skills, and participant satisfaction [potential mechanisms]). To better understand which program components were assessed by what measure, see Table 10.1.

Table 10.1 Measures used in process and intermediate outcome evaluations and which components each measures

	Component being assessed				
Measures	Fidelity	Participation	Understanding	Application	Satisfaction
Session videotape	X				
Attendance	X	X			
Homework worksheets	X	X	X	X	
Goal setting	X	X		X	
Reflection paragraphs	X	X	X	X	
Practice logs	X	X		X	
Session feedback questionnaires	X		X	X	X
Final feedback questionnaires	X		X	X	X

Such an approach acknowledges the participants' experiences while they actively were engaged in the program, thereby providing further understanding of potential mechanisms that might underlie the measured effects. The EI programs described in this chapter and reported in more detail by Vesely-Maillefer (2015) were the first attempt at unpacking the contributions to EI. The evaluation specifically looked at a wide variety of potential "mechanisms," many of which included aspects of the program that involved participation in activities, such as home and group activities, that are utilized to generate participant reflections. For example, attendance at four or more out of five sessions was considered mandatory in order for individuals to be included in the analysis. Engagement in homework activities and participation in practice, for example, were considered salient parts of the program, of which numbers can be seen in Figs. 10.1 and 10.2. For the clarity of reading foregoing figures, participants in rounds 2 and 3 totaled 33 participants in the program group and 20 participants in the control group at time two of data collection (post-program).

Most forms of "mechanism," or in this case participation in activities, are considered necessary but not sufficient aspects that can lead to further processing (or various additional mechanisms) within participants, which can lead to positive program outcomes. The two noted components, homework and skill practice, appear to be invaluable components that are drivers toward progress in general improvement (see below for

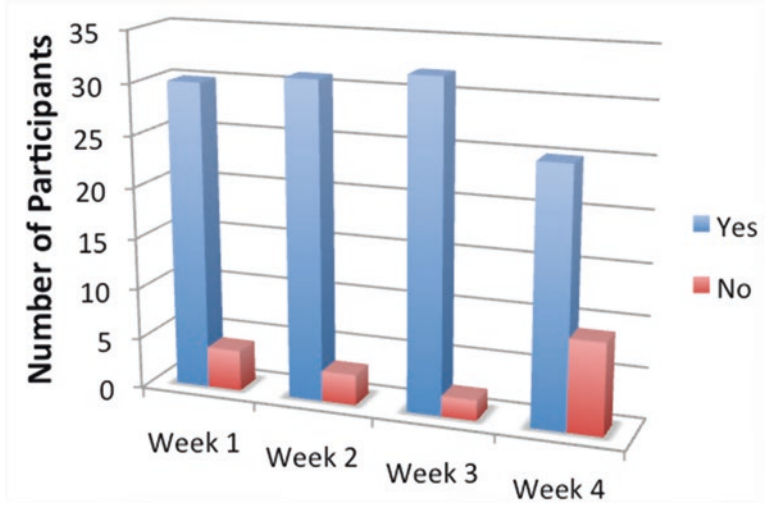

Fig. 10.1 Homework completion by week

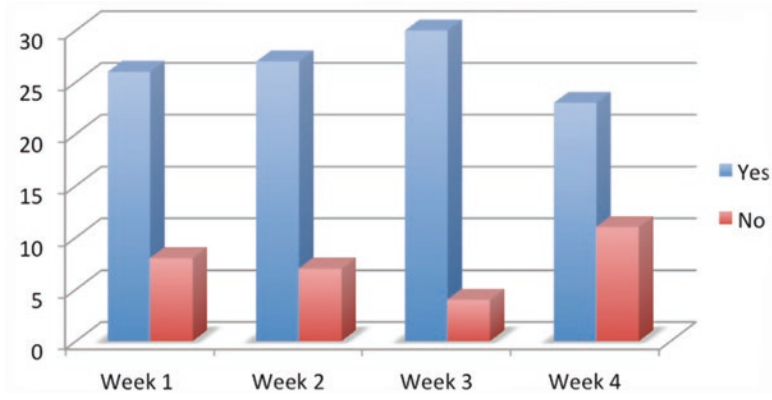

Fig. 10.2 Practice completion by week

further evidence). The patterns for all homework-related activities were similar, indicating that these either increased or remained the same for weeks one and three though some decreased slightly in the last week. Completion rate for homework assignments remained at almost three-quarters of the participants in the final week of the program. On a weekly basis, no less than 71% of the participants set goals (despite not following through), with no less than 68% completing their practice logs. Even for optional reflection paragraphs (part of homework activity), there was a minimum 62% completion rate (see Fig. 10.3 above). The number of skills practiced (e.g., deep breathing, body scan, etc.) by each individual ranged between 2.11 and 2.46 skills per week depending on the week; the number of times practiced ranged between 5.23 and 6.5 times per week; and the amount of time practiced ranged between 40.58 and 73.04 min per week, though with a large standard deviation (see Vesely-Maillefer, 2015). These data included the majority of (between 23 and 30 individuals out of the 34) participants.

Other aspects of participation not specifically detailed here, but considered a part of the program's "mechanisms," included goal setting that encouraged individuals to set (mostly skill practice) targets for themselves and then to note visibly whether they followed through. Participants were also asked to note the degree of effort they put into fostering higher levels of awareness. Overall, the majority of individuals participated in the workshop components (Vesely-Maillefer, 2015). Each part of "context" within the evaluation included other aspects that need to be noted such as personality, motivation, and other individual difference factors not specifically discussed here.

The means through which the evaluation attempted to assess possible mechanisms examined each participant's understanding and application of the material learned within the workshop (see Table 10.1) as well as the information from their reported satisfaction. This allowed for some identification of patterns through which observable activities may act as key ingredients, thereby contributing to the positive outcomes. As noted above, "mechanisms are often hidden…" (Astbury, 2013), and individual understanding of the material and acquisition of skills can be difficult to identify within such a complex program that has so many different components. Importantly, while all EI skills were covered via psychoeducation, participants were able to choose which skill to work on outside the sessions. Consequently, the understanding of each EI facet was not equally represented within the results, as each participant may not have worked on all seven skills. Feedback questionnaires did ask for comments on the significant learning that took place after each session reflecting participant understanding of the skills taught during that particular session. This feedback provided information by proxy in reflecting usefulness. All participants reported their learning to be at least neutral or above. The details of this analysis are

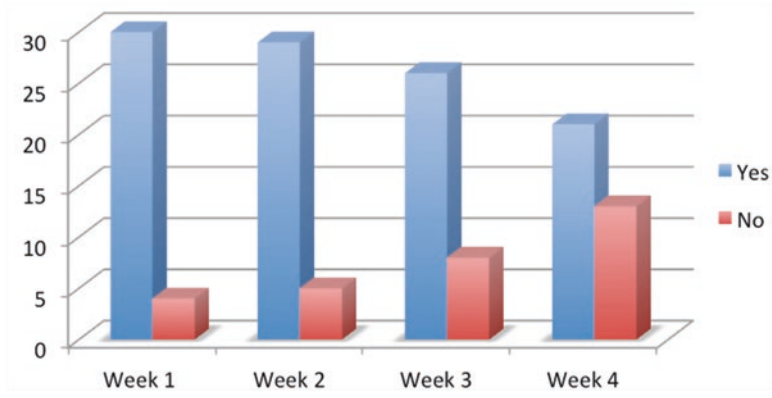

Fig. 10.3 Reflection completion by week

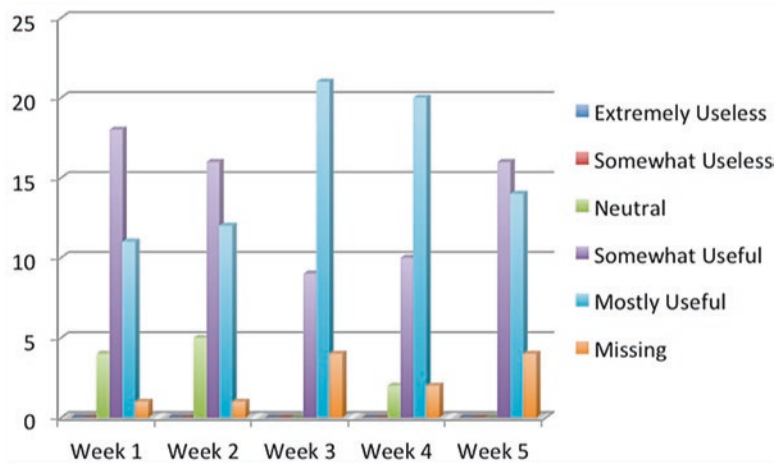

Fig. 10.4 Usefulness of sessions by week

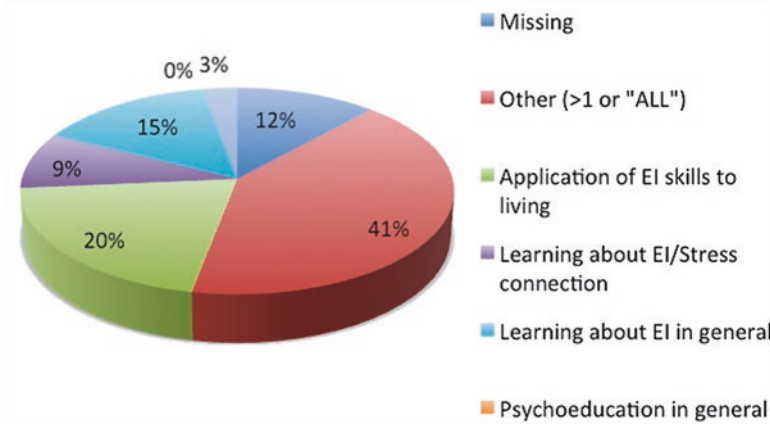

Fig. 10.5 Most useful topic (percentage)

provided in Fig. 10.4. Specific topics that aided participants are provided in Fig. 10.5. Participants were also able to reflect in words the most significant content that they had learned after each of the sessions individually by describing the main themes of the psychoeducation that was provided in each session (Vesely-Maillefer, 2015).

Asking individuals what they learned is also a direct way of assessing whether they understand the material (Vingilis, 2011). Results reflected that individual answers were linked to the main activity, strategy, or skill outlined in each session. Other means of measuring understanding through an analysis of participant homework sheets also indicated that the majority (87.1%) recognized with written examples how their personal pattern of EI results (individual scores from EI self-assessment) were linked to their experience of stress at university, work, and other areas of their life, independent of their negative or positive feelings toward these results. They were able to "recognize and explain" their strengths and limitations and needs for improvement.

As with the evaluation of content understanding, an assessment of the application of skills may also serve as a means of identifying possible mechanisms that can lead to program outcomes. Results from this aspect of the evaluation indicated an appreciation for how the information that was provided could be applied to everyday life, with 93.1% of the respondents stating they had already used at least one of the skills/information and 89.7% indicating that its current use was to a greater extent than before the program. Almost all of the participants provided examples of the skills that were used. Participants also recalled the skills

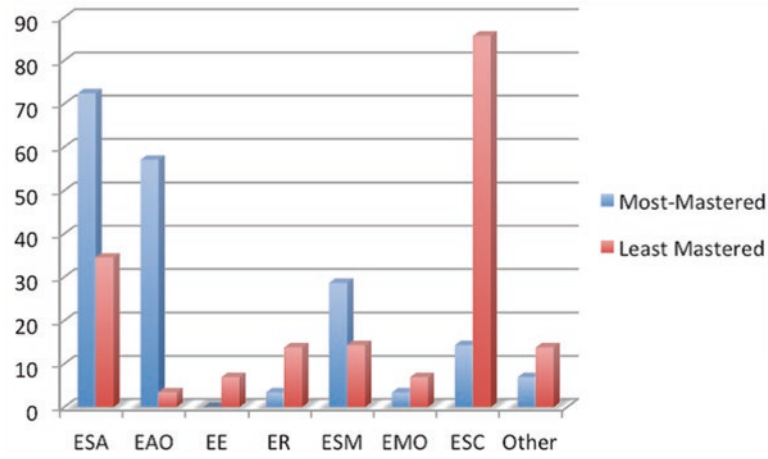

Fig. 10.6 Most- and least-mastered skill post-program

practiced throughout the program and indicated the EI skill they had mastered the most and the least (see Fig. 10.6). Goal setting, practice logs, and reflection paragraphs provided evidence of skills application through specification of the breakdown of skills practiced each week – each based on the skills taught and, for the most part, demonstrated in class. The vast majority of the participants practiced some form of skill(s) each week, indicating a general application of learning, another possible mechanism through which downstream changes could have occurred. Emotional self-awareness or emotional self-control/management included those skills that were most in evidence. Reflection paragraphs further identified the rehearsal of program material for those who did not specifically indicate that they had "practiced." Themes were generated in order to assess content and contemplation (see below). Further, participants' reflections often included reference to a range of EI skills, often discussing more than one of the seven skills each week. Individuals tended to focus more on self-focused EI skills than other-focused EI skills ("self-awareness" versus "management of others").

The question remains, how the data generated aids in the understanding of how each component is "likely to enable or constrain the activation of program mechanisms" (Astbury, 2013, p. 386). The combination of the surrounding reasoning as well as previous empirical data emerging from both educational and clinical literature reflects the possible mechanisms of change.

Self-Reflection as a Possible Mechanism

The results of the EI evaluation show an overwhelming self-reported connection between those who engage in various forms of *self-reflection* and both satisfaction with the program and the perception that the work engaged in has been useful and helpful (Vesely-Maillefer 2015). It follows that, in order to acquire new skills and change behavior, as well as in order to apply these skills, individuals must go beyond merely knowing and understanding certain concepts; they must additionally have an openness and willingness to reflect on their thoughts and behaviors. Themes and comments on homework exercises and reflections throughout the programs indicated that introspection based on the program content could serve as an explanatory mechanism. Participant comments were frequently linked to expressions surrounding the accuracy or expectations of individual results (e.g., how high their EI scores were compared to the average or assessment of how well they did on exercises they practiced at home). It would appear that most participants used a combination of positive and negative descriptors reflecting a range of self-reflection. Positive descriptions for those who did *worse* than expected included: room for improvement, the benefits of the course and receiving their EI profiles, alternative positive aspects of themselves, and normalizing their

scores in comparison to others. Negative descriptions included talking about the discrepancies or needing to improve (e.g., I am less skilled; need to gain more), expressing negative emotions (disappointment, confusion, embarrassment), and attempting to rationalize low scores with external blame (e.g., being anxious during the test). For those who believed their scores were *accurate*, positive descriptions included a focus on their abilities and behaviors (e.g., I am fairly strong; take care of self), positive feeling states (e.g., feel good), and congruence with feedback from others. Negative descriptions included describing not having certain abilities (e.g., hard for me), having negative internal states (e.g., harbor, fester), being hard on the self, and/or questioning the accuracy of the test. However, even for those who yielded negative comments, almost all of the participants (96.7%) were able to identify a "significant opportunity for development," with 53.3% specifically indicating that they would attempt to implement this into their everyday lives and over half specifying a positive outcome already having happened.

Looking more deeply at the patterns seen through written reflections, it is apparent that such reflection and introspection enhanced self-awareness and further understanding of the concepts related to the individuals' personal adaptive and maladaptive daily living. For instance, self-reflection was seen in the reference to individual goals for the week or the skills they were currently practicing, namely, through the frequency of "assessing their success" of a planned goal. Individuals also commonly spoke about "strategies that could aid success in improving goals" (23.1–42.9%; e.g., more practice, developing new strategies/goals/techniques, and thinking about thoughts and actions) as well as discussion of the notion of "growth and increasing mastery." Occasionally, "mention of difficulty" level arose in individual responses as a sign of introspection, and individuals also at times made reference to "personal issues" such as work/academic demands, time issues, problems concentrating, having too many goals/being too ambitious, personality problems, or in general finding it hard to change. Individuals often discussed the "rationale" behind picking specific goals and activities or explained why they did a certain activity and the majority mentioned the relevance of their "attitude toward goals," whether it was positive, neutral, or negative toward the material they were working on.

Theoretically and empirically, this notion that self-reflection is important for a shift toward positive outcomes is congruent with both the clinical and educational psychology literature (assuming that participation and engagement are present). For instance, various skills acquisition models such as those used to understand stress appraisal and acquisition of coping resources (e.g., Lazarus, 1993; Lazarus & Folkman, 1987), as well as cognitive behavioral theory from the clinical intervention literature have been identified (Bennett-Levy, Thwaites, Chaddock, & Davis, 2009; Dobson & Dobson, 2009; Dobson & Dozois, 2001). Following the trajectory from the model used within the Swinburne EI program, these theories indicate that skill development requires psychoeducation and an understanding of the information which generates self-awareness around personal behavior that can lead to behavioral change after the application of skills (see section on practice below). *More specifically, self-awareness and self-reflection are often spoken about as one of the primary mechanisms through which one creates change by understanding how skills and concepts apply to the individual and facilitating the pathway to skills application* (e.g., Kong, 2010; Shapiro, Schwartz, & Bonner, 1998). This is a familiar theme in the clinical psychology literature where self-reflective and insight-enhancing techniques are considered as part of the path toward behavior change for various mental health difficulties (Kristeller & Hallet, 1999; Shapiro et al. 1998; Teasdale, Segal, & Williams, 1995).

A particular example from the EI program can be seen through one of the program activities in which the participant is required to identify situations that elicit negative emotions and thus are likely to trigger poor emotional control ("recognizing triggers"; Gardner, 2005; Vesely-Maillefer, 2015). The activity taught in the emotional self-control module is intended to help create a

general sense of awareness in order to facilitate a plan for behavior change. Additional self-reflection activities were included in the present program to increase understanding of EI skills. These were included during both the teaching of the specific EI facet/skill "emotional self-awareness" and also through more general activities throughout the teaching of each of the seven EI skills. This prompted a general awareness of existing behaviors and opportunities for change and referenced the broad but active action of noticing and interpreting personal thoughts, feelings, and behaviors which are utilized to inform future thoughts, feelings, and behaviors (or performance). *It is now considered that self-reflection or "personalizing EI information" is a theoretically necessary part of EI skills acquisition and is a possible intermediary step between the understanding and the application of EI knowledge.*

Practice as a Possible Mechanism

As indicated in a variety of behavioral change theories, in order to achieve the ability to consistently apply a new skill, practice is required. Evidence within the program evaluation reflected an increase in general EI scores across time combined with verification that all participants engaged in some form of EI skills application. This further supports previous evidence that practice provides a pathway to a wide range of skill acquisition (Howells et al., 2005; Huppert & Johnson, 2010). For example, skills are characterized as being comprised of both declarative and procedural knowledge (e.g., Fiori, 2009). This implies that both the addition of new knowledge and its application in a new context are necessary to develop a new skill. Fiori (2009) refers to the transition from EI knowledge to applicable skill levels, as the top-down approach from the cognitive literature (e.g., Sun, Peterson, & Merrill, 1996) in emphasizing the strengthening process between declarative and procedural knowledge (i.e., understanding emotions before utilizing them within emotional competencies). The notion that one must apply the learning from each program component is also strongly reflected in the work on the trans-theoretical model of behavior change in psychotherapy where stages of change characterize various levels of motivation and commitment to change (Prochaska & DiClemente, 1984; Prochaska, & Norcross, 2006; Prochaska, Norcross, & DiClemente, 1994). There is also the further possibility of a bidirectional relationship between practice and self-reflection (see below).

There were a number of notable aspects regarding skill practice, the first relating again to the importance of introspection and the interconnection between self-reflection and practice. Namely, during the program, practice was necessary to achieve self-reflection in addition to the notion that individuals needed to self-reflect in order to be motivated to engage in practice. For example, examination of the reflection paragraphs revealed that most individuals relate the knowledge learned in the workshop to their personal experience and then utilize this information to inform other components such as goals and practice. In other words, they evaluated themselves and then used this understanding of their new learning to begin to apply the knowledge effectively. Further, "openness and willingness to introspect" went hand in hand in those individuals. Additionally, some of the participants who were not accepting of their EI profile results were still able to recognize and describe personal example(s) of how these negative aspects might be "true" and then planned a relevant goal/practice for the following week. This trajectory could work to the contrary in those who have a defensive attitude toward their results, thus lacking the self-reflective step and then refraining from skill practice (as they may believe they do not need it). Another example was reflected through participant satisfaction. For example, of 37% who specified homework, many noted that they understood the importance of it as part of the program or that they gained from doing it.

While a range of "contextual factors," for example, other individual differences such as previous learning or professional development (e.g., meditation to enhance emotional self-awareness), could influence the amount of

practice required for each individual, this could be partially linked to self-reflection. Specifically, engaging in more self-reflection might make the application of skills more effective since there is an awareness of its effectiveness at each stage. For example, if a teacher had a previous involvement in significant and meaningful therapy, he/she might have a higher level of insight into his/her behaviors and, thus, be able to make changes to his/her skill practice more quickly. Further, for some individuals, practice may be sufficient to achieve improved outcomes, whereas for others, more in-depth self-reflection and homework completion may be necessary in order to achieve sufficient outcomes.

Second, when looking at the actual skills practiced each week, though there was variability, there was a clear bias toward the practice of specific, more concrete skills that were demonstrated in class. Skills that were practiced most were categorized into either emotional self-awareness (ESA; mindfulness practice, mindfulness meditation/breathing, body scan, muscle relaxation) or emotional self-management (ESM; cognitive restructuring, exercise). Though these skills are taught under the umbrella of one EI facet, it is important to note that it could also be attributed to a different EI category depending on how it is applied (e.g., mindfulness for the purpose of emotional management or self-control; cognitive restructuring for the purpose of emotional reasoning). Regardless of their use, participants tended to practice those skills that were demonstrated and more concrete in nature.

Finally, the amount of practice required to achieve successful skill implementation may vary, although consistency and repetition seem to be highly relevant. Individual areas of focus tended to shift across the weeks to align with the EI facet taught in the preceding week. Though ESA and some ESM skills remained constant throughout all sessions, participants also tended to add new skills to their practice roster as they were taught in class, with practice time overall generally increasing each week. Across weeks, participant commitment to practice increased, reflected in an increase in discussions related to the success in meeting goals, statements of ways to improve success of their practiced activity, and level of skill mastery, as well as a decrease in discussion related to difficulty from weeks 1 to 4. Further, responses to individual EI profiles from earlier sessions (2) in the program indicated that participants might have been in earlier stages of EI skill acquisition reflected in the emerging themes of recognition of the need for practical improvement. Later weeks showed increasing percentages of themes on improvement, success, and mastery, in relation to skill practice of the week or within reflection paragraphs.

Although the amount of participation or practice required in order to gain the maximum educational benefit that the program offers remains unknown and the literature regarding the relationship between rates of learning and skills acquisition remains largely equivocal (Rosenbaum, Carlson, & Gilmore, 2001 for a review), theories of behavior change tend to emphasize practice as a necessary component of building a routine, especially in emotionally loaded situations (e.g., Hardeman, Griffin, Johnston, Kinmonth, & Wareham, 2000; Linehan, 2014). Other practice requirements may also depend on levels of self-reflection achieved as noted above. This would imply that in order to gain procedural knowledge or become skillful in an EI domain, one must practice, which requires both declarative general EI knowledge and personal introspection of one's own EI. The idea that one must build on declarative knowledge in addition to balancing practice and self-reflection further supports the notion that an "incubation period" prior to skills becoming effective may be required. This is compatible with observations from the EI program outcomes where stress reduction is merely seen 1 month after the program as opposed to immediately at program completion. It is also congruent with the continuing increase of Genos EI and sense of mastery (resilience) between pre-, post-, and 1-month follow-up. In support of this finding, many forms of psychotherapy indicate the importance of repetition and the practice and use of the acquired skill in order for that skill to become more readily available to the individual, as well as when used,

more effective (Kabat-Zinn, 2003; Koerner, 2012; Laireiter, & Willutzki, 2003; Linehan, 2014). For example, when learning mindfulness as a means of preventing an emotional outburst due to anger, the individual is encouraged to practice this skill when emotionally neutral and to do so consistently. The idea is that if one is required to call upon such a skill when emotional, it is much more likely to be helpful if the individual's body and mind have performed it many times before. When asked to "just take deep breaths and calm oneself on demand" without having done so in the past, the individual is much less likely to be able (or even willing) to do so in a moment of anger. Thus, it is believed that increased practice (the amount is subject to context and individual differences in various domains) will *be more effective at increasing the efficacy of skill application*.

Self-Efficacy as a Possible Mechanism

Other theories of behavior change and social cognition such as theories of planned behavior (TPB; Ajzen, 1991) and self-efficacy (Bandura, 1986) also help to support some of the results that emerged from participant responses. Numerous themes arose in which individuals spoke about their increased sense of mastery or ability to engage in new skills more effectively. These theories emphasize a strong link between beliefs and behaviors by noting that behavioral attitudes, subjective norms, and perceived behavioral control influence their behavioral intentions and thus their actions. Further, the argument using self-efficacy is that by increasing knowledge about EI-related skills, teachers' confidence in using such skills one would improve, which may lead to higher perceived self-efficacy in teaching.

The program itself was specifically aimed at assessing perceived self-efficacy of EI. The notion that self-reported EI increases underlines the improvement of this outcome. The delayed decrease in self-perceived stress in addition to the increase in teacher efficacy follows this similar pattern. It is likely that self-efficacy is reinforced similarly and potentially bidirectionally by other mechanisms such as practice and self-reflection. As self-efficacy is a strong predictor of behavior, the more effective teachers feel at managing stress, the more they will be able to do so in practice. Perceived efficacy of a variety of skills can have an influence on performance, behavior, and other outcomes; this perceived efficacy has shown to yield behavior changes in various contexts that can be measured using more objective measures such as performance measures and "other" reports (e.g., Keefer, 2015). For example, individuals who believe they are competent to regulate their own emotions have shown to be better socially and emotionally adjusted than those who feel less confident in their aptitude to do so (Alessandri, Vecchione, & Caprara, 2015).

General Comment

It is important to state that no mechanism is likely to act in isolation in order to produce outcomes. Though we are speaking here about individual mechanisms of change as seen through discussion around their possible interrelationships (e.g., self-reflection and practice), mechanisms are likely to be intertwined with each another. This is likely to be in the form of "cascading" mechanisms, which could be described within a series of if-then statements. For example, more straightforward mechanisms, such as "*if* individuals participate in the program activities, *then* they will understand the material, *if* they understand the material, *then* they will apply it in their daily lives, etc." Further, cascading mechanisms may be bidirectional as in self-reflection and practice, namely, "*if* individuals self-reflect, *then* they will engage in practice and *if* individuals practice, *then* they will reflect further leading to more effective practice", to give a few examples relevant to above discussion. As in many of the behavior change theories and psychotherapies discussed (e.g., stages of change, CBT, DBT), mechanisms within such programs are likely working through a series of feedback loops, which temporally increase in progression overall, but may sometimes retreat and move forward simultaneously.

What Still Needs to Be Done

The focus of understanding the possible mechanisms of change in EI programs is to highlight the necessity of understanding the critical ingredients – the how and why something works – when implementing programs aimed at improving a specific range of outcomes. The work cited in this chapter provides examples of likely mechanisms of change in EI learning with preservice teachers, findings which largely coincide with previous educational and clinical/psychological literatures on skills learning. However, in the current context, emphasis is on continuous evaluation of the efficacy and effectiveness of program components in order to ensure evidence-based science, program fidelity, as well as the fostering of greater understanding of the mechanisms which lead to specific outcomes and which of those are necessary and fundamental. The next steps involve implementing evaluation criteria for EI learning with educators in programs considered evidence-based and asking those who provide the implementation to follow through on assessing these criteria. Possible mechanisms must then be empirically tested and verified in relation to the outcomes that are presented in order to gain a detailed view of causal pathways. This could be done through a range of experimental, cross-sectional, and longitudinal studies utilizing advanced multilevel modeling to examine pathways, mediators, and moderators. As discussed, skill acquisition is complex and often dependent on context (Zeidner, Matthews, & Roberts, 2008, 2012). Each of the possible pathways discussed here, though salient in this research, likely works in combination with other mechanisms of change, such as willingness (Linehan, 2014; Linehan, Bohus, & Lynch, 2007) and motivation (Millet, & Rollnick, 1991) as well as others not described. The following section discusses, as drawn from the current evidence, what the necessary and sufficient components are to be included in EI program implementation.

The Importance of a Preventative Approach to Teacher Stress and Burnout

Though it remains unclear which EI program components are responsible in leading to which particular outcomes, many of the patterns discussed above provide a basis in both theory and evidence regarding which components overall yield positive outcomes. While researchers continue to investigate the necessary components of such programs for specific populations, for example, which aspects of EI might be more fundamental than others in leading to positive outcomes, implementation of EI programs for teachers remains a strong, viable option for decreasing teacher stress and preventing burnout. This builds on the notion and research support that EI can be improved through training (e.g., Vesely et al., 2014). In addition, the evidence reflects that the majority of participants reported motivation, openness, or neutrality at the very least in response to their EI profiles and expressed their understanding of the material each week. There was also evidence that a considerable amount of introspection, practice, and increased self-efficacy gives administrative reasons to integrate these aspects into EI training for teachers.

Emotional self-awareness came through as a salient component throughout the full program, consistently being practiced as a homework activity. The importance of emotional self-awareness was also seen through the link between practice and self-reflection. Further, it would be ideal to match and emphasize the specific EI components to the specific population and their particular difficulties. For instance, in a program aimed at reducing migraine pain, particular aspects or facets of EI were shown to be either more or less contributors to the outcome (Mikolaczjak, 2017). The same would apply for directing particular aspects of EI programs for teachers toward specific difficulties experienced by this population, such as those that address high emotional labor and burnout. Additionally,

several themes from the satisfaction survey results indicated what individuals liked most from the program. This included practicing and learning skills, participating with others, self-reflection, learning from others, the particular lecturer, group discussion, and normalization of feelings and experiences. Each of these program aspects should be taken into consideration when putting into place a program for the purpose of professional development.

In terms of prevention, EI programs, which include these key aspects and commit to continuous evaluation of its components, can become integrated into professional development for both preservice and in-service teachers. Extensive research on skill continuation and promotion of continuing education have identified the need for continuous integration of professional development in order for it to be effective (Tang et al., 2016). Looking specifically at the current EI program, while most of these preservice teachers participated in, understood the components of, and engaged in application of skills from the program, there were also a number of "non-completers" of the program. We need to develop strategies in learning how to engage the non-completers. In this study, 33% of the participants did not complete homework activities for some weeks; for other weeks, this was less than 5%. This fact highlights the difficulty of homework compliance (Tomkins, 2002), that is commonly seen in group programs. This result suggests the need to supervise certain individuals closely and provide support through checks and balances, a fact that is becoming a focus in clinical practice (Ionita & Fitzpatrick, 2014) and is seen as a viable solution, especially in those cases where participants are stressed. For example, inconsistent practice included a failure to fill out practice logs, reflecting on skills without practicing concretely, reduction in motivation by the last week, and large workload preventing practice. In these cases, higher levels of monitoring could endorse stronger external motivation for completion of program activities, aiding compliance, preventing dropout, and encouraging continuous practice.

Following from this, and from the more general teacher education literature, integrating such programs into teacher education would require the implementation, *not* of a one-day event or one-time attendance of the program, but a more continuous approach in order to be effective. Often single days of professional development can be rated highly by teacher participants but tend to have a short-term impact on behavior and general implementation of new skills and/or policies (Kutcher, 2013). These PD requirements are often put into staff requirements (such as teaching staff about student mental health), but these types of one-time requirements have been discounted as being effective. In order for programs in EI to be effective, more long-term practice that is integrated over time is essential. For example, an initial 5-day over a 5-week program, which is then followed up by bi-annual booster sessions for all who have completed the program, may be necessary for learning to be well integrated into a teacher's pedagogical orientation. Further, we encourage that this type of program, as it is aimed at teacher stress and burnout prevention, be implemented with preservice teachers and become a systemic part of the teacher training program that could then carry through into the actual school environment.

The preservice teacher orientation to the profession is a critical period of learning and growth (Darling-Hammond, 2000). In this way, teachers are able to gather the necessary building blocks to sustain their physical and psychological well-being from the beginning of their careers and have resources in order to improve these as the emotional labor – and emotionally *POSITIVE* aspects – of their job impact them in different ways. Preservice teachers represent the next generation of educators, and it is imperative in promoting their personal adjustment and coping ability within the demands of the profession.

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11 Educational Leaders and Supporting the Mental Health of Students and Staff: Limited Research but Promising Practices in Preparing School Principals

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Abstract

This chapter provides an overview of what the job of being a school principal now entails, as well as the rationale for seeing the school system as a critical institutional setting for addressing mental health problems in youth. The success of school-based mental health programs, like the success of most critical features of modern schools, is ultimately linked with successful school leadership. This chapter reviews one of the most important sets of skills connected to successful school leadership—emotional and social competencies. With attention to best-practice issues in the professional development of school leaders, this chapter also reports on some novel work demonstrating that a variety of emotional and social competencies can be successfully developed in school leaders. This work suggests that enhancing the emotional and social competency of school leaders could be readily incorporated into existing school leadership preparation programs. Thus, it is reasonable and sustainable to have our school system take on a greater role in preventing and addressing mental health issues.

The job of being a school leader in a developed country is now one of the most demanding imaginable. For several decades now, school principals in countries like Canada and the United States are expected to constantly improve student academic performance, as measured by various data-based metrics, while at the same time accepting ultimate responsibility for their schools' performance (West, Peck, & Reitzug, 2010). Along with these high-stake responsibilities comes a job that involves a constant barrage of interpersonal challenges. Whether resolving conflict between children, negotiating with an unhappy parent, motivating a burnt-out teacher, or lobbying a reluctant school board trustee, the successful school leader must possess a great variety of cognitive, social, and emotional competencies (Pollock, Wang, & Hauseman, 2015). Against the widely noted observation that the job of school principal is probably already too vast for a single individual (Copland, 2001) comes a new initiative advocating schools as a critical first line of defense in the prevention and intervention of mental health problems in children and youth

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(Stephan, Weist, Kataoka, Adelsheim, & Mills, 2007).

This chapter provides an overview of what the job of being a school principal now entails, as well as the rationale for seeing the school system as a critical institutional setting for addressing mental health problems in youth. The success of school-based mental health programs, like the success of most critical features of modern schools, is ultimately linked with successful school leadership. This chapter reviews one of the most important sets of skills connected to successful school leadership—emotional and social competencies. With attention to best-practice issues in the professional development of school leaders, this chapter also reports on some novel work demonstrating that a variety of emotional and social competencies can be successfully developed in school leaders. This work suggests that enhancing the emotional and social competency of school leaders could be readily incorporated into existing school leadership preparation programs. Thus, it is reasonable and sustainable to have our school system take on a greater role in preventing and addressing mental health issues.

The Twenty-First Century School Principal

There are now about 150,000 elementary and secondary schools in Canada and the United States (Goldring & Taie, 2014; Statistics Canada, 2011), and each of these institutions is managed by a school principal. As occupations go, the job of the twenty-first-century principal has evolved to become one of the more complex and diverse imaginable (Bredeson, 2016; Copland, 2001; Grubb & Flessa, 2006). With budgets that would rival those of large companies (like those for a large urban high school), the "official" school leader is now responsible for a bewildering array of jobs and tasks (Pollock et al., 2015; West et al., 2010). Along with the physical functioning of the school building, the modern principal is responsible for core aspects of student learning as well as "promoting a positive school climate, maintaining a vision for the school, supporting instructional and school staff, strengthening collaborative capacity and leadership within the school, fostering partnerships between the school, students, families, and other community partners, and serving as a linkage agent between the school and the district" (Iachini, Pitner, Morgan, & Rhodes, 2015, p. 40). With a job description like this, it is not surprising that a literature has begun to appear on the concept of the "superprincipal" (Copland, 2001; Peck, Reitzug, & West, 2013).

With the trend over the last few decades of adding more responsibilities to the principal's portfolio comes considerable empirical evidence that these school leaders have critical effects on a great variety of outcomes (Goddard & Miller, 2010; Leithwood, Sun, & Pollock, 2017; Sinnema, Ludlow, & Robinson, 2016; Sun & Leithwood, 2015). Although a principal's influence is mostly indirect, Sun and Leithwood (2015) suggest that this influence is via four interconnected pathways: "teachers' instructional practices are found on the Rational Path; teacher trust in others is included on the Emotional Path; collaborative structures are located on the Organizational Path; and the Family path includes, among other variables, parents' expectations for their child's success at school" (Sun & Leithwood, 2015, p. 567). Thus, the principal can make a substantial difference to the quality of teaching in the school (with subsequent benefits in student achievement). By improving the working conditions of the teaching and nonteaching staff, the principal also plays a key role in improving the environment of the school and even the external community linked with the specific school (Cruickshank, 2017).

One of the key aspects of the school environment—an issue now perceived by many school leaders as one of the most important (Adams, Adams, Olsen, & Olsen, 2017; Frabutt & Speech, 2012)—is the mental health of the students attending their schools. As the proportion of children with special needs continues to increase in schools, along with children with various emotional and behavioral problems, schools become an important physical space for prevention and intervention (Rothi, Leavey, & Best, 2008;

Soleimanpour, Geierstanger, Kaller, McCarter, & Brindis, 2010; Stephan et al., 2007). Increasingly, schools are expected to provide interventions and/or accommodations for students who have various learning-related problems, as well as students with a variety of mental health problems (Zigmond, Kloo, & Volonino, 2009). Early identification of children with various behavioral and emotional symptoms, via mental health screening at school, represents a unique contribution schools can make in helping to reduce or prevent mental health problems (Frauenholtz, Mendenhall, & Moon, 2017; Humphrey & Wigelsworth, 2016; Kuo, Stoep, McCauley, & Kernic, 2009; Stephan, Weist et al., 2007).

The mental health of teaching and nonteaching staff is another critical part of the school environment (Gray, Wilcox, & Nordstokke, 2017). Not surprising, given the rising number of school-aged children with various mental health problems, a number of studies in developed countries have found that teachers are at elevated risk for common mental problems (Johnson et al., 2005; Stansfeld, Rasul, Head, & Singleton, 2011; Whitaker, Becker, Herman, & Gooze, 2013). Along with the obvious health implications for workers in the teaching profession, an elevated risk has important implications for overall student learning and achievement (Ferguson, Frost, & Hall, 2012).

There is evidence from a number of perspectives that principals play a key role in the mental health of the students and staff in their schools (Adams et al., 2017; Frabutt & Speech, 2012). The effectiveness of mental health prevention and intervention activities in their schools has been directly linked to the role played by the principal (Anyon, Nicotera, & Veeh, 2016; Gofredson & Gofredson, 2002). There is now a substantive literature documenting that students' social, emotional, and academic development is connected to the principals' knowledge of mental health disorders, and the context in health and wellness can be fostered and promoted (Bencivenga & Elias, 2003). Perceived school climate, one of the most import factors in the mental health status of school staff, is strongly linked to the school's leadership competencies (McLean, Abry, Taylor, Jimenez, & Granger, 2017). Summarizing a variety of studies, Sun and Leithwood (2015) note that "principals establish respect and personal regard by recognizing and acknowledging the vulnerabilities of their staff. They build trusting relationships with teachers by listening to their needs and assisting as much as possible to reconcile those needs with a clear vision for the school. Collegial leadership practices (e.g., being friendly, supportive, and open) demonstrate trust in teachers' decision-making abilities and provide support and constructive criticism to teachers" (p. 568). The core features of these important leadership qualities overlap substantially with individuals who have superior emotional and social competencies—a connection not lost on researchers looking to identify the most critical competencies for successful school leadership (Berkovich & Eyal, 2015; Moore, 2009; Roffey, 2007; Schmidt, 2010).

The trend in highlighting the importance of emotional and social competencies is part of a broader interest in the school leadership literature over the past two decades on emotional intelligence (EI). Salovey and Mayer (1990) introduced the EI construct as three broad and interrelated abilities: (1) the appraisal and expression of emotion, (2) the regulation of emotion, and (3) the utilization of emotion to motivate and plan. Since this initial model, other researchers have introduced an even broader array of competencies and subjective self-perceptions related to the understanding, expression, utilization, and management of emotions (Bar-On & Parker, 2000; Mayer, Roberts, & Barsade, 2008; Salovey & Mayer, 1990). All EI theories and models implicitly link the skill and self-efficacy in dealing with emotions (one's own and others') with positive problem-solving and psychosocial adaptation (Parker, 2005).

Why Should EI Predict Successful School Leadership?

Individuals with high levels of EI have been found to experience less stress in their lives, are more satisfied with the quality of their

interpersonal relationships, experience fewer mental and physical health problems, and experience higher occupational attainment (Malouff, Schutte, & Thorsteinsson, 2014; Martins, Ramalho, & Morin, 2010; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011). Before examining the empirical link between EI and successful school leadership, it is important to be able to explicitly account for this relationship. "The failure to sufficiently elaborate theoretical links of EI with various life outcomes in line with the complexity of the construct may not only obfuscate the true nature of the construct but also complicate empirical research efforts" (Perera, 2016. p. 231). Based on conceptual models in the literature (e.g., Corcoran & Slavin, 2016; Perera, 2016), several explanations can be put forward for the empirical link found in the literature between EI and successful leadership.

Motivational Factors A key finding in the EI area is that individuals who score high on measures of this construct are typically more optimistic than individuals who score low (e.g., Bar-On, 2000; Petrides & Furnham, 2001). Several meta-analytic studies present compelling cross-cultural evidence that EI is positively related to optimism (Sánchez-Álvarez, Extremera, & Fernández-Berrocal, 2016; Schutte, Malouff, Thorsteinsson, & Bhullar, 2007). Zeidner, Matthews, and Roberts (2012) have noted that being predisposed to optimism has a critical motivating capacity; the ability to remain positive, despite perceived setbacks and uncertainty, predicts a number of work-related outcomes. Successful leaders may be better able to stay engaged with their priorities and tasks because, at any one point in time, they have more positive beliefs about the future. In addition to helping the principal stay on track in a highly demanding job, habitual displays of positive mood are known to improve group performance and promote prosocial behaviors in subordinates (George & Brief, 1992; Sy, Côté, & Saavedra, 2005)—key factors in the overall wellness of groups and organizations (Vardi & Wiener, 1996).

Cognitive Factors A sizeable literature has emerged examining the links between EI and various cognitive skills (Hogeveen, Salvi, & Grafman, 2016). EI-related competencies have been linked with cognitive processes such as problem-solving and decision-making (Day & Carroll, 2004; Jordan & Troth, 2004; Reis et al., 2007). EI would appear to boost the capacity to learn and solve problems (Checa & Fernández-Berrocal, 2015), as well as promote more effective decision-making under stress (Fallon et al., 2014). The ability to stay focused and use attention in the service of a job that involves a countless array of daily stressors would serve the successful school leader well. For principals with lower levels of EI, the negative affect associated with ongoing stressors would constantly get them "off track" and promote distracting or unproductive behaviors.

Interpersonal Factors As Parker, Taylor, Keefer, and Summerfeldt (in press) have noted, one of the characteristics shared by virtually all EI models is a cluster of critical interpersonal abilities: "recognizing, understanding, and appreciating how other people feel; being able to articulate an understanding of another person's perspective and behaving in a way that respects the other person's feelings; and skill in developing and maintaining mutually satisfying relationships" (p. 3). The quality of satisfying relationships is strongly linked to the ability to identify emotions, as well as the ability to understand and appreciate the feelings of others (George, 2000; Lopes et al., 2004). Principals with low levels of EI, who may have problems identifying and understanding their own or other people's emotions, are going to have difficulties creating and maintaining authentic relationships—a critical quality in being successful as a school leader (Leithwood et al., 2017).

It is important to note that the motivational, cognitive, and interpersonal domains are interrelated and much of the impact of EI on successful school leadership is likely indirect (Sun & Leithwood, 2015). School leaders high in EI may be more engaged with their jobs because they can mobilize greater effort in the face of stressful

situations, as well as better cope with emotionally distracting situations.

EI and Successful School Leadership

The first comprehensive study on the relationship between EI and school leadership was conducted by Stone, Parker, and Wood (2005), who studied a large group of principals and vice-principals ($N = 464$) from a diverse range of school boards in Ontario. Participants were asked to complete the Emotional Quotient Inventory (EQ-i; Bar-On, 1997), a measure of EI that has four main scales (which make up total EI): intrapersonal (measuring one's ability to recognize and label one's feelings), interpersonal (measuring one's ability to recognize and appropriately react to the feelings of others), adaptability (measuring one's ability to adjust his/her emotions and behaviors to changing situations), and stress management (measuring one's ability to effectively manage stressful situations). Along with collecting EI information for the school leaders, the participant's immediate supervisor (superintendent for principal and principal for vice-principal) was asked to complete a measure about the principal or vice-principal's leadership. The assessment tool, adapted from Humphrey (2002), assesses two related dimensions of leadership (task vs. relationship-oriented). The principals and vice-principals who participated in the study also nominated three of their current staff members to independently rate their leadership abilities using the same leadership form as their respective supervisors. Combined supervisor/staff ratings were used to identify two school leadership groups: star performers (individuals who were rated at the 80th percentile or higher on leadership ability) and below-average leaders (individuals rated at the 20th percentile or lower). Stone et al. (2005) found that the star performers scored significantly higher than the other groups on total EI as well as all four dimensions assessed on the EQ-i (intrapersonal, interpersonal, adaptability, and stress management). This pattern of results was consistent for both men and women, as well as whether the individual was a principal or vice-principal or worked in an elementary or secondary school.

In a follow-up study to Stone et al. (2005), using the same methodology but with superintendents from various Ontario school boards, Stone, Parker, and Wood (2008) found virtually an identical pattern of results for the link between EI and successful leadership. Using the same type of 360 approach to assessing leadership ability, the above-average group of superintendents scored significantly higher than the below-average group on total EI as well as all four dimensions assessed with the EQ-i.

In a more recent review, much of it "gray literature" like the work from Stone et al. (2005, 2008) and Cai (2011) examined a number of studies linking various EI-related competencies with a number of outcome variables connected to successful school leadership. Although consistent with the findings from Stone et al. (2005, 2008), much of the work has limited generalizability in that key outcomes for school leadership use only self-reported variables. The same limitation can be made with most of the empirical work on EI and school leadership that has appeared in the published literature (e.g., Benson, Fearon, McLaughlin, & Garratt, 2014; Goldring, Cravens, Porter, Murphy, & Elliott, 2015; Hackett & Hortman, 2008; Patti, Holzer, Brackett, & Stern, 2015). It is worth nothing, however, that a number of writers have described current knowledge about successful school leadership, in general, as quite limited (Firestone & Riehl, 2005; Leithwood, Harris, & Hopkins, 2008).

As Leithwood et al. (2008) noted a decade ago, while the research evidence may be problematic, enough evidence exists to establish a number of basic claims about successful school leadership: "the most successful school leaders are open-minded and ready to learn from others. They are also flexible rather than dogmatic in their thinking within a system of core values, persistent (e.g. in pursuit of high expectations of staff motivation, commitment, learning and achievement for all), resilient and optimistic" (p. 36). The characteristics and attributes Leithwood et al. (2008) highlight are very much at the heart of most models of EI. Before review-

ing a unique project that has focused on promoting and developing EI in school leaders, it is worth spending some time fleshing out the critical features of effective professional development programming for school leaders.

Best-Practice Issues in the Professional Development of School Leaders

Successful school leadership programs provide careful consideration to design. Even ahead of content considerations, any professional organization or university targeting individuals in mid-career must consider the schedules, resources, and needs of both the trainees and the communities in which they live and work. With this in mind, Crow and Whiteman (2016) identify three relevant models of program design: (1) cohort designs allow a group of students to collaborate and progress together (although this model tends to limit trainee flexibility and freedom); (2) online learning allows students, using current technology, to progress at their own pace (although hiring committees are often concerned about credentials obtained exclusively online); and (3) district partnerships that give a trainee real-world, curriculum-linked exposure (although practical considerations arise surrounding stakeholder availability and favoritism). Effective programs often take the best features of each of these models and implement them in ways to maximize each model's benefits.

The University of Pennsylvania is an example of an institution that embraces mixed models in its mid-career doctoral program in educational leadership (Gordon, Oliver, & Solis, 2016). Faculty actively encourage intra-cohort social bonds, which strengthen the future prospects of the cohort as a whole. Rather than passively leverage technology for distance education purposes, students get active, hands-on exposure to emerging technologies in the program's "innovations lab" (skills they can take back to their existing jobs). Finally, through a truly innovative community program, the university partners with local school leaders to develop computer-based simulations of real-world occupational challenges which trainees must address. While not direct placements, these locally developed scenarios nonetheless help to add significant nuance to each trainee's leadership experience and identify genuine problems extant in the community.

This latter feature also demonstrates another challenge associated with educational leadership programs: content delivery. While the integration of technology remains an important feature of modern leadership programs, technology alone does not address leadership development. Most contemporary educational leadership programs leverage case pedagogy as a vehicle to present complex situations with multiple potential outcomes. This form of instruction is invaluable in expanding a student's problem-solving repertoire (Jensen, 2016). The University of Pennsylvania's computer simulations thus offer an efficient pedagogical blend of learning approaches.

Another important concern for institutions offering educational leadership programs is the process through which the program recruits and selects its trainees. Crow and Whiteman (2016) note that the traditional measures of performance—grade point averages and GRE scores—provide little predictive measure of student success. Instead, researchers advocate the development of selection criteria that are directly relevant to the job of educational leadership. Since trainees are already in mid-career, they should be able to provide evidence of (1) the ability to serve as a school leader who promotes learning; (2) the capacity to lead, even in challenging environments; and (3) present, albeit junior, success in the program's curriculum.

The University of Tennessee's Leadership Academy is an excellent example of an institution that has embraced rigorous recruitment and selection procedures intended to maximize student success (Gordon et al., 2016). Their program demonstrates an enviable graduate placement rate of 100%. To achieve this, the university requires applicants to submit (in addition to the usual docket of information) a reflective essay describing their vision for educational leadership in their district. Faculty then select a short list of applicants to come for a 2-day, highly rigorous

interview process. Candidates begin before a panel of evaluators that listens for markers of balanced leadership. Applicants spend the next 2 days at an assessment center, where they will perform role-play, group work, and other activities that provide the selection team with important information about the candidates' potential. Each year, approximately 100 individuals apply to the Leadership Academy, but only 10% receive offers. Stakeholders of the institution recognize that this elaborate recruitment process is partially responsible for the impressive rate of positive trainee outcomes.

Given the challenges that modern students will face in their communities, programs of educational leadership would do well to recognize diversity in both student recruitment and student curriculum. Crow and Whiteman (2016) advocate for partnerships between academic institutions and local school districts to ensure adequate racial, cultural, and gender representation among candidates, as well as the inclusion of diversity and social justice programs within the curriculum. Jensen (2016) also identifies the value of various tools in this regard, including equity audits, cultural autobiographies, diversity presentations, and other pedagogical instruments, in addition to more self-reflective practices such as journaling.

The educational leadership program at California State University Fresno has enjoyed success in this regard with their equity audits (Gordon et al., 2016). Students enrolled in this program already serve highly diverse communities of low socioeconomic status and a substantial frequency of families for whom English is a second language. As such, this program places special emphasis on social justice and diversity education. Leadership students learn to conduct a series of three institutional audits. The first, at the school level, evaluates the institution as a whole, considering the diversity readiness of whole systems which could include curriculum, faculty certifications, advanced placement, discipline policies and other day-to-day aspects of institutional life. The student then disaggregates the result of each audit element into groups that identify socioeconomic status, ethnicity, race, and gender. The results of this activity lead into a second, more detailed audit of subgroups that appear to experience marginalization. Finally, students will identify a single, at-risk student from a challenged subgroup to use as a case study. The results of this three-tiered audit yield a top-down series of recommendations that level the playing field for the entire student body, ensuring all pupils have the same opportunities for education.

Quality audits like this represent crucial opportunities for leadership trainees to gain field experience. While students in the Fresno program often perform this work in their home districts, there is evidence that suggests internships beyond the home district may be of value. Jensen (2016) acknowledges that leadership development is a career-long endeavor and cannot be completed within the space of one program. Students round out their problem-solving repertoires through exposure to novel perspectives. In this light, Crow and Whiteman (2016) recognize that internships and temporary in-school placements can improve a leader's skill, confidence, and community standing while at the same time allowing the student to make effective decisions about his or her own career.

The University of Alabama has fully embraced the advantages of internships and field experiences in their innovative educational leadership program (Gordon et al., 2016). Students enjoy not just one field placement, but three, all of which are tightly integrated with program curriculum. These placements occur in three phases. The first offers students the chance to design and deliver a professional development activity for teachers at a particular school, based on an identified need. The second is a two-semester internship where the student has the opportunity to explore the long-range implications of leadership in an area that is in line with their interests. Finally, the student will complete an in-school residency of no less than 10 days, where he or she will experience total immersion in the challenges of leadership. University of Alabama students also enjoy the support of their cohort, regularly meeting to discuss successes and challenges in their respective placements. Peer socialization of

these experiences allows students to learn from one another and consolidate their individual experiences into a greater sum of knowledge.

Manhattanville College believed the benefits of peer support to be so important that they developed five courses to train teachers to become peer coaches (Gordon et al., 2016). Part of a broader, 15-credit educational leadership program, faculty wanted to design a rigorous, organized program that delivered a breadth of peer coaching skills into their students' hands. The first course ensures that students possess insight into parameters of good teaching and have the vocabulary with which to describe it. The second course provides students with solid data management skills, allowing them to develop effective performance measures. Next, students have the opportunity to practice prior learning through the evaluation of videotaped classroom sessions and take sides in mock feedback sessions with fellow students. The penultimate course in the program introduces students to a rigorous peer review rubric, and finally, students observe certified peer coaches in action and hold conference with them after their sessions are complete. Early feedback from this program suggests that graduates are able to adeptly deliver feedback that results in positive behavior changes and outcomes for their mentees.

Developing EI in School Leaders: A Case Study

As a follow-up to Stone et al. (2005, 2008), a group of Ontario school boards and professional organizations partnered to support a multi-year study to explore the feasibility and benefits of explicitly targeting the development of EI-related competencies in school leaders. The program, originally called *At the Heart of School Leadership*, was designed to be a set of professional development modules connected to the competencies identified by Stone et al. (2005, 2008) as most critical in successful school leadership. The training program was developed following a broad range of best-practice issues reviewed in the previous section.

As conceived, the program consisted of three modules delivered over a period of 2 years, with several cohorts of participants (principals and vice-principals) taking the program in five separate school boards (see Shantz, 2015 for more specific details about participating school leaders and school boards). The programming was developed and delivered by a group of facilitators who all had previous experience as school leaders (e.g., principals and board superintendents). The 2-year time frame for the project was both functional (enough time to allow participants the opportunity to utilize and reflect on course materials) and practical (one can only bring a large group of principals together once or twice an academic year for targeted professional development).

Each of the modules involved several hours of small group activities, separated in time to allow the participants to do assigned readings, journal experiential material connected to specific module themes. Small group activities were designed as interactive sessions invoking participant discussion, with a facilitator actively working to keep the targeted themes and topics connected to the world of the school administrator. The three modules for the program are described below.

Module 1. "*Knowing your heart: Understanding the emotions of self and others***."** Developing and enhancing emotional self-awareness was the core feature of the first module. For school leaders, it represents the ability to understand feelings and the situational context that can generate them—a critical competency that will be built upon in the modules ahead. One of the key features explored in this module is having the participant learn to better understand how their beliefs and values influence their perceptions of different situations—and critically influence (in good and bad ways) the decision-making process. Another feature of the module is to work on the individual's ability to communicate their emotions and feelings in a constructive manner.

Module 2. "*At the heart of relationships: Developing, maintaining, and repairing relation-*

ships.**"** A key part of this interpersonal-focused module is to get participants to see the critical importance of building relationships in their school and in the local community. They also need to learn that with a job that involves so many stakeholders (students, staff, parents, board officials, and neighbors), they are going to need to master the art of developing and maintaining effective teams and groups. School leaders are encouraged in the face-to-face sessions to share effective (and not-so-effective) strategies for building and maintaining relationships from their supervisory practice. A key personal competency to highlight in these facilitated conversations was empathic behavior (another critical topic for the module). Participants were given multiple opportunities to practice empathic communication using various "real-world" scenarios. One of the critical goals of these activities is for the participant to be reminded of how critical it is to take time to try and understand the perspective of the other person before making closure on a decision or judgment.

Module 3. "*At the heart of leadership: Managing the daily demands of the job.***"** A critical feature of the competencies connected to this module is learning not to get overwhelmed by affect (since it increases the likelihood of making poor decisions). To help facilitate a deeper understanding of the need to be flexible when it came to problem-solve, the module focused a great deal on how to manage hostile people. Managing emotions while problem-solving is a key part of managing difficult people and situations. A considerable amount of time in the module is also devoted to the role emotions play in negotiations—a task that school leaders constantly face from very different communities (e.g., students, parents, teachers, and board staff). Every EI model that has been developed includes at least one dimension connected to how people manage stress and unpleasant emotion. Thus, another focus of this module was on developing stress tolerance. The rationale for this focus is the view that impulse control is better developed in individuals who can tolerate the types of stress encountered in the job of being a school leader. As noted at the start of this chapter, the demands placed on school principals continue to expand; thus, the ability of the school leader to use adaptive coping strategies becomes a critical competency. A large part of this module examines the types of stressful situations encountered in the role of school leader.

Program Results The program was delivered over a 2-year period, with 230 school leaders initially registering to participate and completed the Time 1 measures. At the initial testing, session participants were asked to complete the EQ-i (Bar-On, 1997) online, as well as recruit up to ten direct reports, five peers, and five other individuals (e.g., friends, family members) to rate the participant's EI using the EQi:360 (Bar-On & Handley, 2003) online. The 360 measure has the benefit of assessing the same EI-related competencies as the EQ-i but from multiple observers' perspectives. At Time 2 (post-program and approximately 2 years after Time 1), participants were asked to complete the EQ-i again.

The 2-year period for the project proved to have some practical limitations, as retirements, new appointments, and scheduling conflicts affected retention rates. As reported by Keefer, Parker, Wood, and Stone (2014), 83 school leaders completed both the Time 1 and Time 2 measures (although there were no differences in EI scores at Time 1 for individuals who dropped out of the project compared to individuals who completed the program). Comparisons of pre- and posttest means revealed no significant changes in EI abilities for the sample as a whole ($N = 83$). Rather, changes in EI abilities depended on the initial EI ability level. Thus, participants with low EI abilities at pretest (rated at the bottom third of the sample by their 360 data) showed significant increases in EI abilities at posttest, whereas there were no changes for participants rated as average or high on EI by their 360 data. Changes in EI scores depended on the degree of discrepancy between self- and other ratings at pretest. Participants who initially overestimated their EI

abilities showed significant decreases in EI self-ratings, whereas participants who initially underestimated their EI abilities showed significant increases in EI self-ratings. Although only preliminary due to lack of a control group, these results suggest that the program not only improved EI abilities for those who needed it the most, but it also helped participants develop more accurate self-appraisals of their EI.

The high dropout rate (64%) of the project does raise an issue about the sustainability of a specialized professional development program for EI-related competencies. As noted earlier, the 2-year time frame for a professional development program ran up against the realities of an occupational group who quite fluidly move across different school boards. It might be more beneficial to incorporate the curriculum materials from *At the Heart of School Leadership* into a more comprehensive leadership development program (one focusing of many more competencies and skills than just EI).

Conclusions

There is a growing consensus that school mental health programs offer a variety of tangible benefits in the treatment and prevention of mental health problems in youth (Rothi et al., 2008). By being embedded into the school system, these programs reduce a number of critical barriers to mental health services with youth (e.g., in poor families, getting time off from work, reliable transportation, and/or child care are all common barriers) as well as help reduce the stigma associated with seeking help for mental health problems (Stephan et al., 2007). There is also evidence that the existence of mental health programs and services in the school has a positive impact on other outcome variables like student learning and overall school climate (Becker, Brandt, Stephan, & Chorpita 2014).

While school-based mental health programs obviously involve a number of partnerships with different professions (e.g., psychology, nursing, social work, and teaching), there is strong evidence that the success of school-based mental health programs often rests with the school principal (Atkins, Cappella, Shernoff, Mehta, & Gustafson, 2017). There is also a consensus that the job of being a school principal has now grown to almost ridiculous proportions. As recently noted by historians of the modern education system (Peck et al., 2013), "creating a context in which we expect 95,000 principals to be superheroes is destined to lead to disappointment. As Superman, Spiderman and Wonder Woman would tell you, only a select few can be imbued with extraordinary powers. Expecting every school leader to possess such super abilities is simply a debilitating fantasy" (p. 64). Nevertheless, as daunting as the job appears, there is compelling evidence that success in being a school leader is linked with a core set of emotional and social competencies. There is also compelling evidence that these core competencies can be developed and enhanced using the type of curriculum/training formats now quite typical for educational leadership preparation programs in most developed countries (Crow and Whiteman, 2016). Expansion of school leadership programming that targets various emotional and social competencies is one of the most tangible ways to ensure that school-based mental health programs flourish in our schools.

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Part III

A Focus on Specific Program Implementation

12 Effectiveness of School-Based Interventions on Mental Health Stigmatization

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Abstract

This chapter first provides an overview and analysis of current school-based interventions on mental health stigmatization. This includes contact-based education, literacy-based education, and other approaches such as protest, art-based interventions, and the summit approach. The effectiveness of contact-based education in improving knowledge, attitudes, and behavioural intentions towards people with mental illnesses is supported by strong evidence. The student-driven summit approach is also a promising intervention in schools. Next the *Opening Minds* anti-stigma initiative of the Mental Health Commission of Canada, one of the first national anti-stigma programs to target school youth using contact-based education, is described to illustrate key ingredients and the program logic model for contact-based education in the Canadian school context. Engaging contact and delivery of recovery message are identified as key ingredients for program success. The logic model including four input components (team building, partnerships with schools, preparation, coordination), six process components (who-program deliverers, what-contents, how-pedagogy, materials, where-place, when-time), and four levels of program outcome (reaction, knowledge, behaviours, social changes) are discussed.

Stigma is a complex social phenomenon involving a cognitive component (labelling and stereotyping), an emotional component (prejudice), a behavioural component (discrimination), and a structural component (the accumulated organizational policies and practices, the result in inequities for people with a mental illness). Stigma often makes it difficult for people with mental illnesses to access services and to fully participate in society (Zaske, 2017).

Though 70% of people with mental illnesses develop symptoms before age 18, research has indicated that youth demonstrate low mental health literacy, moderate to high levels of stigma towards mental illnesses, and desire more education about mental health (Chandra & Minkovitz, 2006; Pinto-Foltz, Hines-Martin, & Logsdon, 2010). Adolescence is a critical time for attitude change. Early implementation of anti-stigma education to increase awareness and knowledge of mental illnesses can encourage young people's timely help-seeking; promote respect, diversity, and inclusion in the school environment; and impact their adult behaviours in relation to

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stigma. In 2009, the Mental Health Commission of Canada (MHCC) launched a 10-year anti-stigma initiative, *Opening Minds*, to change the attitudes and behaviours of Canadians towards people with mental illnesses. Youth aged 12–18 was one of the four groups targeted for anti-stigma activities.

Many anti-stigma interventions attempt to address the cognitive and emotional components of stigma by correcting public misperceptions, improving public knowledge, or changing attitudes towards mental illnesses. Few interventions focus on the behavioural components (Stuart, Arboleda-Florez, & Sartorius, 2012).

Given the importance of stigma reduction as a public health goal, this chapter will first provide an overview and analysis of current anti-stigma approaches. This is followed by describing the Mental Health Commission of Canada's *Opening Minds* anti-stigma initiatives, which focused on school-based programs for youth.

Overview School-Based Anti-stigma Approaches

Contact-Based Education

Contact-based education involves people with lived experiences of a mental illness in sharing their personal stories and conveying positivity around recovery to an audience of school children (Chen, Koller, Krupa, & Stuart, 2016). The lived experiences discredit false beliefs and misinformation allowing for transformative learning through social interaction. Contact can be direct or indirect. During direct contact, a person who has experienced a mental illness presents personal experiences (Sakellari, Leino-Kilpi, & Kalokerinou-Anagnostopoulou, 2011; Wei, Hayden, Kutcher, Zygmunt, & McGrath, 2013). The presenter can use discussion and other interactive activities to engage the students in cooperative contact. Such presentations are supported by the schools (Rickwood, Cavanagh, Curtis, & Sakrouge, 2004). Similar content can be delivered to students by indirect contact, for example, the school children might watch videos of the dramatization and real experiences of people with a mental illness, followed by discussion and education in a classroom environment (Stuart, 2006). This more structured delivery of mental health information may be provided by a teacher using first-person videos or by a person who has experienced a mental illness. A wide variety of programs involving contact-based education have been documented (Painter et al., 2016; Pinto-Foltz, Logsdon, & Myers, 2011; Sakellari et al., 2011; Wei et al., 2013).

Outcomes that have been evaluated following student participation in contact-based education have included improved knowledge of mental illnesses, reductions in stereotypic thinking, reduced stigmatizing attitudes, reductions in a desire for social distance, and increased mental health help-seeking (Mellor, 2014; Sakellari, Sourander, Kalokerinou-Anagnostopoulou, & Leino-Kilpi, 2016; Stuart, 2006; Wei et al., 2013). The efficacy of contact-based education in improving knowledge, attitudes, and behavioural intentions (social distance) towards people with mental illnesses is supported by *strong* evidence, including clinical trials (Chan, Mak, & Law, 2009; Corrigan, Larson, Sells, Niessen, & Watson, 2007; Koller & Stuart, 2016; Painter et al., 2016; Pinfold et al., 2003; Schulze, Richter-Werling, Matschinger, & Angermeyer, 2003; Spagnolo, 2009; Stuart, 2006).

There are only two exceptions found in the recent literature. First, a meta-analysis conducted by Corrigan et al. (2007) concluded that, in regard to attitudes about mental illnesses, contact had a better effect on attitudes in adults whereas education had a better effect on attitudes in adolescents. It was postulated that beliefs about mental illnesses might not be as firmly developed in adolescents as they are in adults, making adolescents more likely to be responsive to education. Second, Painter et al. (2016) evaluated the effectiveness of (1) a classroom-based mental health anti-stigma intervention involving a PowerPoint presentation and a discussion about mental illnesses compared to (2) contact with two individuals who had experienced a mental illness and exposure to mental health anti-stigma

materials in print or (3) a combination of (1) and (2). It was noted that while the curriculum-based mental health anti-stigma intervention was found to have significant positive effects on participant attitudes to mental illnesses, the contact-only mental health anti-stigma intervention was less effective. In addition, the curriculum plus contact-based mental health anti-stigma intervention did not differ significantly from the contact-only intervention with regard to participant attitudes (Painter et al., 2016). Despite these findings, the majority of existing evidence supports contact-based education as a current best strategy for mental health stigma reduction in a school-based environment (Koller & Stuart, 2016; Rickwood et al., 2004; Sakellari et al., 2011; Stuart, 2006; Wei et al., 2013).

Literacy-Based Education

Literacy-based mental health education is employed in a school setting to increase student's knowledge regarding mental health and mental illnesses, their treatments, and available resources (Sakellari et al., 2016). The expectation is that increased knowledge would reduce stigmatizing attitudes, while supporting early identification of mental illnesses and stimulating help-seeking behaviours (Milin et al., 2016; Perry et al., 2014; Sakellari et al., 2011; Wei et al., 2013). Literacy-based interventions are often didactic, typically involving presentations, lectures, discussions, videos, and quizzes delivered by school teachers, counsellors, or mental health professionals (but not individuals who have lived experience of a mental illness). When mental health anti-stigma interventions are adapted to fit the environment of the school, some are incorporated into the existing health curriculum while others are delivered in individual classrooms (Esters, College, Cooker, & Ittenbach, 1998; Swartz et al., 2010; Rickwood et al., 2004; Ventieri, Clarke, & Hay, 2011). As one example, Kutcher et al. developed a curriculum resource, the *Mental Health and High School Curriculum Guide*, taught by usual classroom teachers on students' knowledge and attitudes related to mental health and mental illness. This approach has been demonstrated to have a positive impact on knowledge and attitudes in various high school populations (Kutcher, Wei, & Morgan, 2015; Mcluckie, Kutcher, Wei, & Weaver, 2014). There appears to be little standardization of interventions and each program is unique in its duration and implementation.

Although outcome evaluations have not been standardized, some literacy programs have shown improved knowledge about mental health and others have shown decreases in negative attitudes to people with mental illnesses (Corrigan et al., 2013; Milin et al., 2016; Perry et al., 2014; Sakellari et al., 2016; Ventieri et al., 2011; Wei et al., 2013). Studies that have examined extended mental health outcomes such as social restriction, social care, and social integration (Sakellari et al., 2016), have demonstrated that information about mental illnesses can help to create an inclusive social atmosphere. Regardless of the outcome measures used in mental health literacy, nearly all programs have shown an immediate increase in knowledge. However, to date, there is no strong evidence of a direct link between changes in knowledge or attitudes and changes in behaviours, leading authors such as Stuart et al. to call for interventions that directly target behavioural change (Stuart et al., 2012).

Few studies have examined the longer-term impacts of literacy-based interventions. In most cases, data are collected before and immediately after the program is executed without longitudinal follow-up (Mellor, 2014; Sakellari et al., 2011; Wei et al., 2013). Only Kutcher et al. followed up after implementation of the *Mental Health Resource Guide* (described above) and found that the improved knowledge and attitude scores were maintained at 2 months (Kutcher et al., 2015; Mcluckie et al., 2014). However, the longer-term effects of literacy-based programs are largely unknown (Milin et al., 2016; Perry et al., 2014; Sakellari et al., 2016). Therefore, it is not clear whether refresher interventions (or boosters) are necessary and, if so, how frequently these should be delivered.

Other Approaches to Mental Health Anti-stigma Programs

The "protest" method attempts to suppress negative attitudes and negative depictions of mental illnesses by highlighting the injustices of stigma and reprimanding those who stereotype or discriminate (Corrigan et al., 2001; Corrigan & Shapiro, 2010; Corrigan, Morris, Michaels, Rafacz, & Rusch, 2012). It is a "shaming and blaming" model that has the potential to provoke negative reactions and backlash. Corrigan et al. found that protest targeting public stigma was rarely examined in research, and the results of meta-analysis did not show that protest yielded significant changes in stigma (Corrigan et al., 2012). Though not described in the literature, legal protest may be an effective means of reducing broader structural stigmas, but this is not a method that is useful when targeting school-based programming.

Arts, drama, and games also have been employed to engage students and reduce stigma (Essler, Arthur, & Stickley, 2006; Schulze et al., 2003). Studies employing role playing, games, quizzes, and artwork have demonstrated increases in positive attitudes (Sakellari et al., 2011; Wei et al., 2013), but programs that focus solely on these types of methods are rare. Most of the programs that use drama, games, posters, painting, and other such methods additionally employ lectures or presentations that teach about mental illnesses or contact-based approaches (Sakellari et al., 2011; Wei et al., 2013). Pitre, Stewart, Adams, Bedard, and Landry (2007) used puppets to deliver mental health messages to children, successfully reducing the children's perceptions of "threat" and "shame" attached to people with a mental illness, and reducing their desire to keep people with a mental illness "at a safe distance".

Youth anti-stigma summits have recently emerged as a promising practice for challenging the stereotypes and misconceptions that fuel stigma in Canadian high schools and empowering students to undertake their own anti-stigma activities. Originally developed by the Durham Talking About Mental Illness (TAMI) Coalition in Ontario, a summit brings together selected students along with school teachers and administrators to learn about mental health issues and stigma. Participants join in mental health education sessions, contact-based education led by speakers with lived experience of mental illnesses, experiential exercises, discussion, and action planning. After the summit, students work together to implement anti-stigma activities in their schools. Both students and school staff are provided with action guides and activity starters to help them plan activities and keep up the momentum of the anti-stigma message (Mental Health Commission of Canada, 2014a, 2014b). Key components of a summit include education, action, and contact. In this approach, students are recognized as experts in helping to design summits and empowered to act as a driving force to guide activities in their schools. Early research is showing that the summit approach can successfully diminish stereotyped attitudes and feelings of social distance (Koller, Chen, Heeney, Potts, & Stuart, 2013). Summits are gaining in popularity and have been used by Jack.org and British Columbia's *Talk at the Top* (jack.org, n.d.).

In summary, with the possible exception of protest, all of the above-mentioned approaches typically show small positive effects on knowledge and attitude change; however, only the contact and summit approaches appear to have an influence on social structures (such as school activities) and behavioural changes. These results suggest that more comprehensive, multilayered approaches are needed.

In the next section, we describe the *Opening Minds* anti-stigma youth initiative in more detail as one of the first national anti-stigma programs to target youth using contact-based education as the key intervention approach. We use it to illustrate key ingredients and the most promising practices in contact-based education.

Opening Minds Anti-stigma Initiatives of Mental Health Commission of Canada

The Opening Minds anti-stigma initiative of the Mental Health Commission of Canada was launched in 2009 with a 10-year mandate to act

as a catalyst for improving the mental health system and changing the attitudes and behaviours of Canadians with respect to mental health issues (Stuart et al., 2014a, 2014b). Building on the emerging evidence that emphasized the importance of a more intensive and targeted approach to stigma reduction, *Opening Minds* identified four priority groups for anti-stigma programming (youth, health-care providers, news media, and the workforce) and so was one of the first national programs to take such a targeted approach.

Youth were targeted because of their high prevalence of mental health issues. According to a multi-country study conducted by the World Health Organization, Canadian youth experienced higher levels of emotional distress compared to youth in other countries and reported feelings of depression once a week or more (The World Health Organization, 1996). Youth were also more likely to report being stigmatized as a result of mental health issues (Stuart, Patten, Koller, Modgil, & Liinamaa, 2014c).

Opening Minds has partnered with more than 20 youth contact-based anti-stigma programs across Canada to promote systematic evaluation using standardized approaches and instruments. This work has contributed to the understanding of promising and best practices in the field of anti-stigma programing. In order to undertake broad-based evaluation across partner organizations, a standardized measurement tool was needed. A literature review showed that none existed to meet the specific needs of this evaluation. Therefore, an instrument that measured stereotypic attributions (controllability of the illness, the potential for recovery, and the potential for violence and unpredictability) and social acceptance (desire for social distance and feelings of social responsibility for mental health issues) was developed. Social distance is a measure of behavioural intent and considered to be a fair (but not perfect) proxy for actual behaviours. The final scale consists of 15 stereotyped attribution items and 17 social acceptance items. Items were scored so that higher scores on any item would reflect higher levels of stigma. The validity and reliability of the instrument has been established (Chen et al., 2017).

Despite the fact that all programs used a contact-based intervention, standardized evaluation showed considerable variability in outcomes—64% of the variation in outcomes was due to the program. Also, males and females reacted differently to anti-stigma programming, particularly those with self-reported mental illnesses (Koller & Stuart, 2016). In addition to the gender mix of the students, contact-based education may have different outcomes depending on the age of the speakers and the quality of the contact (Corrigan et al., 2012).

To more thoroughly understand sources of variation across programs, we undertook a qualitative study to identify critical ingredients in contact-based interventions and build a program logic model to indicate how the various parts of the program interact to produce an effect. The research team worked with 18 contact-based educational programs implemented across Canada that targeted high school students, all formally affiliated with the *Opening Minds* anti-stigma initiative. Twenty in-depth interviews with stakeholders (program coordinators, speakers with lived experiences, family members) were conducted along with field observations of seven programs and an extensive review of program materials. Data analysis involved collecting critical ingredients into domains for conceptual clarity and logic model building. Finally, content validation of the program logic model through a stakeholders' review was conducted (Chen et al., 2016).

A main component of contact-based intervention was the ability of speakers to engage with their audience. "Engaging contact" occurred when the speaker and the audience found some common ground to reduce the stigma attached to mental illnesses. In addition, the speakers had to be in recovery, psychologically ready to share their personal stories, equipped with the skills and knowledge necessary to deliver the mental health anti-stigma program, and able to act as a role model to embody mental health recovery. The message delivered must be one of mental health recovery, misperceptions about mental illness must be corrected, and students in the audience must be connected to mental health

resources. The best programs ensured that students were prepared for the interaction with the speaker. Also, it was helpful if the speaker followed up with students after the presentation. In short, the interaction had to facilitate an emotional connection with the speaker, engage students, and empower students with mental health problems to seek help. It also helped students accept responsibility for advocating against mental illness related stigma. This research has led to the development of a fidelity measurement standard and has thus contributed to the development of best practice standards in mental health anti-stigma programming for youth (Chen et al., 2016).

To further illustrate "how the program theoretically works to achieve benefits for participants" (Savaya & Waysman, 2005, p. 87), a program logic model framework was constructed. The basic logic model included three core components: (1) inputs (the resources to be invested in a program), (2) outputs (the processes, activities, events, and actions that are implemented in the program), and (3) outcomes (the benefits or changes in program participants, measured in terms of short-term, medium term, and long-term impacts) (Savaya & Waysman, 2005). Figure 12.1 shows our logic model for contact-based mental health anti-stigma education. It includes four input components (team building, partnerships with schools, preparation, coordination), six process components (who-program deliverers, what-contents, how-pedagogy, materials, where-place, when-time), and four levels of program outcome (reaction, knowledge, behaviours, social changes). These are described in more detail below.

Domain 1: Inputs

Inputs refer to the resources invested in a program, which could include human resources, financial resources, and other efforts required to support a program. At this level, securing funding to build a team is the first step in providing contact-based mental health education. A well-developed program proposal or a demonstration of previous program outcomes is the key to a successful funding application. Potential funding sources may include public and private sectors. In addition to a grant application, fundraising can be used to obtain financial support. A strong team might include support staff, a mental health provider, speakers with lived experience of mental illness, family members, youth, and community members.

Second, program staff had to gain entrance into schools. Once a school was chosen as a target for mental health anti-stigma education, access to the school was obtained in one of two

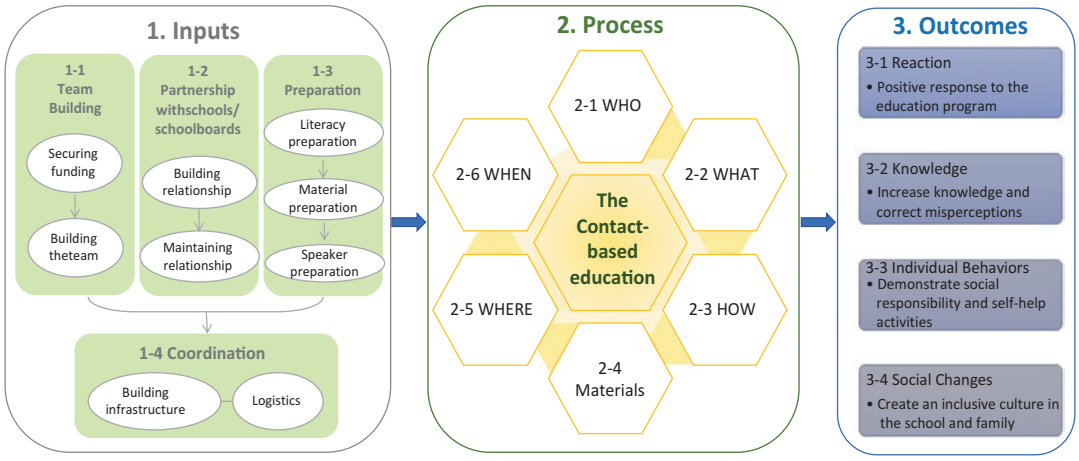

Fig. 12.1 Youth mental health anti-stigma intervention—a program logic model There are "arrows" conneting boxes in the outcomes. ie. 3-1 -> 3-2 -> 3-3 -> 3-4

ways. Some programs used a top-down approach by contacting school principals or members of the school board, while others used a bottom-up approach by talking to individual teachers or presenting the program at parent teacher association meetings. Advertising through word of mouth or by delivering program information to a school were also methods that were used. Once contact is made, a more detailed assessment of the school's needs can be undertaken to better tailor the program to the context of the particular school. It was important to maintain relationships with partner schools or school boards. A regular line of communication using telephone or email was set up to foster information sharing among school members and program members. After mental health programs were implemented, it was important that someone familiar with the program was available for troubleshooting and follow-up. Some programs maintained a computerized database to manage this information.

The third step involved preparation of the educational materials. The strongest programs used a team of advisors and experts to develop the program's educational content, including the development of teaching tools such as PowerPoint presentations, worksheets, scripts, stories, and workbooks. For programs using live speakers, considerable preparation went into teaching and supporting the speakers. Speakers needed to feel comfortable in front of a class and able to meet student's learning needs (rather than their own need to tell a story).

The strongest programs eased new speakers into their roles through a graduated process. Initially, they observed the program delivery of trained speakers in order to understand the nature of the intervention and the reaction of the audience and assess their own psychological preparedness. In addition, speakers had to build a repertoire of knowledge about mental health and mental illnesses and their treatments so that they could respond to student questions. Some programs kept a list of questions and answers that could be used as a speaker training tool. Careful personal story development was also a key feature of a strong program. Typically, speakers were mentored in developing a personal story line. Main ideas would be defined and the story carefully crafted to illuminate the important points leading to a positive, recovery-oriented tale. Practice sessions were an important element in speaker training. This included practice answering potential questions. Ongoing practice sessions helped speakers manage any anxiety that they might feel, help organize thoughts, and build a repertoire of accurate answers that could be used in the question and answer periods that typically followed contact-based educational sessions.

Finally, programs had to build infrastructures to support delivery. This included a major coordination function to ensure that sessions were appropriately scheduled with schools and speakers were transported to the sessions. An effective means of managing the scheduling function for larger programs was an online booking system, but smaller programs typically used more conventional approaches. There also needed to be a backup plan in place in case a speaker was unable to attend. For example, many programs had a backup video that could be used so that there was no risk of having to cancel presentations.

Domain 2: Process

The process domain addresses the who, what, how, where, and when of anti-stigma programming. With respect to the who, most programs centred on individuals with lived experience of a mental illness, but some also included a mental health professional, family member, teacher, or program staff as partners in the presentation. For speakers with lived experience of a mental illness, it was important that they were living well with their illness (i.e. recovered), not in acute distress, and had support to make their presentations. They had to be psychologically ready to share their personal stories and well equipped with the mental health knowledge. They also had to be able to communicate this knowledge in clear ways to students without deepening stereotypic thinking. Finally, they had to act as a role model embodying recovery characteristics and their dress and

demeanour had to be consistent with this. In other words, speakers must actively disconfirm stereotypic views that students may have of people with a mental illness, such as being unkempt, dangerous, incoherent, or intellectually limited. This requires a well-designed training program that psychologically and technically supports speakers who will deliver mental health knowledge and share their experiences of mental illness with an audience.

A second process consideration is what the message will contain. The most effective contact-based mental health education enhances mental health knowledge and improves acceptance of mental illness by delivering a personal mental health recovery message that includes a statement of strength, hope, and empowerment. A speaker's recovery message must connect with students and elicit their empathy. Often, speakers would start by describing how it felt to be diagnosed with a mental illness and explain some of the useful strategies they used to deal with the difficulties encountered when they were in high school. The speaker could continue the story by describing how maturity led to a successful management of the illness in early adult life. An important part of such a presentation is the breaking of misperceptions of mental illnesses. The speaker must address the myths related to mental illnesses and discuss how students can find help for mental problems. The goals of the presentation are to enhance disclosure, encourage help-seeking, increase social acceptance, and promote greater social responsibility regarding mental illnesses.

A third consideration is how the program will educate the students—what pedagogy will be used. To encourage youth engagement, a mental health anti-stigma education program must be youth-friendly. That is, it must use youth culture (e.g. social media, popular music) and language that appeals to youth. In addition, the creation of a safe environment is necessary to encourage students to engage in more open dialogue. A good way to accomplish the above is to employ students as partners in the process and promote their empowerment. Involvement of students in the program design can reveal what the needs of the students are, allowing the program to target these needs more specifically. This is also an effective way to encourage students to access information and become youth advocates. It gives students the opportunity to play a leadership role and empowers them to make changes. A mental health anti-stigma intervention that partners with students to implement anti-stigma activities in local schools after the contact-based education could amplify the intervention effects to reach a community level.

Next, the program staff must determine what materials the program will contain. Providing students with mental health resources in various formats such as handouts, toolkits, or information booklets will augment and sustain the program's effects and make sure students have outlets if the stories trigger any emotional effects. Materials that introduce the topic can be printed or Web based and should be distributed before the presentation to give students a general sense of what the presentation will entail. Materials that provide follow-up resources to students and their families can be distributed after the presentation. Teachers require guidelines to deliver mental health literacy before the presentation and to debrief students after the presentation. The best programs worked closely with teachers to ensure that students were well prepared to receive the speaker's story. Similarly, they often provided time after the program (such as the next day) to debrief. Key school staff (such as a guidance counsellor) were often on hand in case students needed to talk further about a personal mental health issue, and teachers were schooled in how to make the connection between students who may be in distress with the appropriate support personnel.

Where the presentations take place can make an important difference to the level of comfort, safety, disclosure, and student engagement. For example, presentations that took place in individual classrooms provided the best environment for a transformative learning experience. When presentations were made to large groups (such as in an assembly or a theatre), students were less likely to ask questions and interact with the speakers on a personal level. While larger presentations have broader reach (which is often the rationale for adopting this

approach), the presence of hundreds of students in a large room undermines the personal interaction that is the hallmark of contact-based education. Smaller classroom presentations can also allow presenters to address specific curricular requirements. Online-based methods such as websites and social media can also be used to answer students' questions. Booster elements (posters, concerts, fund raisers, video contests) can foster program sustainability and support ongoing activities driven by student champions.

The final process issue is to determine when the program will be completed. Programs varied from a single session of 40–90 min to a whole day of activities to activities that spanned several days. With longer, multi-day activities, it was possible to have a teacher engage with the material and help prepare the students to hear personal stories and understand their context. It also allowed for follow-up discussion, debriefing, and engagement of additional support staff. Engaging with a school for a longer presentation was often challenging as many teachers had limited time to devote to this topic. However, brief interventions were largely unsuccessful in bringing about the desired outcomes.

Domain 3: Outcomes

We used Kirkpatrick's framework for educational evaluation (Kirkpatrick & Kirkpatrick, 2006), which progresses through a series of levels, to guide our understanding of best practices for program outcomes. Student reaction is at the lowest level. This evaluates how students feel about the learning experience; whether they liked it and were satisfied with it. Potential emotional reactions might include happiness, empathy, feeling more connected, approachable, open minded, moved, or sadness. The second level evaluates changes in student knowledge and attitudes that could be attributed to the intervention. This includes correcting misperceptions and stereotypes. The third level examines changes in behaviours and evaluates the extent to which learning has been applied. This might include a demonstration of social responsibility towards students with mental or emotional problems, greater demonstrations of respect, decreases in social distance, and provision of greater social support. Finally, the fourth level evaluates the extent to which the program messages may have been transferred to the sociocultural environment, in this case to create a less stigmatizing environment. Creation of a safe environment that enables students to talk about mental health issues, support each other, promote social inclusion, and advocate for anti-stigma activities is the long-term goal of effective anti-stigma interventions. Most programs had some data describing student reactions but few had anything more. In the context of the *Opening Minds* evaluation, all programs collected information on knowledge and attitude change. In addition, they included a measure of behavioural intent as a proxy for behaviour change. In an attempt to promote structural change, in November 2014, *Opening Minds* launched a HEADSTRONG national summit to mobilize youth across the country to confront mental health stigma. The summit brought together more than 4400 youth from across the country who were committed to create positive change. Through the HEADSTRONG summit, 19 regional coordinators were established, 3 provincial events and 25 regional summits were hosted, and countless more students and school-based activities were inspired (Mental Health Commission of Canada, 2014a, 2014b).

Having a logic model to guide program activities, such as the one described above, provides a thorough understanding of the changes anti-stigma programs can make in a student body. It provides a comprehensive and testable picture outlining "what works" and explains active components in contact-based mental health anti-stigma interventions, especially for the youth population in schools. Understanding the changes that can be achieved by contact-based mental health anti-stigma education and identifying the most effective components in a contact-based mental health anti-stigma education program are essential to inform the design of best-practice mental health anti-stigma education interventions in a school context.

Summary/Conclusion

Although both literacy education and contact with people who have had a mental illness were shown to have positive effects on knowledge and attitude change, contact demonstrates stronger evidence in reducing discriminatory behavioural intentions such as social distance. Contact combed with education and student-driven actions seems to work best among adolescents.

The *Opening Minds* research discussed in this chapter built the programming model illustrating how contact-based anti-stigma intervention should be crafted to meet the differing needs of the school context and identified the key ingredients that must be implemented to maximize program success. Further validation of the key ingredients and development of fidelity criteria would be the next steps to promote best practice in youth anti-stigma interventions.

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13 Self-Stigma in Youth: Prevention, Intervention, and the Relevance for Schools

Alison L. Rose, Sarah K. Atkey, and Joel O. Goldberg

Abstract

Adolescents undergo significant physical and emotional changes while also simultaneously encountering life challenges such as navigating relationships with parents and peers, forming a self-identity, and perhaps responding to instances of peer pressure and bullying. While these difficulties may provide opportunities for self-reflection as well as help to foster resilience and build character, in their entirety, they may lead to significant emotional distress. Self-stigma is also associated more broadly with findings of lower levels of functioning across multiple life domains reflected in self and parental report. Given that there have been no full-scale interventions developed to reduce self-stigma in children and adolescents, we review intervention programs for adults with mental health problems and provide suggestions for mental health professionals, counselors, and educators who are seeking to reduce the tendency to internalize mental illness stigma.

Picture a struggling high school student who is experiencing yet another challenging day and who desperately, perhaps secretly, is looking for someone to lean on but feels too self-conscious and too ashamed to seek help because of the internalized image of what others have stereotyped about those who have mental health concerns.

Adolescents undergo significant physical and emotional changes while also simultaneously encountering life challenges such as navigating relationships with parents and peers, forming a self-identity, and perhaps responding to instances of peer pressure and bullying. While these difficulties may provide opportunities for self-reflection as well as helping to foster resilience and build character, in their entirety, they may lead to significant emotional distress. In fact, adolescence is tied closely to the first onset of numerous mental health challenges, with nearly half of all such lifetime disorders beginning in the mid-teenage years (Kessler et al., 2007).

Epidemiological studies have identified that between 10% and 20% of all adolescents report having a mental health disorder (Costello, Egger, & Angold, 2005). Despite the extent of these disturbances, and unlike physical health problems such as orthopedic injuries where youth invariably seek out and receive intervention, many youth report delaying or avoiding seeking professional help for mental health concerns (Wilson & Deane, 2012), delays which often serve to exacerbate symptoms. This is particularly the case for those with more serious mental health difficulties such

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as psychosis, bipolar disorder, and major depressive and anxiety disorders (Boonstra et al., 2012; Dell'Osso, Glick, Baldwin, & Altamura, 2013).

One reason people of various ages do not seek help for a mental health problem reflects their concern regarding the prospects of being stigmatized. Fortunately, we are now in an era in North America, where there is much greater awareness of mental health issues reflected in part in the growth of anti-stigma campaigns. These campaigns have, as their goal, not only reduced stigma but also encouraged people to seek the help that they require. Unfortunately, a related tendency – stigmatizing oneself – has received much less attention, both in terms of the general public awareness and in terms of research investigations. This is despite the fact that self-stigma is equally as damaging if not more so in creating yet another barrier for people to seek the help they need.

At present, the literature on self-stigma is focused largely on adults with diagnosed mental illnesses and in self-stigma among university students with varying levels of distress. The topic of self-stigma in children and youth has been largely neglected despite the clear indications we now have of the prevalence of mental health problems among young people and the mounting evidence of the costs and consequences for young people of not seeking help when it is required. This chapter summarizes what is known regarding self-stigma in youth, but it is also the authors' goal to have it serve as a catalyst for future research and theory development on self-stigma in young people.

Introduction

The need for greater awareness and understanding of self-stigma in children and adolescents is underscored by recent evidence suggesting that stigmatizing oneself is associated with greater adjustment difficulties. As part of the development of a new measure of self-stigmatization, Kaushik and associates (2017) reported that greater self-stigma was associated with more negative self-perceptions across various self-worth domains that include social acceptance, physical appearance, scholastic competence, and athletic competence. Self-stigma is also associated more broadly with findings of lower levels of functioning across multiple life domains reflected in self and parental report.

We begin by exploring the value of self-stigma as a heuristic construct and its relevance to adolescents. The various forms of self-stigma are described, and the research conducted thus far on self-stigma in youth is summarized. Research on self-stigma is summarized in emerging adults (i.e., university and college students) as a stage that is considered an extension of late adolescence. We also consider the growing evidence and promising avenues regarding interventions designed to reduce levels of self-stigma. In addition, in an attempt to promote an explanatory approach in promoting the nature of self-stigma in youth, we introduce new conceptualizations about the factors that are likely implicated in the development and persistence of self-stigma among young people with mental health problems. Finally, given that there have been no full-scale interventions developed to reduce self-stigma in children and adolescents, we review intervention programs for adults with mental health problems and provide suggestions for mental health professionals, counselors, and educators who are seeking to reduce the tendency to internalize mental illness stigma.

Defining Self-Stigma

What is self-stigma and how is it is expressed? Youth with mental health problems are the frequent target of discrimination and prejudice. Self-stigma represents the internalization of these negative societal judgments that have stereotyped people with mental health problems. In essence, people who self-stigmatize have come to believe in, and define themselves by, attitudes such as "I am a weak and inferior person because I don't seem able to cope or function as well as other people."

Anti-stigma campaigns and programs in high schools and elsewhere are both timely and impor-

tant, but a key consideration when evaluating these programs is their scope. That is, do programs have an extended element such that the focus is not only on reducing the tendency to stigmatize others but also the tendency to stigmatize oneself? Clearly, the destructiveness of stigma is amplified when stigma also impacts how the young person who is struggling with a mental health problem is impacted in terms of how they see themselves and whether the young person is willing to let others know about their struggles.

Young people can internalize negative judgments about themselves for having mental health problems in general or for having specific mental health concerns. The high school student depicted in the opening paragraph may be suffering from a generalized or specific form of emotional disturbance, and in turn, manifestations of self-stigma may be expressed in different ways. She or he can internalize stigma for various kinds of disorders, including depression, social anxiety, or an eating disorder. These disorders are prime candidates because the symptomatic core already involves a central emphasis on the self as being deficient or defective. It is quite possible that the vulnerability to *public* shaming which may accompany these disorders evolves to become identified as *personal* shaming. Accounts of self-stigma experienced by adolescents with depression or attention-deficit/hyperactivity disorder (ADHD) include internalized feelings of being different, damaged, and broken and the sense that mistreatment from peers should be blamed on some aspect of the self (see McKeague, Hennessey, O'Driscoll, & Heary, 2015).

Components of Self-Stigma Researchers as well as mental health advocates have found utility in examining self-stigma phenomenon in its particular components: the person with self-stigma is aware that the public holds negative attitudes toward the mental illness (Awareness) and then comes to believe that these stereotypes about mental illness are somehow true (Agreement) and, finally, that this perceived public stigma actually applies to them (Application) as an individual (Corrigan & Rao, 2012). Research has examined how self-stigma can lead to damaged self-esteem and lowered self-efficacy to name a few of the harmful consequences (Corrigan & Shapiro, 2010; Manos, Rusch, Kanter, & Clifford, 2009). Further, investigators are now exploring what has been termed the "why try" effect, in which self-stigma is considered to cause a loss of self-respect leading individuals to feel unworthy of pursuing life's goals (Corrigan, Bink, Schmidt, Jones, & Rüsch, 2016).

A related but distinct way of viewing self-stigma is the self-stigma that occurs in the context of seeking help for mental health problems. This contextualized kind of self-stigma is most commonly operationalized using a convenient assessment instrument, the ten-item Self-Stigma of Seeking Help (SSOSH) scale by Vogel, Wade, and Haake (2006), which evaluates the level of comfort or concern in relation to seeking psychological help. Research into self-stigma in this context has clear practical and clinical utility, with the potential for uncovering previously unrecognized barriers to seeking help for those who need guidance and support but have been too ashamed to seek it for themselves.

The Prevalence of Self-Stigma Among Youth

Just how prevalent is self-stigma among youth? Unfortunately to our knowledge, there has been no published epidemiological investigation that assesses the frequency with which young people tend to stigmatize themselves. However, one large-scale recent systematic review that examined studies using mostly adult populations has revealed that stigma is the fourth highest ranked barrier to help seeking, with disclosure concerns related to worrying about letting others know about struggles of personal recovery being the most commonly reported stigma barrier (Clement et al., 2015). Other systematic reviews have found self-stigma prevalence rates of 49% in those with schizophrenia spectrum disorders and 22% in people with bipolar disorder or depression (Brohan, Gauci, Sartorius, Thornicroft, &

GAMIAN-Europe Study Group, 2011; Gerlinger et al., 2013). Self-stigma can even arise among young people who are already receiving certain kinds of help, as documented by Kranke, Floersch, Kranke, and Munson (2011), who found that some adolescents in treatment tend to stigmatize themselves for needing to take psychiatric medication.

The limited evidence that is available suggests that self-stigma among young people is quite prevalent and there is a need for programmatic inquiry and intervention. Our own research using the SSOSH measure found that at least one in eight high school students scored in the range of those who report self-stigma about seeking help for mental health concerns (Hartman et al., 2013). A recent survey was conducted with almost 24,000 high school students in Ontario (see Flett, Hewitt, Nepon, & Zaki-Azat, in this volume). Student respondents were given a series of statements designed to assess their levels of stress and distress. Included in the statements is "I would feel like a weak person if I had to get help because of how I am feeling." The results showed that 43% of students either agreed or strongly agreed with this statement. It can be inferred from this finding that more than two-fifths of adolescents who are experiencing some form of psychological distress are prone to judging themselves negatively if they intend to, or actually have, sought help. Clearly, this statistics starkly reinforces that adolescents' negative beliefs surrounding help seeking for mental illness are major concern that merits further investigation.

An example of the particularly difficult circumstances that arise when adolescents face mental illness self-stigma is perhaps best illustrated by the life story of Liz (which she narrated to students in a high school intervention study, cited in Hartman et al., 2013). Liz is a woman who has been diagnosed with schizophrenia and first started experiencing symptoms related to the disorder when she was about 14 years of age. Liz recalls that it was around this age when she first started hearing voices, which she knew was not "normal" but which she hid from others by spending the majority of her time alone and isolated. Both her symptoms and lack of self-disclosure, or seeking needed help, persisted into her university years. She recounted that "Somehow it was never detected by family and friends. I hid the problem by avoiding people and spending a great deal of time by myself." It was finally in her last year of university when the voices and the visions became so terribly troubling that she felt compelled to phone her parents. Although she was assessed and successfully underwent treatment and psychiatric rehabilitation for the disorder, she still feels that there is, what she terms, "invisible discrimination," toward other people with mental illness which prevents her from disclosing her disorder to important others in her life. In Liz's words, "I hear the comments all the time, both at work and when I am with friends. Things like 'psycho, crazy, one side of the brain isn't listening to the other side, schizo's shouldn't be driving.' These words and ideas hurt immensely…I can't say anything for fear of being alienated from all my friends and co-workers."

Similar to Liz's experience during her youth and her poignant descriptions of phrases that depict hurtful stereotypes, many adolescents are reluctant to seek help because they feel a sense of shame, embarrassment, and self-consciousness related to their mental illness concerns, and these reactions often reflect the internalization of stigma. They may be especially unwilling to seek assistance if they perceive help seeking as a sign of personal inadequacy, a well-known societal stereotype. Whereas individuals invariably seek out help for physical concerns, such as a suspected broken arm or leg, there is reluctance to admit the need to get help for mental health concerns, since this could pose a potential threat to self-esteem or as a sign of personal weakness or failure (Fisher, Nadler, & Whitcher-Alagna, 1982; Slone, Meir, & Tarrasch, 2013).

Internalizing Public Stigma Although there are numerous factors contributing to the low rate of help-seeking behavior among youth, a key deterrent involves adolescents' perceptions regarding how the public views mental illness. Public stigma, which in this context involves holding discriminatory and prejudicial views about men-

tal illness, can take the form of either trying to socially distance oneself from those who are mentally ill or limiting their rights (Corrigan & Watson, 2002). Adolescents with mental health concerns who internalize the public stigma of mental illness in the form of self-stigma may be erroneously interpreting that they personify the negative stereotypes associated with mental illness (Corrigan & Watson, 2002). As a result, they tend to report more negative attitudes toward seeking help for their mental health concerns, as well as a lower likelihood of both seeking and receiving assistance from trained professionals (Gulliver, Griffiths, & Christensen, 2010; Zhao et al., 2015).

The high rate of mental illness stigma, coupled with the underutilization of mental health services among youth, has led to numerous global mental health promotions and anti-stigma initiatives to address these issues through targeted school-based programs (Hartman et al., 2013). However, although awareness of stigma surrounding mental illness has grown, and public efforts to address it have increased considerably, public stigma surrounding mental illness remains rampant within society. A large review concluded that while considerable progress has been made in reducing public stigma, society still tends to hold common misconceptions and negative views regarding mental illness (Angermeyer & Dietrich, 2006). One recent large international survey of mental illness stigma found that in developed countries, about 7–8% of respondents endorsed the statement that individuals with mental illness are more violent than others, compared to 15 or 16% in developing countries (Seeman, Tang, Brown, & Ing, 2016). Moreover, while 45–51% of respondents from developed countries reported that they believe mental illness is similar to physical illness, only 7% of this same group endorsed the belief that mental illness could actually be overcome (Seeman et al., 2016).

Clearly, negative beliefs surrounding mental illness remain within society, and as such, there is a risk that individuals with mental health concerns will internalize these negative views and believe the stereotypes are representative of themselves. However, self-stigma as a phenomenon is seen as conceptually and empirically distinct from the construct of self-criticism. That is, self-stigmatization has a specific focus on internalizing mental illness stereotypes and consequently feeling profound shame, embarrassment, and anticipatory worries regarding how others might perceive their mental illness concerns.

The Construct of Self-Stigma and Help-Seeking Behavior

Although a meta-analysis has revealed that the correlation between self-stigma and symptom severity is moderate (Livingston & Boyd, 2010), higher self-stigma is related to a multitude of negative psychosocial outcomes. For instance, self-stigma is associated with higher rates of depression and social isolation, and lowered self-esteem and self-efficacy, and a diminished sense of both self-respect and personal recovery (Corrigan, Watson, & Barr, 2006; Corrigan, Larson, & Rüsch, 2009). Lowered self-esteem and self-efficacy often lead to a loss in opportunity, as individuals feel less motivated and capable of fulfilling self-determined goals that enhance well-being, including housing, health and wellness, relationships, and recreation (Corrigan et al., 2009). A consequence of this is the "why try" effect, where people question their worthiness and ability to pursue these goals (Corrigan et al., 2016). Not surprisingly, higher self-stigma is related to lower levels of hope, empowerment, and overall quality of life (Gerlinger et al., 2013; Livingston & Boyd, 2010).

Self-stigma is commonly researched in the context of seeking psychological help, whereby an individual internalizes the belief that attaining assistance for mental health concerns is undesirable and socially unacceptable based on the views of society (Vogel et al., 2006). That being said, as noted earlier, self-stigma for seeking psychological help is related to, but empirically distinct from, the self-stigma linked to having a mental health problem itself (Tucker et al., 2013). This is an important field of research in light of

several findings demonstrating that an individual's belief about psychological help seeking is one of the most powerful predictors of whether or not they will actually seek assistance (Topkaya, 2014). As negative attitudes toward seeking psychological help rise within society, the use of psychological services for the treatment of mental health concerns declines (Topkaya, 2014).

The development of the SSOSH scale by Vogel et al. (2006) has created a useful well-validated tool that has fueled a remarkable rise of research. With estimates of internal reliability ranging from 0.86 to 0.90, this measure assesses the extent to which highly reluctant or unthreatened individuals are at the prospects of seeking help for psychological concerns. Scores of 34 or higher on the SSOSH (at least one standard deviation above the mean for those not seeking treatment in the original Vogel et al. (2006) validation study) have been operationalized ("cutoff" score approach) by our research group as indicative of a greater tendency to self-stigmatize seeking help for psychological treatment.

The instrument validation study by Vogel et al. (2006) involved surveying college students to assess the extent to which public and self-stigma for seeking help are predictive of attitudes and willingness toward seeking psychological help. In this study, public stigma was assessed using the Social Stigma for Seeking Psychological Help Scale, which measures concerns about how stigmatizing it is to receive psychological treatment (SSRPH; Komiya, Good, & Sherrod, 2000). Ultimately, Vogel et al. (2006) found that while higher levels of both public and self-stigma for seeking help were associated with less positive attitudes and lower intentions to seek help, it was the phenomenon of self-stigma which predicted those negative attitudes and diminished willingness to get help over and above the effect of public stigma. Vogel, Wade, and Hackler (2007) expanded on this research by examining whether self-stigma associated with seeking counseling mediates the link between perceived public stigma and seeking counseling for psychological and interpersonal concerns. In this case, perceived public stigma was measured by the Perceived Devaluation-Discrimination Scale which asks individuals to rate the extent to which they believe statements reflect how most people view current or former psychiatric patients (PDDQ; Link, Cullen, Frank, & Wozniak, 1987). Results showed that among college students, public stigma contributed to the occurrence of self-stigma, which in turn influenced attitudes toward seeking help and ultimately impacted respondents' reported willingness to seek help. However, self-stigma was the more relevant indicator with respect to the rate at which individuals sought help for mental health concerns. Self-stigma for seeking help is clearly more closely associated with the propensity toward individuals to seek out psychological assistance as compared with public stigma. Additionally, self-stigma, beyond influencing help-seeking behavior, can negatively impact the self-concept and treatment engagement above and beyond the influence of public stigma (Moses, 2009a).

Remarkably, to date, there has been a lack of research related to the self-stigma of help seeking using adolescent samples, despite its potential to provide insights regarding teens' perceptions of, and experiences with, the initial symptoms of mental illness (Hartman et al., 2013; Sheffield, Fiorenza, & Sofronoff, 2004). The deleterious effects of self-stigma are especially harmful for youth given that, as alluded to previously, the stage of adolescence is a developmental period characterized by a strong need to appear and feel competent, gain social acceptance, and establish independence (Wisdom, Clarke, & Green, 2006). For adolescents in particular, self-stigma surrounding mental illness can be debilitating in that it can negatively affect youths' self-concept, mood, and social relationships (Kranke & Floersch, 2009; Moses, 2009a). As previously mentioned, adolescents are often reluctant to seek help for their mental health concerns. Past research has shown that a willingness to seek help decreases as the severity of mental health problems among adolescents rises (Rickwood, Deane, & Wilson, 2007). Furthermore, past research has found that roughly two-thirds of adolescents who report suicidal thoughts fail to ever seek help (Husky, McGuire, Flynn, Chrostowski, & Olfson, 2009).

Youth are also more reluctant to accept a formal mental health diagnosis, due to the stigma attached to what its meaning is for them. Mowbray, Megivern, and Strauss (2002) asked college students who had been diagnosed with a serious mental health disorder in high school to reflect back on their previous experience. While the students acknowledged having "problems," the majority revealed that they never conceptualized these problems as their having a mental illness. Students also reported that in their experience, peers who did label themselves as having a mental illness were more subject to social ostracism and were disparaged and pitied by others. Additional research has also revealed that, once given a formal diagnosis, a majority of adolescents tend to conceptualize their mental illness in minimizing terms or demonstrate uncertainty or confusion about the nature of their psychological problems (Moses, 2009b). That said, it is important to acknowledge that not all youth similarly perceive and react to a formal diagnosis of mental illness in a similar fashion. Wisdom and Green (2004) found that some adolescents diagnosed with depression experienced the diagnostic label as useful and a source of relief in finally feeling understood and not blamed for their behavior. In this same study, however, other adolescents reported believing that their diagnosis of mental illness had a negative effect on their sense of self as well as their view of the future. While it is indeed complicated to investigate the various ways in which youth conceptualize their experiences with mental illness, it is a key step toward understanding adolescents' help-seeking and treatment utilization patterns (Moses, 2009b).

Self-Stigma and the Pursuit of Career and Guidance Counseling Self-stigma is a barrier that affects help seeking not only with respect to attaining adequate psychological treatment but also in relation to seeking support in the form of career or guidance counseling. Research in these domains is highly relevant for youth considering advice from school-based career and guidance counselors, that is, those help-giving supports who are oftentimes the most proximal source of contact for adolescents experiencing distress in high school or in anticipation of making the difficult transition from high school to postsecondary education (Geller & Greenberg, 2009).

With regard to career counseling, Ludwikowski, Vogel, and Armstrong (2009) surveyed college students in examining the relationship between self-stigma and help seeking. In this study, a measure of personal stigma was included that evaluates the effects that stigma can have when individuals consider the reactions of those they have interacted with (Vogel, Wade, & Ascheman, 2009). Results revealed that both public and personal stigma were linked to self-stigma, which was then linked to attitudes toward seeking career counseling. As opposed to public stigma, these results suggested that addressing personal stigma and self-stigma related to career counseling may be more effective routes to increasing service usage.

A need to address personal stigma and self-stigma barriers is particularly pertinent when considering that the rate at which upper year high school students seek help from educational counselors is reportedly very low (Shapka, Domene, & Keating, 2006). In contrast with career counseling, to our knowledge there is no research directly assessing factors contributing to adolescents' self-stigma for seeking guidance counseling. This is surprising given that school counselors are a primary source of support for youth. Researchers and mental health professionals alike need to address these gaps in the literature, as well as continue to evaluate the barriers influencing adolescents' perceptions of help seeking as assistance can be sought from an array of sources. There are, overall, differences among adolescents with respect to how they perceive and react to mental health difficulties and, more broadly, how they seek help for educational and career-related concerns. Research has assessed the many contributing factors and mechanisms that may be impacting the degree to which adolescents are endorsing self-stigmatizing views about seeking help.

The following section considers the factors that are associated with self-stigma in young peo-

ple. Our analysis considers factors related to personality and the self-concept, but it also considers broader contextual factors (e.g., cultural influences) as well as the possible role of family factors and experiences.

Self-Stigma and Mattering

The construct of perceived "mattering" is defined as an individual's feeling or belief that he or she is important and of interest to others or the feeling that others depend on him or her (Rosenberg & McCullough, 1981). Perceived mattering is manifested in personal significance to another person and a recipient of his or her concern. Studies with high school students and adults have demonstrated that perceived mattering is a critical aspect of the sense of overall well-being (Flett, Galfi-Pechenkov, Molnar, Hewitt, & Goldstein, 2012). Lower levels of perceived mattering are linked to higher levels of depression and anxiety for both male and female adolescents (Dixon, Scheidegger, & McWhirter, 2009).

Explorations regarding the relationship between self-stigma, help seeking, and perceived mattering among high school students have reflected that female students with lower levels of perceived mattering experience higher levels of self-stigma associated with seeking help; however, the same relationship was not present with male students (Atkey, Zeifman, Young, Macintosh, Flett, & Goldberg, 2015). Gender was a significant moderator of the relationship between perceived mattering and self-stigma of seeking help, while perceived mattering was a significant predictor of self-stigma of seeking help (Atkey, Zeifman, Young, et al., 2015). This suggests that reduced perceptions of mattering to others play a significant role for students, particularly female students, who may be most in need of treatment yet also more likely to experience self-stigma regarding seeking help. Furthermore, a sense of mattering to others may be a protective factor not only in terms of mental health but also in the willingness to seek psychological help. It may be that individuals who feel or believe that they matter to others are less likely to experience self-stigma of seeking help should they need psychological treatment. It is possible that when one perceives that he or she is important to others and that they depend on him or her, they are more confident about seeking needed treatment. They may feel that it is important to receive treatment in order to maintain their relationships. Taken together, this research has important implications for school guidance counselors, in providing evidence for what they may have long suspected; that is, those students who feel like they really matter little to others are least likely to seek help, as if caught in a vicious cycle in which they anticipate that what they have to say will not be listened to.

Self-Stigma and Perfectionism

Self-oriented perfectionism is defined as having extremely high standards toward the self (Hewitt & Flett, 1991), and it has been shown to have negative implications for children and youth. Perfectionism is associated with adjustment issues and numerous mental health concerns such as anxiety, depression (Essau, Conradt, Sasagawa, & Ollendick, 2012; Hewitt, Caelian, Flett, Sherry, Collins, & Flynn, 2002; Hewitt, Newton, Flett, & Callander, 1997; Huggins, Davis, Rooney, & Kane, 2008), and symptoms of eating disorders (McVey, Pepler, Davis, Flett, & Abdolell, 2002). Perfectionistic students have a tendency to seek perfection instead of excellence, in addition to maintaining self-critical evaluations using high standards (Zeifman, Atkey, Young, Flett, Hewitt, & Goldberg, 2015). In a recent literature review on suicide risk and perfectionism, Flett, Hewitt, and Heisel (2014) indicated that perfectionists in psychological distress are more likely to be prone to self-stigma and a general unwillingness to seek help.

In a study examining the relationship between perfectionism and self-stigma of seeking help among high school students, Zeifman et al. (2015) reported a link between self-oriented perfectionism and self-stigma of seeking help in students who had lower levels of contact with individuals with mental illness or less familiarity with mental illness. This relationship between

self-stigma and perfectionism was not present in students with higher levels of contact or familiarity with mental illness (Zeifman et al., 2015). These results have important relevance for mental health in high schools since it suggests that it is those students who are most unfamiliar with mental illness who have the greatest need to learn that seeking psychological help is not a sign of weakness or imperfection.

Self-Stigma and Cultural Relevance

To investigate the question regarding the cross-cultural universality of self-stigma for seeking help, studies have shown that the self-stigma scale (SSOSH) is valid across cultures, with the most recent research demonstrating that across ten countries and regions, self-stigma consistently mediates the relationship between public stigma and attitudes toward seeking services (Vogel et al., 2017). Nonetheless, individuals from families of different cultural backgrounds who hold or promote erroneous beliefs about seeking help for mental health concerns can be especially deterred from both seeking care and engaging in treatment. For example, among children and adolescents in the United States, Latinos report especially high rates of unmet mental health needs relative to other ethnicities (Kataoka, Zhang, & Wells, 2002). However, there has been serious concern raised regarding the lack, indeed absence, of efforts being made to increase access to mental health services for ethnically diverse youth (Cauce et al., 2002). For these youth in question, self-stigma is one factor that limits access to these essential sources of support. The following section provides a summary of research in the self-stigma field highlighting the influential contribution of cultural differences.

Self-Stigma and the Relevance of Culture

There is an important variable in collectivist cultures, which are those cultures that place emphasis on the value of interdependent relationships and group loyalty, known as "face." "Face" refers to the public image that one desires to preserve and maintain in front of others and the social worth gained based on one's performance within interpersonal contexts (Choi & Lee, 2002). The idea of "losing face" is considered detrimental to one's public image or social worth. In particular, within collectivistic cultures, losing face can lead to self-stigma as well as stigma from one's own family and community. Leong, Kim, and Gupta (2011) proposed that losing face is a strong predictor of avoidance of mental health services among Asian-Americans. In a study sampling of university students from Macao and Mainland China, results showed that positive attitudes toward help seeking were significantly and negatively correlated with self-stigma, public stigma, and concerns about a loss of face, but were not significantly related to psychological symptoms. Psychological symptoms themselves were positively associated with a loss of face concerns, self-stigma, and public stigma. While group membership was not a significant predictor of professional help seeking, lower levels of self-stigma, as well as being younger and being female, were all significant predictors.

In addition, unpublished data that has been recently collected suggests that there is evidence of possible sensitivity to mental illness discrimination specifically among South Asian emerging adults (Flett, Michel, Memedoska, Atkey, & Goldberg, 2018). As part of this research, undergraduates at a Canadian university completed online self-report measures, including the Awareness and Agreement subscales of the Self-Stigma for Mental Illness Scale (SSMIS-SF; Corrigan, et al., 2012). As cited earlier in this chapter, while the Awareness subscale reflects knowledge of public stereotypes related to mental illness, the Agreement subscale reflects whether the stereotypes are believed to be factual. There were significant group differences for the Awareness subscale, but not the Agreement subscale. More specifically, South Asian participants reported higher levels of Awareness as compared to those students self-identifying as White. Taken together, the findings suggest possible sensitivity to mental illness discrimination

specifically among South Asian emerging adults. Further work is needed to explore the potential impact of self-stigma on self-concept in this group and on possible reluctance to self-disclose mental health concerns due to fears of being stereotyped.

Future research should continue to examine how self-stigma among individuals with psychological concerns is influenced by cultural factors, with particular emphasis on adolescent populations who may be experiencing earlier onset of these disorders. For example, it is pertinent to examine whether youth whose parents are immigrants experience higher shame in the context of seeking help and whether this reluctance to seek needed help for mental health concerns reflects internalizing stereotypes that their parents may hold. Many immigrant groups, and by extension immigrant families, may be hesitant to access mental health services (Dockery et al., 2015). Furthermore, refugee parents and their adolescent children may also be reluctant to seek help due to public stigma and self-stigma related to mental illness and concerns of possible violation of confidentiality (de Anstiss & Ziaian, 2010). It is evident that levels of self-stigma are a cause for concern across cultures, and as such it is important that international differences be considered in policy, planning as well as the delivery of interventions.

Self-Stigma and the Influence of Parents and Peers

What is likely of no surprise to many educators are the findings based on evidence that, to at least some extent, a proclivity toward self-stigma among youth is associated with intrusive, over-controlling parenting or insensitive and harsh parenting. By extension, young people, who demonstrate a tendency to stigmatize themselves, have been characterized as having remarkably insecure attachment styles as described by attachment style theory (Bowlby, 2005).

The role of relationship influences, including parents and peers, impacts self-stigma. The association of perceived harsh parental criticism (distinct from parents having high expectations) with self-stigma was highlighted by Nepon, Flett, and Hewitt (2012) who examined the links among dimensions of perfectionism, depression, social anxiety, and self-stigma associated with seeking psychological help. A sample of 120 first-year university students completed trait measures of perfectionism, the Perfectionistic Self-Presentation Scale (Hewitt et al., 2003), the Self-Stigma of Seeking Help Scale, as well as measures of depression and social anxiety. The trait measures of perfectionism included the Frost Multidimensional Perfectionism Scale (Frost, Marten, Lahart, & Rosenblate, 1990). This instrument assesses various components of perfectionism. It is of significance because it has separate subscales that assess high parental expectations and parental criticism. Analyses revealed that self-stigma of seeking help was associated positively with all three facets of perfectionistic self-presentation, as well as with concern over mistakes and reported exposure to parental criticism. The association between self-stigma and parental expectations however was not statistically significant. Perfectionistic self-presentation and the various trait perfectionism dimensions were also linked with depression and social anxiety. Hierarchical regression analyses controlling for depression found that perfectionistic self-promotion, concern over mistakes, and parental criticism accounted for unique variance in self-stigma scores. Regarding parental factors, these data suggest that self-stigma is not impacted substantially by parents who have high expectations; rather, it is the perceived tendency for parents to be hypercritical and the harsh demanding messages that those parents direct toward their children that promote a tendency for these youth to stigmatize themselves as emerging adults. This finding is particularly noteworthy given the studies that link parental criticism with psychological distress.

Another investigation examined the possibility that exposure to *helicopter parenting* is associated with self-stigma in adolescents. Helicopter parenting is an extreme and intrusive form of childhood overprotection (Schiffrin et al., 2014) that may promote the sense in children and youth

of being personally weak. Atkey and associates (2015) examined this possibility in a sample of 87 adolescents from a Jewish community high school who completed the SSOSH and the Helicopter Parenting Behaviors Scale (Schiffrin et al., 2014). This parenting measure has separate subscales that assess helicopter parenting and parental autonomy support. As expected, correlational and regression analyses found moderate but significant links between self-stigma and reported exposure to helicopter parenting behaviors, as well as lower levels of parental autonomy support.

Our own research has found that high school students who report having a parental figure as a safe haven also tend to report higher levels of social distance from those with a serious mental illness, suggesting that parental overprotectiveness may generate feelings of caution about mental illness in youth (Zhao et al., 2015). In contrast, a secure attachment style and established relationships with peers are related to reduced self-stigma for seeking help, as well as lower levels of social distance from individuals with mental illness (Zhao et al., 2015).

The association between attachment styles and self-stigma was also examined in another sample of 134 high school students (Atkey, Flett, & Goldberg, 2017). The results from this sample will be described in some detail because these students completed an extensive battery of measures in obtaining an understanding regarding how self-stigma for seeking help relates to personality factors and adjustment indicators.

Participants provided dimensional ratings of four different attachment styles (i.e., secure attachment, fearful attachment, preoccupied attachment, dismissive attachment) using the measure developed by Bartholomew and Horowitz (1991). This measure consists of four paragraphs that separately describe each attachment style with respondents indicating how much each style applies to them. Analyses of the ratings provided by the 134 high school students showed self-stigma was not associated with a preoccupied or a dismissive attachment style. However, it was associated significantly with the fearful attachment style and the absence of a secure attachment style. Results also showed that the link between an insecure self and self-stigma extends beyond self-criticism, self-esteem, and self-efficacy.

Strategies in Limiting Self-Stigma

Research in our laboratory is focused on evaluating an approach that is distinct when the self-stigma literature as a whole is considered, that is, not only does self-stigma reflect the presence of negative characteristics and attributes, it also reflects the absence of positive orientations. This approach embraces a positive psychology perspective and is designed to advance the theme that "the presence of the negative is not equivalent to the absence of the positive." This approach has important implications for prevention and intervention. It is our contention that the most effective way of limiting self-stigma is through proactive prevention programs designed to increase or instill positive qualities and characteristics along with a positive orientation toward the self and personal identity that can limit the tendency to self-stigmatize and the impact of self-stigma. This theme is discussed more extensively in a latter segment of this chapter. These positive attributes should serve to neutralize or ameliorate negative factors that may promote a tendency to internalize stigma.

Parenthetically, it should be noted that while our focus is on children and adolescents, some general evidence in keeping with our position was provided in a new investigation with adult psychiatric patients. This study showed that among adult patients with extensive exposure to discrimination experiences, a greater sense of belongingness and connectedness to others buffered the link between this exposure and self-stigma (Treichler & Lucksted, 2017). These data suggest that a positive interpersonal orientation that promotes relatedness to others is likely to reduce the internalization of stigma among people of various ages.

Our approach focuses on two components, self-compassion and the domains of well-being described by Ryff and her associates (Ryff, 1989;

Ryff & Keyes, 1995). Self-compassion is described in more detail below. As for well-being, Ryff (1989) supplemented research on self-actualization by illustrating the benefits of individual differences in psychological well-being. In many respects, the six elements of well-being that comprise her model are viewed as pathways to positive life adjustment. The six components are autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, and self-acceptance. Ryff (1989) showed that these six domains combine to form a broad higher-order construct of psychological well-being (Ryff & Keyes, 1995).

The 134 high school students described earlier completed a brief 18-item version of the Ryff scales (Atkey, Flett, & Goldberg, 2017). The correlations between self-stigma for seeking help and the well-being domains are shown in Table 13.1. Here it can be seen that particularly robust negative associations were found between self-stigma and autonomy, environmental mastery, personal growth, positive relationships with others, and self-acceptance. We found an overall correlation of −0.45 between self-stigma and an overall score on this measure.

Table 13.1 Correlations between self-stigma and personality and well-being measures in adolescents

Measures	Zero-order correlations	Partial correlations
Well-being – total	−0.47**	−0.42**
WB – autonomy	−0.40**	−0.32**
WB – mastery	−0.19*	−0.05
WB – growth	−0.35**	−0.27**
WB – positive relations	−0.42**	−0.36**
WB – purpose	−0.27**	−0.25**
WB – self-acceptance	−0.29**	−0.23*
Rosenberg self-esteem	−0.20**	–
Self-efficacy	−0.27**	–
Self-criticism	0.15	–
Dependency	−0.03	–
Efficacy	−0.06	–
Secure attachment	−0.36**	−0.29**
Fearful attachment	0.21*	0.13
Preoccupied attachment	−0.02	−0.07
Dismissive attachment	0.11	0.17

Note: *$p < 0.05$, **$p < 0.01$ Based on 134 high school students. Partial correlations reflect controlling for self-esteem, self-efficacy, and self-criticism

Table 13.1 also shows the correlations that the self-stigma measure had with various measures representing the self-concept. Participants completed the Rosenberg Self-Esteem Scale (Rosenberg, 1965), the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) and the adolescent version of the Depressive Experiences Questionnaire (Blatt, Schaffer, Bers, & Quinlan, 1992). This measure assesses self-criticism, dependency, and efficacy. These personality constructs should be associated with self-stigma in light of descriptions of the "why try phenomenon" provided by Corrigan et al. (2009). According to this concept, people prone to self-stigma feel helpless and, as a result of internalizing stigma, experience reductions in self-esteem and self-efficacy. The inclusion of self-concept enabled us to assess this element of their "why try model." It can be seen in Table 13.1 that while there was only a marginal link with self-criticism, the "why try model" was supported with both low self-efficacy and low self-esteem which were associated with greater self-stigma.

Given the overlap between self-stigma and low self-esteem and self-efficacy, and the tendency for people with a lower sense of well-being to have diminished self-esteem and self-efficacy, it is important to establish whether the links between well-being and self-stigma in our sample would remain evident after controlling for the variance attributable to other variables representing the self-concept. The partial correlations are shown in the second column in Table 13.1. The only association that was no longer significant was the correlation between self-stigma and environmental mastery. Overall scores on the Ryff measure were still linked with self-stigma ($r = -0.42$) among the adolescents in our sample.

Self-Stigma and Self-Compassion

Research has begun to explore the relationship between the self-stigma of seeking help and self-compassion, otherwise known as the ability to be

kind and understanding to oneself in times of personal suffering, perceived failure, or feelings of inadequacy (Neff, 2003). Self-compassion is considered a protective resilience factor that may lessen the rate of self-stigma (Heath, Brenner, Lannin, & Vogel, 2018). The reasons for this belief are twofold. First, self-compassion is known to be related to lower levels of defensiveness and self-blame (Terry & Leary, 2011). Second, those who are self-compassionate tend to report lower levels of negative external evaluations (Leary, Tate, Adams, Batts Allen, & Hancock, 2007). Viewing help seeking from an accepting and nonjudgmental perspective may lead an individual to adopt less stigmatizing views toward themselves (Heath et al., 2018). Our own research (Zhao & Goldberg, 2017) has confirmed that self-compassion is associated with lower levels of both self-stigma and self-stigma of seeking help in an emerging adult sample of first-year university students. What was even more fascinating were findings from regression analyses which showed that different aspects of self-compassion were uniquely associated with the two different kinds of self-stigma. Self-kindness was the only component of self-compassion that significantly contributed to variability in self-stigma for having mental illness, whereas a sense of common humanity was the only significant predictor of self-stigma for seeking help. In other words, if you report self-kindness, you are less likely to report self-stigma for having mental illness; if you endorse the common humanity component of self-compassion, you are less likely to report experiencing self-stigma as it relates to seeking professional help. The results not only validate the distinctiveness of the two self-stigma constructs but also have important practical implications. That is, self-stigma may pose a particular barrier to seeking help for those vulnerable individuals who feel particularly ashamed about being different, and have not yet recognized that we share our human condition including our many imperfections.

In contrast, self-compassionate individuals are more likely to be self-forgiving and are most likely to recognize that everyone experiences challenges and occasionally needs help, and because of this, even if they perceive there is a societal stigma around help seeking, they are less likely to internalize such views (Heath et al., 2018). Heath et al. (2018) used a postsecondary sample and found that self-compassion moderates the effects between perceived public stigmas on the self-stigma of seeking help. In other words, out of the individuals who reported greater perceived public stigma for seeking help, those with higher self-compassion reported lower self-stigma for seeking help compared to those with lower self-compassion. As expected, the negative effects of perceived public stigma for seeking help appeared to lower an individual's risk of internalizing these beliefs, in part due to the buffering effects of self-compassion.

Unfortunately, to our knowledge, the literature has not yet included a focus on self-stigma and self-compassion as it relates to adolescents, so there are many ways in which this field of research can be extended and further developed. However, the limited research on this topic will be discussed due to its relevance for future work and the ability to inform treatment interventions. Much of the research looking at self-stigma for seeking help and self-compassion has been explored in the context of gender norms. One important issue is the finding that older adolescent girls have the lowest levels of self-compassion and are potentially most in need of related interventions (Bluth, Campo, Futch, & Gaylord, 2017). As well, researchers have looked at the many factors related to the self-stigma of help seeking with respect to norms of masculinity. Disturbingly, a large-scale survey of adolescents has found that when controlling for various demographic characteristics, boys report a much lower propensity to seek help for depression as compared to girls (Sen, 2004). This same study also found that of all youth surveyed, irrespective of gender, the vast majority with depressed mood or at risk for self-injury reported not seeking help from anyone (Sen, 2004). In addition, youth reported they would be more likely to refer girls to get psychological help as compared to boys (Raviv, Sills, Raviv, & Wilansky, 2000). Researchers have proposed that the reason for this underutilization of services by males can be

attributed to the pressure to adhere to traditional gender norms such as independence, resilience, self-reliance, and emotional control (Levant, Wimer, Williams, Smalley, & Noronha, 2009; Tsan, Day, Schwartz, & Kimbrel, 2011).

Given that athletics are often tied to conceptualizations of traditional masculinity, Wasylkiw and Clairo (2016) assessed attitudes toward help seeking by exploring the relationship between conformity to masculine norms and self-compassion. These authors first established that intercollegiate athletes, in contrast to a comparison group, reported higher levels of both masculinity norms and self-compassion. They also found that traditional masculinity norms were significantly predictive of less favorable attitudes toward help seeking due in part to the tendency to self-stigmatize (Wasylkiw & Clairo, 2016). Most notably, however, regardless of the degree to which traditional masculinity norms were endorsed, higher levels of self-compassion were actually predictive of more positive attitudes toward help seeking, but only in the intercollegiate athlete group. The authors proposed that it might have been the team cohesion aspect of sports that drove this effect, as it reinforces self-compassion by promoting a sense of a shared community among the athletes.

Heath, Brenner, Vogel, Lannin, and Strass (2017) investigated the mechanisms that buffer or minimize the relationship between masculinity norms and self-stigma for seeking help, as well as resistance to self-disclosure among college men. Resistance to self-disclosure referred to the degree to which the athletes viewed disclosing emotions to a counselor as an anticipated risk (Vogel & Wester, 2003). Increased self-compassion was associated with lower levels of self-stigma for help seeking as well as disclosure risks. Similar to the study by Wasylkiw and Clairo (2016), they also found that self-compassion buffered and reduced the relationship between masculine norm adherence and common barriers to seeking help, which in this case were help-seeking self-stigma and resistance to self-disclosing. Specially, those men with higher self-compassion reported a weaker relationship between masculinity norm adherence and these obstacles to help seeking. Clearly, results appear to indicate that it would be especially beneficial that interventions designed to increase help-seeking behavior among men integrate a component focused on increasing self-compassionate thoughts and behaviors.

Although advancements have been made regarding research on self-compassion and self-stigma, there remain areas in which vital work on this topic is needed. Perhaps most evidently, all research studies cited above use postsecondary school samples. It would be extremely informative to further investigate self-compassion in adolescence and its potential role as a buffer of self-stigma. In addition, research will want to consider looking at a domain-specific form of self-compassion known as social self-compassion, known as the propensity to be kind and understanding toward oneself in response to challenging interpersonal situations with others (Flett, 2017). This interpersonal form of self-compassion is a resilient factor that is highly applicable to youth who are establishing their own social identities as well as reacting and responding to potential instances of peer pressure and conflict. As mentioned above, research has explored how masculinity norms relate to self-compassion and self-stigma for seeking help, which has provided knowledge regarding how to best develop and design future initiatives for males in particular. However, research has not always shown consistency regarding gender differences related to the self-stigma of seeking help for mental health concerns, as outlined by the next section of this chapter.

The Influence of Gender and Vulnerability to Youths' Help-Seeking Behavior

Male and female students may experience different social consequences related to psychological problems and symptoms, which can impact utilization patterns of mental health services. There are numerous harmful consequences associated with higher rates of self-stigma for seeking help among males. Data from a sample of undergradu-

ate males has shown a significant link between gender role conflict, otherwise known as the experience of negative consequences due to socialized gender roles, and the willingness to seek counseling for psychological or interpersonal problems. Men experiencing higher rates of gender role conflict were less likely to seek counseling, in part due to the self-stigma of seeking help (Pederson & Vogel, 2007). Research has also shown that the relationship between traditional masculinity ideology and gender role conflict and attitudes toward seeking psychological help is mediated by internalized self-stigma as measured by the SSOSH (Levant et al., 2013). These results suggest that men who self-stigmatize help seeking are particularly at risk for not getting access to appropriate treatment and thus may be more susceptible to being undiagnosed for mental health conditions, particularly for those disorders which tend to be more stigmatizing for males such as eating disorders (Griffiths, Murray, & Touyz, 2015).

Research directly looking at self-stigma for help seeking among youth is limited and inconclusive. However, we do know that there can be sex differences in early adolescence with respect to the role of perceived public stigma associated with seeking mental health services. Research has found that, compared to girls, boys tend to have less mental health knowledge and experience, report higher mental health stigma, and turn to family members first for emotional concerns (Chandra & Minkovitz, 2006). Girls are twice as likely as boys to report that they are willing to use mental health services (Chandra & Minkovitz, 2006). Chandra and Minkovitz found that higher levels of both perceived parental disapproval and perceived public stigma helped to explain these gender differences with regard to a willingness to use mental health services. While it is not possible to extrapolate how these results directly compare to the self-stigma of seeking help, it provides us with a general guideline of when and how best to target misconceptions regarding mental illness in the hopes that this information will help prevent the occurrence of self-stigma in later years. Mental health education and services in middle school that incorporates stigma reduction efforts and actively involves parents may be especially useful at helping to reduce these gender disparities early on in adolescence (Chandra & Minkovitz, 2006).

Evaluating Interventions Designed to Reduce Self-Stigmatization

This final segment focuses on interventions designed to reduce self-stigma. We begin by reiterating that multifaceted interventions focused on self-stigma reduction in children and adolescents have yet to be developed.

Generally, the literature on self-stigma related to interventions that have been developed and implemented is focused on self-stigma in adults who report various forms of mental illness. Yanos, Lucksted, Drapalski, Roe, and Lysaker (2015) identified six different intervention approaches, with each addressing the self-stigma of adult patients. The six interventions were given either generic names (i.e., self-stigma reduction program, ending self-stigma) or names reflecting specific themes (i.e., healthy self-concept, coming out proud, anti-stigma photo voice intervention, narrative enhancement and cognitive therapy).

A recent study explored whether narrative enhancement and cognitive therapy (NECT) can reduce self-stigma and promote recovery among participants with serious mental illness (Roe, Hasson-Ohayon, Mashiach-Eizenberg, Yamin, & Lysaker, 2017). This is a multi-session group intervention that has a four-part structure. Participants are oriented to the intervention and in recognizing internalized stigma. Participants then reflect on how stigmatizing beliefs have a negative impact on cognitive and emotional aspects of their personal identity. Lastly, individuals construct and share a narrative that incorporates and makes sense of one's self and illness, so that the illness is no longer a key component of their primary identity. This approach encourages participants to actively challenge and reject self-stigma and narrate their life story in a different manner. After completing the intervention, quantitative analyses revealed a significant increase in

self-clarify and decrease in self-stigma. It will be necessary to evaluate in future research if these same strategies are equally if not more useful for adolescents who feel a sense of self-stigma and shame related to their mental illness concerns.

One promising way to combat self-stigma is through a contact approach, which involves dispelling negative beliefs about mental illness through direct in vivo interactions with mental health consumers. This strategy is particularly effective when combined with psychoeducation, which involves informing people with factual information that challenges the myths of mental illness (Corrigan & Penn, 1999). This is evidenced by brief school-based education workshops that have shown on a national and international scale that contact can increase mental health literacy and produce lasting positive changes in the reported attitudes of youth toward mental illness (Pinfold et al., 2003). Yau, Pun, and Tang (2011) found that reducing self-stigma was possible when youth were provided contact with people who have mental illness within a horticultural farm vocational setting. Despite the relevance of how self-stigma can impact the experience of teenagers experiencing their first symptoms of mental illness, this was previously the only study that had directly assessed the effects of the self-stigma of seeking help using an adolescent sample. To address this major limitation, Hartman et al. (2013) explored the effectiveness of a single-session anti-stigma intervention with high school youth.

Hartman et al. (2013) assessed the impact of an interactive presentation to students in grades 9–12 on the topic of mental illness, with the highlight being an autobiographical talk by a woman with schizophrenia who spoke about her struggles with stigma related to her disorder and the shame she felt about seeking help. The students completed a variety of pre- and post-presentation measures that included factual knowledge of schizophrenia, intended behavior toward people with schizophrenia in the form of social distancing, and self-stigma of seeking help. Accuracy of factual knowledge increased significantly after delivery of the presentation, while social distance toward those with schizophrenia decreased. Out of the total sample of 282 high school youth, about 1 out of 8 students (12% of the sample) self-identified as having significant levels of self-stigma at levels high enough to be considered a barrier for seeking help. By the end of the presentation, the sample reported a significant 27% overall reduction in levels of self-stigma. Interestingly, risk factors associated with greater levels of self-stigma included younger age, lack of familiarity with mental illness, and lower self-esteem. The results were promising, given that they produced considerable immediate improvements in knowledge, social distance, and reduced rates of self-stigma through the use of a brief anti-stigma intervention.

Another area that is gaining considerable attention and shows some promise of reducing self-stigmatizing attitudes is self-compassion. Self-compassion interventions have potential to be as effective as contact approaches in decreasing the self-stigma of seeking help, although at this point, there is a lack of formal experimental studies directly assessing this form of intervention for self-stigma. To address this gap in the literature, our own research is aiming to further extend this line of inquiry. Although self-compassion is predicted to be an influential protective factor against the self-stigma of seeking help, more research is needed to ascertain the extent to which this is the case. Future researchers may want to explore how self-compassion interventions complement or coincide with efforts designed to instill self-forgiveness in religious schools that promote these teachings.

According to a comprehensive review, there is also a contrasting self-stigma reduction approach that is gaining more widespread acceptance (Mittal, Sullivan, Chekuri, Allee, & Corrigan, 2012). Rather than using interventions that aim to change stigmatizing beliefs and attitudes, these alternative approaches involve accepting stigmatizing stereotypes without challenging them and work on enhancing stigma-coping skills through improvements in self-esteem, empowerment, and help-seeking behavior.

Personal empowerment is a particularly crucial element as it can be viewed as the inverse of self-stigmatization because it promotes a sense of

"power, control, activism, righteous indignation, and optimism" (Corrigan & Rao, 2012). While this empowerment approach is gaining traction, further empirical investigation of this method is needed. At this point, there is some initial theoretical support for its use. Brohan, Elgie, Sartorius, Thornicroft, and the GAMIAN-Europe Study Group (2010) found a strong inverse relationship between self-stigma and empowerment, suggesting that a focus on empowerment may reduce levels of self-stigma. In addition, Knight, Wykes, and Hayward (2006) attempted to improve self-esteem by educating clients about stigma, myths, and realities without reducing levels of stigma, to increase awareness of, and coping with, stigma and to also increase self-esteem levels. The authors found significant increases in self-esteem, as well as decreases in depression, positive and negative symptoms of schizophrenia, and general levels of psychopathology. Overall, these findings suggest that empowerment strategies show solid potential as an important avenue by which self-stigma may be reduced. It is encouraging to see that school assemblies and workshops on these themes are being delivered in secondary schools by youth-led programs such as YouthSpeak where speakers share their personal stories with students to convey that mental health impacts everyone and empower youth through leadership training (see www.youthspeak.ca).

An example of treatment that incorporates psychoeducation, empowerment, and coping strategies for stigma reduction is illustrated by a culturally sensitive intervention developed and based in Chile for outpatient mental health service users (Schilling et al., 2015). This randomized control trial utilized a series of recovery-based group workshops. During these workshops, individuals were asked to make use of life narratives and the meanings they attach to certain life events in the service of reminding themselves of beliefs, values, skills, and relationships that are sources of support. Narrative practices were used as a method for individuals to reframe their life stories and differentiate themselves from their mental disorder, thereby lessening the negative impacts of self-stigma. Video case vignettes were shown where mental health service users shared their lived experiences of discrimination with the intervention participants. Importantly, this is the first evidence-based intervention attempting to alleviate levels of self-stigma among those with severe mental illness in Chile, and the first published study on this topic conducted within Latin America, a region where levels of public stigma and self-stigma related to mental illness are prevalent. Following the intervention, preliminary qualitative reports from participants suggested that this intervention was feasible and acceptable to implement. They also reported increased self-confidence in the use of anti-stigma strategies. This research again underscores the influence of narrative, empowerment, and contact strategies in helping to reduce levels of self-stigma, as well as the importance of conducting these studies cross-culturally to evaluate effectiveness of interventions. Interventions for adolescents that use a similar framework and that incorporate these same elements may be particularly beneficial, although future research with this population is needed to ascertain if this is the case.

The long-lasting effects of interventions designed to reduce self-stigma are uncertain, however. A recent meta-analysis of randomized control trials aimed at reducing self-stigma in people with mental illness found insufficient evidence (Büchter & Messer, 2017). That being said, the authors assert that it is premature to conclude that these interventions are ineffective, when there are such a limited number of studies to assess that are hampered by methodological limitations and small sample sizes. This review differs from the one by Mittal et al. (2012) in a couple key respects. The review by Mittal did not use stringent methods to analyze data and assess risk of bias, which makes comparisons with the review by Buchter and Messer (2017) challenging. In addition, Mittal and colleagues included studies in their review that used patients without a clear clinical diagnosis as well as studies that employed a variety of study designs. As Buchter and Messer (2017) note, since research on self-stigma interventions is still in its preliminary stages, there is a need for more discussion regarding the common goals, design, and evaluation of

interventions on reducing self-stigma. Ultimately, this would likely involve consulting with people who experience self-stigmatization to investigate when they felt they would be best served by these interventions during treatment and what methods of delivery are most appropriate.

What advice or suggestions can be provided to mental health professionals and educators who are seeking to reduce or eliminate self-schema? To begin, we suggest that there would be an early focus on prevention among school children. As part of their discussion on students who hide their distress and "fly under the radar," Flett and Hewitt (2013) advocated for the role of schools in mental health promotion; it was suggested that there is a need for system-wide preventive efforts informed by school mental health counselors. Such efforts would focus on heightening awareness of key themes and building skills and responses that would decrease distress among students but also increase the tendency to adaptively respond when help is needed. In practice, mental health promotion would become an integral part of the regular school schedule. Such an approach would provide the opportunity to develop and deliver a multicomponent preventive program that would help alleviate the need to combat stereotypes because they are addressed before becoming pervasive.

Regarding the components of this program, we would continue to emphasize themes such as self-compassion and empowerment with a specific focus on certain critical mental health psychoeducational areas. One topic would be the normalization of distress; at an early age, students need to know that feelings of distress are typical, not atypical, and if they are feeling sad or anxious, they are not alone. The sense of being alone seems central to the self-stigma process during adolescence (McKeague et al., 2015). This emphasis on normalization is essential to combat the feelings of being uniquely defective.

Elements of this "ideal intervention" could be tailored to the needs of certain types of students. Those students who are self-critical perfectionists are prone to self-stigma, and these students would benefit from learning emotional regulation skills and cognitive-behavioral techniques that transform negative thoughts into positive self-thoughts. The optimal intervention will also focus on problem-solving and skills development. Here we would suggest that all students develop self-advocacy skills in ways that are keeping with the programs developed to promote self-advocacy among students with disabilities (Kramer, 2015). Finally, returning going to the evidence regarding proven effective strategies in reducing stigma, students should benefit substantially from exposure to models who have successfully met the challenge of stigma and mental health issues by actively employing techniques that accept that stigma happens but it should not be internalized. The same strategies that apply to students likely apply to parents with mentally ill children, who likely feel isolated and in need of additional supports. We argue that it would be beneficial for interventions to include a parental focus in keeping with work showing that parents of mentally ill children tend to internalize the stigma associated with the mental illness themselves and potentially sustain their children's self-stigma.

Concluding Remarks

Research suggests that self-stigmatization of mental illness can be extremely debilitating; its high degree of prevalence is reflected in the number of young people who indicate that they would feel "weak" if they experienced a mental health problem. We have reviewed what is known about self-stigma in general and on investigations conducted specifically with adolescents. These results suggest that adolescents who are prone to self-stigma have distinguishing characteristics such as insecure attachments and deficits in major well-being domains. One of our hopes is that this review will serve as a catalyst for further research on self-stigma in children and adolescents. We are also hopeful that this chapter will inspire sophisticated prevention efforts that "shine a light" on self-stigma reduction. Programs designed to bolster positive qualities and characteristics should prove especially useful in keeping with the evidence that self-stigma of mental illness not only

reflects the presence of negative attributes but also reflects the absence of positive orientations and views of the self. Programs that foster self-compassionate responding to suffering, bolster feelings of empowerment, and enhance stigma-coping skills show promise for effectiveness and have potential as additional intervention strategies along with more established methods of challenging mental illness stereotypes such as through contact and psychoeducation. However, we reiterate that future research must continue to explore these key questions among adolescents in particular. Such research with youth holds the potential in addressing self-stigma and its consequences that in turn could increase the likelihood of help seeking when needed and thereby reduce human suffering.

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Nonsuicidal Self-Injury: What Schools Can Do

14

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Abstract

Nonsuicidal self-injury (NSSI), which refers to direct and deliberate bodily harm without lethal intent (e.g., self-cutting, burning), is a serious and burgeoning mental health concern among school-aged youth. Despite the widespread prevalence of NSSI, teachers, school mental health practitioners, administrators, and parents often report a lack of understanding of the behavior and struggle to identify the ways to best respond to NSSI in schools. In the present chapter, an overview of recent research on the prevalence, risk factors, and motivations underlying NSSI is provided to facilitate a better understanding of this often misunderstood behavior. Next, guidelines are offered for developing a school policy on identifying and responding to NSSI in schools, and the roles and responsibilities that members of the school community can take on to work toward addressing NSSI are discussed.

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Part I: Understanding Nonsuicidal Self-Injury among Students

What Is Nonsuicidal Self-Injury (NSSI)?

Nonsuicidal self-injury (NSSI) is defined in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* as the direct and deliberate destruction or alternation of bodily tissue in the absence of lethal intent and commonly includes behaviors such as self-cutting, burning, and severe scratching (American Psychiatric Association, 2013). As reflected in this definition, NSSI can be differentiated from suicidal behavior (e.g., a suicidal attempt) in which there is conscious intent to end one's own life (Hamza, Stewart, & Willoughby, 2012; Nock, 2010). It is also important to note that NSSI does not refer to behaviors that are socially sanctioned (e.g., tattooing, piercings, etc., Nock & Favazza, 2009), and does not include repetitive habitual behaviors resulting from severe developmental disabilities (American Psychiatric Association, 2013).

Over the past decade, research on NSSI has increased dramatically, and there is mounting evidence that NSSI is a widespread and significant mental health concern among school-aged youth and adolescents (Klonsky, Victor, & Saffer, 2014; Lewis & Heath, 2015). As a result, there is a strong need to summarize recent advances on

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NSSI to facilitate an up-to-date understanding of the prevalence, risk factors, and motivations underlying NSSI among persons working in schools (De Riggi, Moumne, Heath, & Lewis, 2016; Hasking et al., 2016). In order to identify and respond to NSSI in schools, teachers, school mental health practitioners, administrators, and other school staff first need to have a strong understanding of this behavior.

Who Engages in NSSI?

Recent estimates indicate that as many as 8% of preadolescents (ages 10–14; Barrocas, Hankin, Young, & Abela, 2012; Hankin & Abela, 2011; Hilt, Nock, Lloyd-Richardson, & Prinstein, 2008; Prinstein et al., 2010) and 12–28% of adolescents have engaged in NSSI (Baetens, Claes, Muehlenkamp, Grietens, & Onghena, 2011; Brunner et al., 2014; Muehlenkamp, Claes, Havertape, & Plener, 2012; Muehlenkamp, Williams, Gutierrez, & Claes, 2009; Ross & Heath, 2002). Although estimates of prevalence range, variation likely stems from differences in the types of assessments that have been used to assess the prevalence of NSSI. Specifically, when researchers use one-item assessments to measure NSSI (e.g., have you ever intentionally hurt yourself without wanting to kill yourself?), these assessments tend to yield lower prevalence rates of NSSI than behavioral checklist measures (e.g., which of the following behaviors have you engaged in? Check any that apply – cutting, burning, severe scratching; Muehlenkamp et al., 2012; Swannell, Martin, Page, Hasking, & St John, 2014). Checklist measures may result in higher prevalence rates, because these assessments make NSSI behaviors easier to recall and because students who might not think they are self-injuring may still engage in NSSI behavior (Heath, Toste, Nedecheva, & Charlebois, 2008; Swannell et al., 2014). For example, a student who does not engage in self-cutting behavior may not think other behaviors could be regarded as self-injurious (e.g., self-hitting). In a recent large-scale comprehensive review of the research on NSSI prevalence, it was found that the average prevalence of NSSI among adolescents (across studies using various assessment types) was 17% (Swannell et al., 2014), suggesting that approximately one out of every five students has engaged in NSSI.

There is strong agreement in the field that NSSI tends to have its onset in early adolescence, around 13 years of age (Hankin & Abela, 2011; Heath et al., 2008; Whitlock et al., 2011). Indeed, when students are asked to retrospectively report when they first starting self-injuring, most students report that the early adolescent years are when they first tried the behavior (Whitlock et al., 2011). Similarly, in one longitudinal study (which assessed NSSI over time), the rate of NSSI engagement doubled as youth entered the adolescent years (13 years of age and above; Hankin & Abela, 2011). Although early adolescence is when NSSI typically has its onset, research has shown that late adolescence and early adulthood also represent periods of increased risk for NSSI engagement (Heath et al., 2008; Whitlock, Eckenrode, & Silverman, 2006), suggesting that both the secondary and postsecondary school years may be especially critical periods for NSSI prevention and intervention.

In some studies, it has been found that NSSI is more prevalent among females than males (Baetens et al., 2011; Plener, Libal, Keller, Fegert, & Muehlenkamp, 2009; Sornberger, Heath, Toste, & McLouth, 2012); however, in other studies, no gender differences have been found in terms of prevalence (Andover, Primack, Gibb, & Pepper, 2010; Asarnow et al., 2011; Bureau et al., 2010; Claes, Houben, Vandereycken, Bijttebier, & Muehlenkamp, 2010; Whitlock et al., 2011). It is interesting to note these gender differences tend to be more pronounced in early adolescence and then diminish in later adolescence and early adulthood. One possibility for these differences is that females may start engaging in NSSI at an earlier age, which could account for findings that females report more NSSI engagement than males earlier on in development (e.g., Andover et al., 2010; see Nixon, Cloutier, & Aggarwal, 2002 for a similar finding). Alternatively, gender differences seem to be more marked among clinical samples rather than

community samples, which could stem from differences in males' willingness to disclose and seek help for NSSI (Bresin & Schoenleber, 2015). Another reason for the reported gender differences in prevalence may be because researchers have typically assessed methods of NSSI more commonly engaged in by females, as compared to males. In the past, measures of NSSI primarily assessed cutting behaviors; more recently, measures have included a broader spectrum of NSSI behaviors such as self-hitting, burning, and head banging (Heath et al., 2008; Klonsky & Glenn, 2009). Researchers have consistently found that females are more likely to report cutting behaviors, whereas males are more likely to report self-hitting and burning behaviors (Andover et al., 2010; Barrocas et al., 2012; Sornberger et al., 2012; Whitlock et al., 2011). Thus, research that has primarily relied on assessments of cutting behaviors may be more likely to produce gender differences than research assessing more diverse NSSI behaviors (e.g., cutting, burning, head banging, hitting, etc.).

Studies on NSSI have been predominantly conducted in Western countries, including Canada, the United States, Australia, and Europe (Claes et al., 2010; Gholamrezaei, DeStefano, & Heath, 2015; Hanania, Heath, Emery, Toste, & Daoud, 2015; Sornberger et al., 2012; Tatnell, Kelada, Hasking, & Martin, 2014; see Muehlenkamp et al., 2012 for a review), and findings suggest that NSSI is a widely occurring mental health concern among school-aged youth and adolescents both locally and internationally. In fact, in three recent reviews in which NSSI prevalence rates were examined across continents and countries (e.g., Europe and North America or several countries within Europe), comparable rates of NSSI prevalence were found (Muehlenkamp et al., 2012; Plener et al., 2009, 2013). It is important to note, however, that research on NSSI has largely relied on the use of Western and predominantly Caucasian samples, and less work has been conducted among non-Western cultures and racial minorities (Gholamrezaei et al., 2015). Comparable rates of NSSI have been found in some Asian countries (e.g., China, Japan, Taiwan; Jiang, Yu, Zheng, Feng, & Ling, 2011; Wan, Xu, Chen, Hu, & Tao, 2015), but gender differences have been less pronounced in these studies. In particular, a common finding is that males and females do not differ in their most commonly endorsed methods of NSSI (i.e., males and females are equally likely to engage in self-cutting and hitting; for a review, see Gholamrezaei et al., 2015).

Why Do Students Engage in NSSI?

Major advances in research have been made on understanding the motivations underlying NSSI behavior among students (Chapman, Gratz, & Brown, 2006; Hamza & Willoughby, 2015; Klonsky & Glenn, 2009; Nock & Prinstein, 2004, 2005; for a review see Klonsky, 2009). Historically, NSSI was often regarded as a form of attention-seeking behavior or misconstrued as a suicidal attempt (Best, 2006; Carlson, DeGeer, Deur, & Fenton, 2005). Recent research and theory, however, suggest that students engage in NSSI because it serves as a form of coping behavior, used primarily to regulate distressing emotional states or, less commonly, distressing social situations (Hamza & Willoughby, 2015; Klonsky, 2009; Nock, 2010). Indeed, when asked why they self-injure, students overwhelmingly report that NSSI helps to reduce negative emotions (e.g., stress, anxiety, anger, sadness; Klonsky, 2007; Klonsky & Glenn, 2009). Further, research using assessments of NSSI as it occurs in real time (i.e., individuals report on their emotions before and after engaging in NSSI) also has shown that negative emotions tend to increase before NSSI and decrease following the act (Armey, Crowther, & Miller, 2011; Muehlenkamp et al., 2009; Nock, Prinstein, & Sterba, 2009). Less commonly, individuals report that NSSI serves to modulate overwhelming interpersonal distress (e.g., to get others to leave one alone, to create a boundary between one's self and others, to fit in with peers; Klonsky & Glenn, 2009; Lloyd-Richardson, Perrine, Dierker, & Kelley, 2007; Turner, Chapman, & Layden, 2012; Zetterqvist, Lundh, Dahlström, & Svedin, 2013). These

findings are consistent with the notion that NSSI primarily serves as an emotion regulation strategy used to cope with distress (rather than to get attention or manipulate others; Klonsky & Glenn, 2009; Lloyd-Richardson et al., 2007; Muehlenkamp, Brausch, Quigley, & Whitlock, 2013; Nock & Prinstein, 2004; You, Lin, & Leung, 2013; Zetterqvist et al., 2013).

Consistent with recent research and theory that NSSI occurs in an effort to regulate intrapersonal and interpersonal distress (Klonsky & Glenn, 2009; Nock, 2010), students who engage in NSSI can be differentiated from students who do not self-injure on several measures of risk. Students who engage in NSSI report more negative emotions, depressive symptoms, and anxiety (Bresin, Carter, & Gordon, 2013; Hamza & Willoughby, 2014; Hankin & Abela, 2011; Hilt, Nock et al., 2008; Marshall, Tilton-Weaver, & Stattin, 2013), and lower levels of self-esteem and self-worth, than students who do not engage in NSSI (Claes et al., 2010). Moreover, students who engage in NSSI report lower levels of social support and peer and parent relationship quality than students who do not self-injure (e.g., higher levels of alienation, criticism, and conflict; Bureau et al., 2010; Jiang et al., 2016; Muehlenkamp et al., 2013; Tatnell et al., 2014; Whitlock et al., 2013). Taken together, these findings offer compelling support that students who engage in NSSI are at heightened risk for psychosocial distress, and NSSI may be one form of coping behavior used by these students (Hasking et al., 2016).

Part II: Identifying and Responding to NSSI Among Students

Schools are uniquely positioned to address the mental health needs of students because students spend a significant portion of their time in school (Roberts-Dobie & Donatelle, 2007), and schools already provide mental health services to students (McAllister, Hasking, Estefan, McClenaghan, & Lowe, 2010). Moreover, it may be less stigmatizing for youth to access services in the school than being referred to an external agency (Hasking et al., 2016). Given that NSSI tends to have its onset during the school-aged years, is a widely occurring mental health concern among students (see Muehlenkamp et al., 2012; Swannell et al., 2014), and that NSSI is often disclosed at school (e.g., peers, teachers, coach, etc.; Armiento, Hamza, & Willoughby, 2014; Fortune, Sinclair, & Hawton, 2008; Nixon, Cloutier, & Jansson, 2008), ensuring that schools are prepared to identify and respond to students engaging in NSSI is critically important (Heath, Toste, & MacPhee, 2010). There is strong consensus in the field that schools should collectively develop and implement a policy on responding to NSSI (not just policies on suicidal behavior) to ensure an informed, collaborative, and consistent response to self-injury in schools (Berger, Hasking, & Reupert, 2015; Bubrick, Goodman, & Whitlock, 2010; Hasking et al., 2016; Lieberman, Toste, & Heath, 2009; Toste & Heath, 2010; Walsh, 2006; Walsh & Muehlenkamp, 2013). As Berger, Hasking et al. (2015) note, having a school policy not only ensures that NSSI is effectively addressed, but it also makes self-injury prevention and intervention significant priorities in schools.

What Should a School Policy on NSSI Include?

The development of any policy (or protocol) for addressing NSSI should include participation from all members of the school community to ensure that the plan will be successfully implemented (Lieberman et al., 2009; McAllister et al., 2010). Several authors have offered guidelines for schools around developing effective policies for identifying and responding to NSSI in schools (Berger, Hasking et al., 2015; Bubrick et al., 2010; Hasking et al., 2016; Heath & Lewis, 2013; Lieberman et al., 2009; Toste & Heath, 2010; Walsh, 2006). A summarized and integrated conceptual model of these guidelines is presented in Fig. 14.1, and a brief overview of several proposed components of a school policy on NSSI will now be provided.

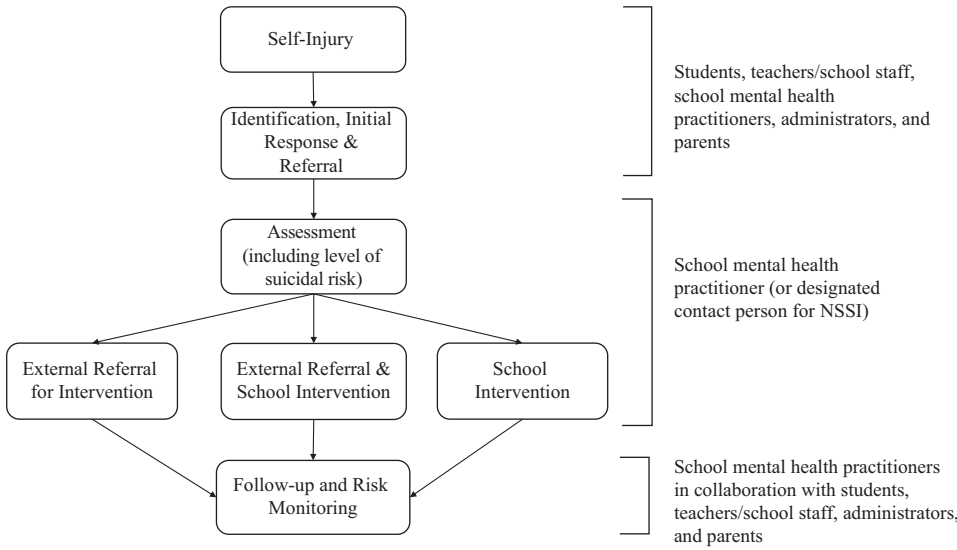

Fig. 14.1 Developing a school policy on NSSI

Identification, Initial Response, and Referral As a starting point, all members of the school community (i.e., teachers, school staff, school mental health practitioners, administrators, etc.) should be trained in how to identify and respond to self-injury within schools (Berger, Hasking et al., 2015; Lieberman et al., 2009; Shapiro, 2008; Walsh, 2006; Walsh & Muehlenkamp, 2013). Ensuring that the initial response to self-injury (whether the behavior is directly disclosed, suspected, or revealed from another student) is a positive experience for the student who is self-injuring is extremely critical (De Riggi et al., 2016), because this initial response may determine whether the student will be willing to disclose and seek care from a more formal source (i.e., mental health practitioner; Lieberman et al., 2009; Toste & Heath, 2010; Walsh, 2006; Walsh & Muehlenkamp, 2013). Moreover, a negative disclosure experience could lead to more distress for the student, resulting in more self-injurious behaviors (Toste & Heath, 2010). Thus, although students would not typically be trained in the NSSI school policy, increasing student knowledge around understanding and responding to unhealthy coping behaviors, such as NSSI, has been encouraged to facilitate beneficial peer responses to disclosures (Muehlenkamp, Walsh, & McDade, 2010). When NSSI is suspected (e.g., by a peer or teacher) or has been identified (e.g., the student disclosed to a fellow peer, who told a teacher), a clearly identified mental health practitioner within the school (or a designated equivalent) who serves as the point of referral for NSSI should be notified (Berger, Hasking et al., 2015; De Riggi et al., 2016; Toste & Heath, 2010). Ideally, the student who self-injures would be involved (or at the very least, informed) about notifying the mental health practitioner with the support of the referring peer and/or teacher. In the event that this primary contact person is unavailable, the school policy should also provide a clearly identified secondary point of contact (e.g., a member of an existing crisis response team in the school; De Riggi et al., 2016).

Assessment (Including Level of Suicidal Risk) The primary contact person for handling NSSI (typically an identified school mental health practitioner or other designated equivalent) should first try to determine whether NSSI is occurring (when NSSI is suspected). At this first level of assessment, the mental health practitioner may start by inquiring about how the student has been feeling and whether he/she has been experiencing any stress or difficulty coping,

which could lead into a discussion around NSSI (Lewis & Heath, 2015). This approach also is useful to initiate an open conversation around unhealthy coping behavior more generally (e.g., substance use, risk-taking behavior, unhealthy eating behavior), particularly when it is unclear whether NSSI is occurring. If NSSI has been identified, the second level of assessment should include a more focused and formal discussion around the NSSI behaviors, as well as an assessment of the student's level of suicidal risk. If the student is unwilling to discuss their NSSI behaviors, it is important that the suicidal risk assessment is still conducted. For example, the mental health practitioner could state: "I'm going to provide you with some information about unhealthy coping behavior (e.g., self-cutting), and some of the resources we have available. It is okay if you do not feel comfortable talking about your unhealthy coping behaviors at this time, but I am obligated ensure your safety, and need to ask a couple questions about whether you're having any thoughts about ending your life." An assessment of suicidal risk is essential to ensure that an appropriate care plan is identified (Bubrick et al., 2010; Lieberman et al., 2009; Toste & Heath, 2010; Walsh, 2006). If there is not someone who can provide an assessment of self-injurious behaviors at the school level, the designated NSSI contact person should be responsible for contacting a trained school professional or making a referral to an external source of support for the student (e.g., psychologist, community agency – Berger, Hasking et al., 2015; Lieberman et al., 2009; Toste & Heath, 2010; Walsh, 2006). It is important that the person conducting the self-injury assessment have training, expertise, and comfort in working with students who engage in NSSI (Lieberman et al., 2009; Toste & Heath, 2010 ; Walsh & Muehlenkamp, 2013).

If the student is willing to discuss their NSSI as part of the assessment, rather than try to assess the severity of the NSSI (e.g., asking to see the injuries – which may be regarded as overly intrusive and disruptive to the student-practitioner relationship), the goal of the assessment should be to ascertain the student's degree of risk for more lethal forms of self-injury. Thus, questions pertaining to the frequency of engagement (both the number of episodes and the number of incidents per episode, e.g., one episode in the past week, with seven cuts/incidents), number of methods/types of self-injury, duration of self-injury, and level of suicidal ideation/planning can be used to identify students at risk. There is mounting evidence that more frequent engagement in NSSI (e.g., more than ten lifetime episodes), multiple methods of NSSI engagement (i.e., two or more methods), and longer duration of self-injury (particularly sustained self-injury over time without stopping) are associated with increased suicidal risk (Hamza & Willoughby, 2013; Klonsky & Olino, 2008; Whitlock, Muehlenkamp, & Eckenrode, 2008).

An effective policy for NSSI should also include clear guidelines around when and how parents should be notified about a youth's self-injury (Berger, Hasking et al., 2015; De Riggi et al., 2016; Hasking et al., 2016). The NSSI designated school mental health practitioner is a strong candidate for contacting parents following the self-injury assessment (given their knowledge of existing guidelines around duties to report). Although administrators often are the ones to contact parents about student problem behavior, in the case of NSSI, it is necessary to involve a mental health practitioner who can provide a more informed assessment of the student's behavior, provide parents with the information and resources needed to understand and respond to NSSI, and connect parents to relevant supports at the school and/or in the community.

Intervention Following a thorough assessment of the NSSI (as well as level of suicidal risk), the trained mental health practitioner may choose to refer a student externally for additional support (e.g., emergency services, family therapy, more specialized care), choose to provide some level of intervention at the school level (in addition to an external referral), or deem that intervention can be provided at the school level. The decision whether to provide care within and/or outside of the school will depend to an extent on the student's level of risk (De Riggi et al., 2016). For

example, a student with past or infrequent NSSI with no suicidal ideation may continue to receive care within the school, whereas a student with frequent NSSI and suicidal thoughts or behaviors will often need to be referred for more immediate and specialized care. In addition, the practitioner's perceived comfort and competency around addressing the student's needs (Toste & Heath, 2010; Walsh & Muehlenkamp, 2013), as well as time constraints, should be considered. Establishing a care plan that will meet the needs of the student is critical to ensure that NSSI is addressed in a timely fashion; therefore, the person conducting the assessment should have a strong understanding of the services and intervention options available for use with students engaging in NSSI (Lieberman et al., 2009; Toste & Heath, 2010).

Follow-Up and Risk Monitoring As the student is receiving intervention for self-injury (either internally or externally), risk assessment should be revisited (Toste & Heath, 2010) to ensure that in the event additional supports are needed an escalation in care is provided (e.g., external referral). Thus, assessment of risk should be ongoing throughout the intervention stage, and a person qualified to conduct risk assessments should continue to monitor the student's progress. As part of the school response policy on NSSI, some authors also have suggested that schools should address concerns around managing contagion within the school (i.e., other students start engaging in NSSI) and providing self-care for school personnel and peers of the youth who are self-injuring as secondary steps (Berger, Hasking et al., 2015; Hasking et al., 2016).

What are the Roles and Responsibilities of Members of the School Community?

In order for any school policy on NSSI to be effective, there is strong agreement among researchers and clinicians that everyone within the school must understand their role and be able to initiate the policy procedures as necessary (Berger, Hasking et al., 2015; Hasking et al., 2016; Lieberman et al., 2009; Roberts-Dobie & Donatelle, 2007; Walsh, 2006). An overview of the research outlining specific recommendations concerning the roles and responsibilities of students, teachers/school staff, school mental health practitioners, administrators, and parents in identifying and responding to NSSI in schools will now be provided. Although these guidelines serve to assist schools in assigning roles and responsibilities to members of the school community, the roles of each member of the school will be contingent on the agreed-upon school policy within each school.

Students

Although students are not often involved in the development of a policy on addressing NSSI in schools (Bubrick et al., 2010), several researchers have noted that students have an important role to play in identifying and responding to NSSI (De Riggi et al., 2016; Fortune et al., 2008). In particular, research has consistently shown that students who self-injure are more likely to disclose their NSSI to a peer than teachers, parents, or a mental health practitioner (Armiento et al., 2014; Berger, Hasking, & Martin, 2014; Evans, Hawton, & Rodham, 2005; Hasking, Rees, Martin, & Quigley, 2015; Heath, Baxter, Toste, & McLouth, 2010; Heath, Ross, Toste, Charlebois, & Nedecheva, 2009; Muehlenkamp et al., 2010; Nixon et al., 2008; Whitlock et al., 2006). For example, in one study, when asked whether they had ever sought help before engaging in NSSI, male and female high school students reported being four times more likely to reach out to friends than any other source of support, including family members, teachers, or mental health practitioners (including telephone help lines; Fortune et al., 2008; also see Hasking et al., 2015). Recent research suggests that students who disclose their NSSI to peers (relative to youth who conceal their NSSI) may engage in more painful and severe NSSI and experience

higher levels of suicidal ideation (Armiento et al., 2014; Hasking et al., 2015). For example, Nixon and colleagues found that youth who engaged in more frequent NSSI were more likely to seek help or support from both formal and informal sources (Nixon et al., 2008), and Heath and colleagues (2010) found that students who engaged in more methods of NSSI reported that they would be more willing to access school-based supports for NSSI. These findings suggest that students who do disclose their NSSI to peers may be experiencing high levels of distress and are in need of access to care (also see Ystgaard et al., 2009).

Given that students who disclose their NSSI may engage in severe NSSI, and that students overwhelmingly choose to disclose to their peers, equipping peers with effective ways to respond to NSSI is an important first step in addressing NSSI in schools. For example, when asked about how NSSI could best be prevented in schools, adolescents who self-injured noted that being able to talk about NSSI with a nonjudgmental individual would serve as an important first step (Berger et al., 2014; Fortune et al., 2008). There are many barriers to NSSI disclosure, including fear of being stigmatized (e.g., labeled as attention seeking), as well as fear of being misunderstood or embarrassed (Fortune et al., 2008; Klineberg, Kelly, Stansfeld, & Bhui, 2013; Nada-Raja, Morrison, & Skegg, 2003). Thus, it is not surprising that as many as 40% of students who self-injure conceal their engagement in NSSI (Armiento et al., 2014; Nixon et al., 2008). To ensure that students who do disclose have a positive disclosure experience, clinicians and researchers have suggested that students should be taught to demonstrate a "respectful willingness to listen in a non-judgmental fashion" (Lieberman et al., 2009, p. 205) and remain calm when NSSI is shared. Critically, a peer's response may determine whether the youth who is self-injuring engages in further help-seeking behavior (Toste & Heath, 2010). In a recent study of university students, every student who had sought formal help for self-injury also had informally disclosed their NSSI to a peer (e.g., friend, romantic partner; Armiento et al., 2014). Similarly, Nada-Raja et al. (2003) found that young adults who reported informal help-seeking (e.g., from a friend or family member) were more likely to seek help from a professional mental health-care provider. These findings suggest that students may be able to facilitate help-seeking behavior among students who self-injure, by encouraging them to talk to a trusted school staff member, such as a teacher or school-based mental health practitioner (Hasking et al., 2015; Wu, Whitley, Stewart, & Liu, 2012). Students can offer to approach a trusted adult on the student's behalf or even go with the student to talk to a trusted adult together.

If the student who self-injures is unwilling to seek additional support, then a peer is uniquely positioned to reach out to a school staff member on the student's behalf. However, to protect the trust of the confiding student, and their relationship, the peer should communicate to the student who is self-injuring that he/she plans to speak to a trusted adult (e.g., "I know you don't want anyone to know about your self-injury, but I'm really concerned and feel that I need to talk to an adult about this"). Teachers, or other trusted school staff, who are informed by a student that a friend may be self-injuring, should similarly encourage students to involve their disclosing peer in the help-seeking process as much as possible, so that the student who is self-injuring feels supported, and does not feel that their trust has been breached.

In the past, efforts were made to increase NSSI understanding among students through targeted mental health initiatives. For example, the signs of self-injury program (Jacobs, Walsh, McDade, & Pigeon, 2009) was designed to increase students' basic understanding around NSSI (thereby reducing negative attitudes) and to improve students' abilities to respond to NSSI disclosures (e.g., encouraging students to demonstrate care and concern for the student who is self-injuring and report the self-injury to a trusted adult). More recently, efforts have focused on teaching students about responding to student disclosures more broadly (e.g., what should you do when a friend discloses something that is worrying, unfamiliar, or hard to understand?). This

approach prepares students to respond to disclosures about a variety of mental health concerns or unhealthy coping behaviors, in addition to NSSI, and is consistent with recent efforts to foster mental health literacy in schools (e.g., Kutcher, Wei, McLuckie, & Bullock, 2013; Roger et al., 2014). For example, Stan Kutcher has developed a mental health training and curriculum guide for schools (see Teen Mental Health at: teenmentalhealth.org), which provides information about a variety of common mental health concerns among youth (e.g., depression, anxiety, NSSI, etc.). This approach has situated NSSI as one (among many) of the potentially unhealthy coping behaviors students use to regulate their distress and can serve to increase knowledge about healthy coping, reducing stigma around NSSI, and enhance help-seeking behaviors.

It also is noteworthy that researchers have found that students who have high levels of self-esteem and friendship quality are more likely to disclose their NSSI, suggesting that students may be most willing to disclose when they are confident in their ability to share this information and believe their peers will be supportive (Armiento et al., 2014). Thus, fostering strong and supportive relationships at the school level may be an important first step to creating a safe environment in which students feel comfortable seeking support. Additionally, equipping youth with skills to express their emotions through social-emotional learning may also prevent against unhealthy coping behaviors, such as NSSI (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Mazza, Dexter-Mazza, Miller, Rathus, & Murphy, 2016).

Teachers (and Other Teaching Staff, Such as Coaches, Librarians, etc.)

Although teachers (or other teaching staff that work in close contact with students) should not be providing care to a student engaging in NSSI (e.g., assessment, intervention), teachers have a critical role to play in understanding NSSI and familiarizing themselves with the school policy, so that they can *respond appropriately* to NSSI disclosures, as well as help to *identify* students who are self-injuring (Bubrick et al., 2010; Heath, Toste, Sornberger, & Wagner, 2011; Lieberman et al., 2009; Toste & Heath, 2010). Recent research suggests that as many as 70% of teachers have encountered a student who engages in NSSI (Berger et al., 2014; Berger, Reupert, & Hasking, 2015; Carlson et al., 2005; Heath et al., 2011). Despite findings that many teachers are likely to come into contact with a student who engages in NSSI, however, teachers overwhelmingly report a lack of knowledge about identifying and responding to students who self-injure. Less than a third of teachers report feeling knowledgeable about NSSI (Heath, Toste, & Beettam, 2006; Heath et al., 2011), close to 60% report that they do not know how to respond to students who engage in NSSI (Carlson et al., 2005; Heath et al., 2011), and as many as 80% of teachers report having had no formal training in identifying and responding to NSSI (Berger, Reupert et al., 2015). Even though teachers lack confidence in identifying and responding to NSSI, many teachers report feeling concerned about student well-being and want to be able to help students who are self-injuring, although not as the primary health-care provider (Berger et al., 2014; Heath et al., 2006, 2011). Moreover, teachers also underscore a willingness and desire to receive additional training in NSSI to better meet the needs of students (Berger et al., 2014; Carlson et al., 2005).

The first step in assisting teachers in identifying and responding to NSSI is to provide information to teachers on NSSI to increase teacher knowledge about the behavior. Research suggests that most teachers accurately identify the typical age of onset of NSSI in adolescence and can identify the primary methods of NSSI used (i.e., cutting); however, the vast majority of teachers still underestimate the prevalence of NSSI among school-aged youth and adolescents (Berger et al., 2014; Berger, Reupert et al., 2015; Carlson et al., 2005; Groschwitz, Munz, Straub, Bohnacker, & Plener, 2017; Heath et al., 2006). There also are differences with respect to perceived and reported knowledge about NSSI among teachers, depending on the gender of the teacher and their level of experience. In several recent studies, it was found

that female teachers had more knowledge of NSSI and reported greater confidence in responding to NSSI than male teachers (Berger et al., 2014; Berger, Reupert et al., 2015). Moreover, males were more likely to regard self-injury as attention seeking as compared to female teachers (Heath et al., 2006), suggesting male teachers (in particular) may be in need of further understanding of the motivations underlying NSSI behaviors. Research also suggests that younger teachers have more knowledge about NSSI than older teachers (Berger et al., 2014; Heath et al., 2011) and that longer length of time teaching is associated with lower knowledge about NSSI (Berger, Reupert et al., 2015), which may be reflective of an increasing emphasis on mental health curriculum in teacher training in more recent years. It also is interesting to note that in the studies reviewed in this chapter, teachers who had received training in NSSI, as well as teachers who had more experience with students who engaged in NSSI, had greater knowledge/understanding of NSSI, more self-reported confidence in responding to NSSI, and more positive attitudes toward NSSI (Berger et al., 2014; Heath et al., 2006).

Respond to NSSI

In schools, teachers often learn about NSSI (or suspected NSSI) from other students. As previously mentioned, it is important that teachers encourage students reporting concerns about friends who self-injure to involve the student who is self-injuring in the disclosure process (i.e., encourage the student to say to his/her friend, "please come speak to the teacher with me about how you have been feeling," or if the friend refuses, "I feel that I need to speak to a teacher about this, because I am concerned about you"). Teachers can also validate students who seek help on behalf of a friend (Hasking et al., 2016; e.g., "I know this must have been difficult for you, but I'm glad you came to talk to me about your concern"). When NSSI is disclosed directly to a teacher, the teacher's role is *not* to try and assess the severity of the behavior or provide any sort of intervention to the student (Lieberman et al., 2009; Toste & Heath, 2010; Walsh & Muehlenkamp, 2013). Instead, the teacher's role is to respond calmly to the student without judgment, so that the student feels supported and willing to accept care from more formal sources of support (i.e., school mental health practitioner with training in NSSI; Bubrick et al., 2010; Hasking et al., 2016; Toste & Heath, 2010). In the past, teachers have often reported strong and aversive responses to NSSI, including feelings of shock, horror, and disgust (Best, 2005, Heath et al., 2006; Roberts-Dobie & Donatelle, 2007). For example, in a study of Canadian teachers by Heath et al. (2011), 60% of teachers reported that they found the act of NSSI horrifying, and critically teachers who were horrified also were less confident in their ability to respond to NSSI. Fortunately, there does seem to be an increasing understanding among teachers (and school staff) that NSSI is primarily an emotion regulation strategy, reflecting student distress (Berger, Reupert et al., 2015; Heath et al., 2011). Nevertheless, training teachers on how to respond to NSSI without judgment is vitally important, to ensure students have positive disclosure experiences.

If the disclosing student requests that the teacher not contact the school mental health practitioner, the teacher should be honest with the student that school policy requires the teacher to notify a mental health practitioner on the student's behalf but that the teacher will be there to support the student and can even go with the student to talk to the mental health practitioner (Bubrick et al., 2010; Lieberman et al., 2009). For example, Bubrick et al. (2010) offer specific statements teachers can use such as "I am concerned about you and want to be sure you have the support you need" (p. 4). The primary role of the teacher, therefore, is to initiate the NSSI protocol by notifying the NSSI school mental health practitioner/contact person that a student is self-injuring (Lieberman et al., 2009).

Identification of NSSI

It has been suggested that teachers should also be mindful of the warning signs of NSSI, to assist in

the early identification of students who are self-injuring (Heath et al., 2011; Lieberman et al., 2009). It is important to note, however, that many students try to conceal their engagement in NSSI (Armiento et al., 2014; De Riggi et al., 2016; Hasking et al., 2015; Nixon et al., 2008). Physical injuries are often hidden prior to when the student is ready to seek help, and self-injury often occurs when the student is alone (Hasking et al., 2015; Nock et al., 2009). Thus, physical warning signs may not always be visible to educators. Further, teachers must be cautious about trying to identify students who are self-injuring, given that efforts to identify students may be regarded by students trying to conceal their behaviors as highly intrusive (Hasking et al., 2016). If a teacher suspects NSSI, they should discuss their concerns with the school mental health practitioner, prior to approaching the student. Physical warning signs of NSSI could include cuts, bruising, burn marks, severe scratches, bleeding wounds, etc. without a known cause or source (De Riggi et al., 2016; Simpson, Armstrong, Couch, & Bore, 2010; Walsh, 2006; Walsh & Muehlenkamp, 2013), and Bubrick et al. (2010) note that these injuries may appear opposite the dominant arm (although injuries can occur anywhere on the body). Other behaviors which may be indicative of NSSI could also include attempts to hide/conceal injuries (e.g., trying to avoid behaviors like swimming in which the skin is exposed, wearing long sleeves during hot weather; Lieberman et al., 2009; Walsh, 2006) or carrying around sharp objects, like razor blades (Lieberman & Poland, 2006; Simpson et al., 2010). There may also be themes of self-injury in the student's writing or creative endeavors (e.g., drawings, journaling, music, art, etc. Toste & Heath, 2010; Walsh & Muehlenkamp, 2013). Another specific warning sign that NSSI may be occurring could include fearlessness about death (e.g., "I am not afraid to die"), given that recent work suggests NSSI may be associated with heightened tolerance for self-inflicted pain and lowered fear around suicidal behavior (Willoughby, Heffer, & Hamza, 2015). In addition, research has shown that having a friend who engages in NSSI may also increase risk for NSSI (Claes et al., 2010; Hasking, Andrews, & Martin, 2013; Prinstein et al., 2010), so students with other warning signs (e.g., themes of self-injury in writing), who also have friends who engage in NSSI, may be at higher risk for NSSI.

Several other warning signs may suggest that the student is experiencing some kind of mental health concern, although these signs and symptoms are not unique to NSSI. For example, a student may exhibit depressed affect (e.g., sadness, loss of interest in activities the student once enjoyed; Hamza & Willoughby, 2014; Hankin & Abela, 2011; Hilt, Cha, & Nolen-Hoeksema, 2008), have difficulty regulating or expressing their emotions (e.g., strong negative emotions, difficulty controlling emotions, and often have emotional highs and lows; Kranzler, Fehling, Anestis, & Selby, 2016; Thomassin, Shaffer, Madden, & Londino, 2016; Victor & Klonsky, 2014), report negative attitudes toward the self (e.g., "I am stupid or worthless;" Claes et al., 2010; Claes, Soenens, Vansteenkiste, & Vandereycken, 2012; Glassman, Weierich, Hooley, Deliberto, & Nock, 2007; Klonsky, 2009), engage in risky behaviors such as drug and alcohol use (Claes & Muehlenkamp, 2014; Ross, Heath, & Toste, 2009; Serras, Saules, Cranford, & Eisenberg, 2010), or experience interpersonal relationship problems. For example, students who report low levels of social support and high levels of peer victimization are at increased risk for NSSI (Muehlenkamp et al., 2013; van Geel, Goemans, & Vedder, 2015). It is important to note, however, that these warning signs may be present in the absence of any NSSI engagement (De Riggi et al., 2016). Thus, if it is suspected that a student is engaging in NSSI, or experiencing any other mental health concern, it is important that the student is referred for an appropriate and thorough mental health assessment with a trained mental health practitioner (Toste & Heath, 2010).

School Mental Health Practitioners

School mental health practitioners (including counselors, social workers, and psychologists) have a critical role to play when it comes to

addressing NSSI in schools, given their training in student mental health (De Riggi et al., 2016; Roberts-Dobie & Donatelle, 2007). Recent estimates suggest that the majority of school mental health practitioners (as many as 92%) have worked with a student who engages in NSSI (Duggan, Heath, Toste, & Ross, 2011; Roberts-Dobie & Donatelle, 2007). Moreover, when surveyed, school counselors (70–75%) reported that they were likely to be consulted if a student was self-injuring and indicated they often received reports of self-injury from other students and teachers (Duggan et al., 2011; Harris & Jeffery, 2010; Roberts-Dobie & Donatelle, 2007). It is not surprising, then, that we propose that the designated school mental health practitioner needs to be knowledgeable about NSSI and take on a leadership role in implementing the school policy on NSSI, to ensure appropriate assessment, referral, and intervention for NSSI are provided to the student.

Assessment and Referral Once NSSI has been reported, the student will require a more formal assessment of their self-injury, including the degree of suicidal risk (Toste & Heath, 2010). If the student presented with injuries requiring medical attention, these would first need to be addressed – either by a school nurse or medical professional (Bubrick et al., 2010). In a recent paper, Lewis and Heath (2015) suggested that an assessment of the self-injury could begin by asking the youth about how he/she is feeling and then could transition into a discussion about how the youth is coping with the emotions he/she is experiencing (e.g., self-injury). As part of this assessment, it would be important to determine the extent to which the student is experiencing any suicidal thoughts or behaviors and to identify any other underlying mental health concerns needing to be addressed, to inform decisions around referral, as well as provide appropriate intervention to the student (Toste & Heath, 2010). Students at high/imminent risk for suicidal behavior would need to be referred for emergency medical services (e.g., emergency room, urgent mental health care) and their parents immediately notified (i.e., crisis response protocol is in effect). In contrast, more low-risk students may require less immediate referral, parents may not need to be contacted immediately (depending on the age of the student and legal requirements around parental consent which vary from province to province), and/or some intervention could be provided at the school level (Lieberman et al., 2009; Toste & Heath, 2010; Walsh & Muehlenkamp, 2013). In two recently proposed school response protocols for NSSI, authors have offered some suggested criteria for making a determination around degree of suicidal risk (Toste & Heath, 2010; Walsh & Muehlenkamp, 2013). In particular, it was suggested that students should be considered high risk in the event any suicidal ideation or behavior is present (e.g., thoughts about wanting to end their life, plans about how to end their life, or have previously attempted suicide). Moreover, students should be considered high risk if self-harming behaviors have ambiguous intent (i.e., unclear whether intention is lethal or not) and are particularly severe (i.e., high potential to lead to serious injury or death – due to frequent NSSI episodes and incidents, multiple methods of NSSI, persistent engagement), and there are other comorbid mental health concerns occurring (e.g., borderline personality disorder, eating disorder, etc.). In contrast, low-risk students may no longer be engaging in NSSI (e.g., an isolated incident) or engage in NSSI infrequently, have no suicidal ideation, and not present with additional mental health concerns (Toste & Heath, 2010; Walsh & Muehlenkamp, 2013).

Although NSSI is differentiated from suicidal behavior on the basis of nonlethal intent, there is mounting evidence that NSSI is associated with increased risk for suicidal ideation and attempts among students (Guan, Fox, & Prinstein, 2012; Klonsky, May, & Glenn, 2013; Whitlock et al., 2013; for a review see Hamza et al., 2012). Indeed, students who engage in NSSI may be two to four times more likely to experience suicidal ideation or make a suicidal attempt, as compared to students who do not self-injure (Klonsky, May & Glenn, 2013; Hamza & Willoughby, 2016).

Fortunately, research suggests that most students who engage in NSSI will not make a suicidal attempt (Hamza & Willoughby, 2013; Hilt, Nock, et al., 2008; Klonsky & Olino, 2008); however, being able to identify those students engaging in NSSI at risk for suicidal behavior is *critically* important. The guidelines offered by Toste and Heath (2010) and Walsh and Muehlenkamp (2013) are consistent with recent findings that have identified subgroups of individuals who self-injure, with varying levels of suicidal risk. For example, Hamza and Willoughby (2013) found that university students who engaged in infrequent NSSI (less than ten lifetime episodes) and had not injured within the past year, were not at elevated risk for suicidal behavior as compared to students who did not self-injure. In contrast, university students who indicated that they were likely to make a future suicidal attempt engaged in more than ten lifetime NSSI incidents, recent NSSI, multiple methods of NSSI, and reported higher levels of psychosocial distress (e.g., depressive symptoms) than low-risk students who self-injured and students who did not self-injure (also see Whitlock et al., 2008). It is important to caution that there is still no clearly established standard as to how to identify imminent risk among students engaging in NSSI, and some authors have suggested that any harm to the self could be potentially serious (even if not intentional; Lloyd-Richardson, Lewis, Whitlock, Rodham, & Schatten, 2015). Thus, ensuring that the mental health practitioner who is conducting the NSSI assessment has current knowledge of the best practice recommendations for discerning suicidal risk among students engaging in NSSI is essential.

Although a designated school mental health practitioner may be well positioned to serve as the point of contact for students engaging in NSSI, not all school mental health practitioners may have the expertise, the comfort level needed, or the time to provide ongoing one-on-one care to students who engage in NSSI (De Riggi et al., 2016; Toste & Heath, 2010). When surveyed, school mental health practitioners acknowledged that although they were likely to be contacted if a student engaged in NSSI, not all of them felt comfortable providing care to a student engaging in NSSI or felt they had the knowledge necessary to provide NSSI assessment and intervention at the school level (Berger, Reupert et al., 2015; Harris & Jeffery, 2010; Roberts-Dobie & Donatelle, 2007). Indeed, less than half felt they should be providing care to students who self-injure (in part due to time constraints; Duggan et al., 2011; Harris & Jeffery, 2010), and working with students who self-injure was regarded as emotionally challenging and anxiety-provoking. Even though mental health practitioners wanted to help these students, there was a strong desire to refer these students for care outside of the school (Best, 2005; McAllister et al., 2010; Roberts-Dobie & Donatelle, 2007).

The concern among school mental health practitioners in being involved in assessing and providing intervention to students engaging in NSSI may stem from a lack of perceived knowledge, as well as training, around NSSI. School mental health practitioners report having little to moderate levels of knowledge about NSSI (e.g., warning signs, causes, intervention options; Simpson et al., 2010; Duggan et al., 2011; Groschwitz et al., 2017; Roberts-Dobie & Donatelle, 2007) and report a lack of formal training on NSSI. Yet, the vast majority underscore that more training on NSSI is needed and would be valued (Berger et al., 2014; Duggan et al., 2011; Harris & Jeffery, 2010; Roberts-Dobie & Donatelle, 2007). Further, in studies in which school mental health practitioners were surveyed, school mental health practitioners and school staff indicated that there was no existing policy on NSSI, though such a policy was regarded as necessary (Berger, Reupert et al., 2015; Duggan et al., 2011; Roberts-Dobie & Donatelle, 2007). Research has consistently shown that training on NSSI is associated with greater understanding of NSSI, more positive attitudes toward students who self-injure, as well as greater confidence in addressing NSSI (Berger, Reupert et al., 2015; Groschwitz et al., 2017). Thus, providing training on NSSI to school mental health practitioners is a much needed school mental health initiative.

In the event that the school mental health practitioner serving as the contact person for NSSI (or designated equivalent) does not have the expertise needed to assess and provide intervention related to NSSI (or may have restrictions due to lack of time or resources available), there needs to be a clearly outlined and established plan of immediate referral (e.g., community clinic, psychologist, etc.; Toste & Heath, 2010). The importance of ensuring a student engaging in NSSI receives an appropriate referral also underscores why it is critically important that the NSSI point of contact person at the school level stays up to date on NSSI community supports and resources (Lieberman et al., 2009; Roberts-Dobie & Donatelle, 2007). In addition to making an external referral, school mental health practitioners with limited expertise in NSSI can support the student in several other ways, including serving as a liaison among the student and school staff (e.g., teachers, administrators) and following up with the student who self-injures (as well as any other students who were involved in reporting the NSSI; Bubrick et al., 2010; Roberts-Dobie & Donatelle, 2007). In addition, the school mental health practitioner could also provide supplementary intervention to the student that is not specific to the NSSI. For example, the school mental health practitioner could work with the student to develop more effective coping strategies (e.g., stress management techniques such as exercise, progressive muscle relaxation, mindfulness techniques) or to address underlying risk factors for NSSI (e.g., improving self-esteem and interpersonal problem-solving, reducing negative attitudes toward the self; Lieberman et al., 2009).

School mental health practitioners also should be involved in contacting the student's parents about the NSSI. The process through which the decision about whether to contact the student's parents is made should be clearly outlined within the NSSI policy (and will be informed by existing school, local, and national policies and laws; Bubrick et al., 2010). If the student is at imminent risk (deemed high risk for serious injury or death), parents will need to be notified immediately. In contrast, if a student is no longer engaging in NSSI or is considered at low risk for suicidal behavior, the decision about whether to contact the parents may be less clear (and is still debated in the literature; Lieberman et al., 2009; De Riggi et al., 2016). Again, the decision about whether to inform parents will also be contingent on mandatory reporting laws, which require parents to be contacted depending on the age of the student and vary province to province. Authors have encouraged that students should be involved and well-informed if parents are going to be contacted, and Bubrick et al. (2010) provide several recommendations to school mental health practitioners for contacting parents (e.g., providing parents with a brief overview/understanding of NSSI and the reasons students engage in NSSI, encouraging calm and supportive responding to NSSI among parents, offering parents with ways to access mental health resources in the community; Bubrick et al., 2010; also see Lloyd-Richardson et al., 2015 for some suggestions on parental contact).

Intervention

Some school mental health practitioners will have the expertise needed to provide NSSI-specific intervention at the school level (either in combination with external support or independently at the school level if suicidal risk is low). Although empirically supported interventions specifically for NSSI among adolescents are lacking (Muehlenkamp, 2006; Nixon, Aulakh, Townsend, & Atherton, 2009; Nock, 2010; Washburn et al., 2012), some broader treatment approaches have received empirical support for use with NSSI. Cognitive-behavioral therapy (CBT), which focuses on changing a person's maladaptive thoughts and uncovering the processes that reinforce behavior, has been shown to be effective in reducing NSSI among adolescents in some studies (Brausch & Girresch, 2012; Muehlenkamp, 2006; Taylor et al., 2011). In particular, one specific subtype of cognitive-behavioral therapy that has been widely used is that of dialectical behavior therapy (DBT; Linehan, 1993). DBT was originally developed for use for persons with borderline personality

disorder (BPD; Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Shearin & Linehan, 1994), in which NSSI (and suicidal behavior) often co-occur. During DBT, clients work on changing thoughts and beliefs, understanding antecedents and consequences of behavior, and on learning acceptance (Linehan, 1993). DBT also focuses on providing clients with problem-solving techniques to utilize when experiencing distress and is specifically geared toward people who experience emotions intensely (e.g., persons with BPD; Linehan et al., 1991). Research has shown that DBT is effective in reducing self-injury among persons with BPD (Fleischhaker et al., 2011; Kliem, Kröger, & Kosfelder, 2010; Stanley, Brodsky, Nelson, & Dulit, 2007). Moreover, DBT has been specifically adapted for use with children and adolescents (with and without a diagnosis of BPD) and has been shown to be effective in reducing self-injury as well as internalizing behaviors such as depressive symptoms (Cook & Gorraiz, 2015; Goldstein et al., 2015; Klein & Miller, 2011). Intervention aimed more broadly at fostering the student's emotion regulation abilities, and fostering their interpersonal skills, may also help to reduce the use of NSSI behaviors among students (Washburn et al., 2012), given that students who self-injure may have deficits in these domains (Nock, 2010). Further, authors have suggested that working with students on cognitive structuring around negative attitudes toward the self may also be important, given that NSSI may serve to punish one's self (Klonsky & Glenn, 2009; Nock, 2010).

Recently, Mazza et al. (2016) developed a DBT manualized program specifically adapted for use in schools (DBT Steps-A), which can be used as a supplement in a therapeutic context or more broadly integrated into the classroom as part of social-emotional learning (SEL) curriculum (Mazza et al., 2016). The program, which focuses on building four primary skills (i.e., mindfulness, distress tolerance, emotional regulation, and interpersonal effectiveness), is designed so that it can be administered to students individually, in small groups, or in the larger classroom (i.e., a universal approach for helping youth to improve their decision-making skills, manage emotions, and develop strong interpersonal relationships; Mazza et al., 2016). The program was also designed so that it could be easily administered by school mental health practitioners without having to take any additional DBT training and includes easy-to-use lesson plans and work sheets. Although the program is not a form of clinical intervention (or an approach specifically targeted at high-risk youth), the skills garnered from the program are thought to be important in preventing emotionally dysregulated behaviors (such as NSSI). In particular, focusing on skill development such as teaching students about emotion regulation (e.g., understanding their emotions, modulating emotional responses by reducing negative emotions and increasing positive emotions, engaging in problem-focused emotion coping) can serve as a way to equip students with healthier responses to their overwhelming emotions (rather than NSSI). The program could be especially useful, therefore, for school mental health practitioners who may not have training around NSSI intervention but want to provide some support for students at the school level. This approach to fostering social and emotional skills is consistent with broader efforts to promote mental health and well-being more broadly in schools, rather than relying on a "reactive" approach to addressing youth mental health concerns (Kutcher et al., 2013).

Follow-Up and Monitoring

Regardless of whether a mental health practitioner refers a student for external intervention and/or provides school-level intervention, the school mental health practitioner should continue to monitor the student's progress (and use feedback from students, teachers, parents, etc.), serve as a point of contact/liaison for students and the school, and ensure that routine reassessments of risk are conducted (De Riggi et al., 2016; Walsh & Muehlenkamp, 2013). Moreover, school mental health practitioners can also follow up with any referring students and can assist in check-ins on students, teachers, or staff. Finally, the school mental health practitioner can play a role in

assisting schools in managing contagion. Contagion refers to a situation in which a student's self-injury may lead to additional cases of self-injury in the school (e.g., imitation, learning of new behavior; Bubrick et al., 2010; Walsh, 2006). Although more research surrounding best practices for minimizing contagion in schools is needed, Hasking et al. (2016) suggest that school mental health practitioners should consider three primary ways to reduce contagion around NSSI in schools. First, they suggest that students should be encouraged to limit discussions about NSSI behaviors with peers (e.g., the type of NSSI, the injury resulting) as this may be triggering for other students. Second, Hasking et al. (2016) underscore that using individualized approaches to NSSI intervention is preferable to the use of group therapeutic interventions for NSSI, given that group discussions around NSSI experiences can also be triggering for students. When using a group approach, the focus should be on learning healthy coping, and not just for students with NSSI. Finally, Hasking et al. (2016) note that there is consensus in the field that open wounds should be covered (Lieberman et al., 2009; Walsh & Muehlenkamp, 2013); however, it is less clear whether students should be encouraged to cover scars. There is some preliminary evidence that making the decision to no longer conceal one's scars may be an important part of the self-injury recovery process (e.g., Lewis & Mehrabkhani, 2016). Thus, Hasking et al. (2016) suggest that mental health practitioners should have a "sensitive and compassionate discussion" (p. 655) with the student around their decision to no longer conceal their scars, as well as what students might anticipate will happen as a result of doing so (e.g., less shame, questions from others, etc.).

Administrators

Akin to the recommendations for other members of the school community, administrators also have a responsibility to develop an understanding of NSSI (including the warning signs and symptoms, as well as the motivations underlying NSSI). Additionally, administrators should advocate for the development of a formal policy on NSSI (if there is not yet one in place) and ensure that there is widespread understanding of the policy by the broader school community (including among teachers, mental health practitioners, and other school staff). Administrators must also have clearly defined roles in the policy, so that they are prepared to identify and respond to NSSI in schools. There has been strong consensus that in order for any policy on NSSI to be implemented and effective, there needs to be participation from all levels of the school community, including school staff and administrators (McAllister et al., 2010). For example, when school staff and mental health practitioners were asked about barriers to implementing a policy on NSSI, participants reported that the policy would only be effective if it had commitment from higher administrative staff (Berger, Hasking et al., 2015; Groschwitz et al., 2017). Thus, administrators should strive to prioritize in-service training opportunities for all school staff (including the administrators) around responding to mental health concerns, such as NSSI, in schools (Muehlenkamp et al., 2010). Administrators also need to work closely with the school mental health practitioner around decisions about when to contact parents about NSSI, as well as how to contact parents appropriately. Although administrators may often be the ones to contact parents for student problem behaviors, mental health practitioners should be the ones to provide parents with information and resources about NSSI. As a proactive measure, administrators also can strive to involve parents at the school level more broadly, so that established lines of communication are in place, in the event parents need to be notified about a mental health concern, such as NSSI.

Parents

Students who self-injure may be most likely to disclose their NSSI to peers; however, research suggests that parents are often the next most commonly disclosed to sources (Armiento et al.,

2014; Berger, Hasking, & Martin, 2013; Fortune et al., 2008). Thus, parents also have an important role to play in the initial response to NSSI and creating a supportive environment which facilitates help-seeking behavior. In one study students noted that parents and teachers can help to prevent NSSI, by being there to talk with their youth and by providing nonjudgmental support (Berger et al., 2013). It follows then that parents will also benefit from having a basic understanding of NSSI (including its prevalence and motivations underlying the behavior), as well as information about how to respond to an NSSI disclosure from their child or approach the subject with their child if they suspect their child is self-injuring. Involving parents at the school, and working to promote parental mental health literacy (as well among students and school staff), serves to create a more knowledgeable and able community of support for students. It is also important to note that parents serve as important advocates for their children. For example, a parent could contact a mental health practitioner on the youth's behalf and initiate the school policy on NSSI. Indeed, around 20% of school counselors indicated that they found out about the student's NSSI because parents had approached them (Roberts-Dobie & Donatelle, 2007). To support their child, the parent could also work on strengthening the parent-child relationship (Berger et al., 2013), which could serve as a warm and supportive relationship from which parents can model healthy emotion coping strategies to their child (Arbuthnott & Lewis, 2015). Although a more detailed discussion of how parents should approach NSSI is beyond the scope of this chapter, we have provided several resources at the end of this chapter which can be shared by school personnel with parents to assist parents in their efforts to understand, identify, and respond to NSSI behaviors.

Collectively (Prevention of Mental Health Concerns)

Although this chapter has largely focused on how to identify and respond to NSSI (and the roles and responsibilities of each individual within the school community), it is noteworthy that every member of the school community also has a role to play in preventing NSSI behavior more broadly. In addition to having a clear policy to address NSSI, schools should also seek to create a school environment which promotes the emotional, physical, and social health and well-being of its students, which can serve to prevent mental health issues from occurring in the first place. Increasingly, efforts have been made to promote mental health literacy in classrooms among students and educators; these programs should also specifically address NSSI (in addition to other commonly occurring mental health concerns such as depressive symptoms, attention-deficit disorder, etc.; Kutcher et al., 2013). In addition to promoting mental health literacy, schools should continue to implement universal programs that foster emotion regulation and problem-focused coping skills, develop strong social competencies, and create environments that are conducing to help-seeking behaviors (Lieberman et al., 2009; Whitlock & Knox, 2009). In particular, one relevant social-emotional learning (SEL) curriculum already discussed in this chapter was the DBT Steps-A program, designed by Mazza et al. (2016). This program can be broadly implemented by school mental health practitioners (to individual students, small groups, or classrooms) to foster students' skills in decision-making, managing emotions, and developing interpersonal relationships, through easy-to-use lesson plans and student worksheets.

Conclusions

Throughout this chapter we have underscored the importance of fostering mental health literacy among students, educators, administrators, and parents around unhealthy emotion coping behavior (and in particular NSSI). At the school level, everyone has a role to play in promoting the mental health and resiliency of students and facilitating the timely identification and care of mental health concerns among school-aged children and youth. NSSI is one form of unhealthy coping behavior which needs to be addressed in schools,

especially since NSSI carries with it a heightened risk for suicidal behavior. In the first section of this chapter, an overview of the prevalence, risk factors, and motivations underlying NSSI was provided to increase knowledge and awareness of this widespread mental health concern. Next, the importance of developing a school policy on NSSI in collaboration with members of the school community was highlighted, and then specific recommendations for identifying and responding to NSSI in schools were offered. The present review of the literature on what schools can do to address NSSI highlights the need for additional training on NSSI among school personnel, to foster the timely identification and care of students engaging in NSSI. Moreover, the research reviewed emphasizes the importance of continuing to bolster efforts to support mental health literacy in schools.

Links to Resources on NSSI for Members of the School Community

Students Who Are Self-Injuring

Reaching out for Help: Talking about on-going Self-Injury:
http://www.selfinjury.bctr.cornell.edu/perch/resources/reaching-out-for-help-pm-5.pdf

Self-Injury – A Guide for those who Self-injure:
http://sioutreach.org/learn-self-injury/if-you-self-injure/

Distraction Techniques and Alternative Coping Strategies:
http://www.selfinjury.bctr.cornell.edu/perch/resources/distraction-techniques-pm-2.pdf

Recovering from Self-Injury:
http://www.selfinjury.bctr.cornell.edu/perch/resources/recovering-from-self-injury-1.pdf

Students Who Have a Friend Who Is Self-Injuring

How can I Help a Friend Who Self-Injures?
http://www.selfinjury.bctr.cornell.edu/perch/resources/how-can-i-help-a-friend-english.pdf

Self-Injury – A Guide for Friends:
http://sioutreach.org/learn-self-injury/friends/

Teachers

What is Self-Injury?
http://www.selfinjury.bctr.cornell.edu/perch/resources/what-is-self-injury-9.pdf

Top 15 Misconceptions about Self-Injury:
http://www.selfinjury.bctr.cornell.edu/perch/resources/15-misconceptionsenglish-2.pdf

School Response to Nonsuicidal Self-injury:
http://cemh.lbpsb.qc.ca/educators/NSSI.pdf

Nonsuicidal Self-Injury in Schools: Developing and Implementing a School Protocol
http://www.selfinjury.bctr.cornell.edu/perch/resources/non-suicidal-self-injury-in-schools.pdf

Self-Injury – A Guide for School Professionals
http://sioutreach.org/learn-self-injury/school-professionals/

School Mental Health Practitioners

What is Self-Injury?
http://www.selfinjury.bctr.cornell.edu/perch/resources/what-is-self-injury-9.pdf

The Relationship between Non-Suicidal Self-Injury and Suicide:
http://www.selfinjury.bctr.cornell.edu/perch/resources/the-relationship-between-nssi-and-suicide-3.pdf

Non-suicidal Self-Injury in Schools: Developing and Implementing a School Protocol
http://www.selfinjury.bctr.cornell.edu/perch/resources/non-suicidal-self-injury-in-schools.pdf

School Response to Non-suicidal Self-injury:
http://cemh.lbpsb.qc.ca/educators/NSSI.pdf

Self-Injury – A Guide for School Professionals
http://sioutreach.org/learn-self-injury/school-professionals/

Self-Injury – A Guide for School Mental Health Practitioners
http://sioutreach.org/learn-self-injury/mental-health-professionals/

Administrators

What is Self-Injury?
http://www.selfinjury.bctr.cornell.edu/perch/resources/what-is-self-injury-9.pdf

Top 15 Misconceptions about Self-Injury: http://www.selfinjury.bctr.cornell.edu/perch/resources/15-misconceptionsenglish-2.pdf

School Response to Non-suicidal Self-injury: http://cemh.lbpsb.qc.ca/educators/NSSI.pdf

Non-suicidal Self-Injury in Schools: Developing and Implementing a School Protocol
http://www.selfinjury.bctr.cornell.edu/perch/resources/non-suicidal-self-injury-in-schools.pdf

Self-Injury – A Guide for School Professionals
http://sioutreach.org/learn-self-injury/school-professionals/

Parents

What is Self-Injury:
http://www.selfinjury.bctr.cornell.edu/perch/resources/what-is-self-injury-9.pdf

Information for Parents: What you need to know about self-injury:
http://www.selfinjury.bctr.cornell.edu/perch/resources/info-for-parents-english.pdf

Positive Communication Strategies:
http://www.selfinjury.bctr.cornell.edu/documents/pm_positive_comm.pdf

Self-Injury – A Guide for Parents and Caregivers
http://sioutreach.org/learn-self-injury/parents-and-families/

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School-Based Suicide Prevention, Intervention, and Postvention

15

David N. Miller and James J. Mazza

Abstract

Youth suicide is a worldwide public health problem that requires urgent attention. For example, in the United States, although suicide is the tenth leading cause of death among Americans overall, it is the second leading cause of death among young people ages 15–24 and the third leading cause of death among those ages 10–14. Because children and adolescents spend so much time in them, schools are ideal focal points for focused suicide prevention efforts.

Introduction

Youth suicide is a worldwide public health problem that requires urgent attention. For example, in the United States, although suicide is the tenth leading cause of death among Americans overall, it is the second leading cause of death among young people ages 15–24 and the third leading cause of death among those ages 10–14. Moreover, from 1999 to 2014, the suicide rate among males and females increased 24% across all age groups, including children and adolescents, with a particularly notable increase in the suicide rate among girls ages 10–14 (Curtin, Warner, & Hedegaard, 2016). Similar results have been reported in Canada, where suicide is the second leading cause of death among young people ages 10–24. Globally, suicide rates have been increasing so substantially that youth are now the group at highest risk for suicide in one-third of all the countries in the world (World Health Organization, 2014).

As disturbing as these statistics are, they do not adequately convey the scope and magnitude of the problem of suicidal behavior, which includes multiple components and is broader than suicide alone. Suicidal behavior may be defined as a continuum of behaviors that includes suicidal ideation (i.e., thoughts about suicide), suicide-related communication (i.e., suicide threats or plans), suicide attempts, and suicide (Silverman, 2013). These different forms of suicidal behavior frequently overlap, they are not mutually exclusive, and not all suicidal youth sequentially advance through them (Mazza, 2006). For example, some youth will display only one form of suicidal behavior (e.g., suicidal ideation), while others may display several forms (e.g., engaging in suicidal ideation as well as making suicide plans and attempts).

Suicidal behavior does occur among elementary and middle school students, but it is particularly prevalent among high school students

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(Kann et al., 2014; Miller, 2011). According to results from the recent national Youth Risk Behavior Surveillance Survey completed by US students in grades 9–12, 17% reported seriously considering attempting suicide in the last 12 months, 13.6% made a suicide plan, 8% of students reported attempting suicide one or more times, and 2.7% of students reported making a suicide attempt that resulted in an injury, poisoning, or an overdose that required medical attention (Kann et al., 2014). Suicidal behavior is highly prevalent among high school populations in Canada and other countries as well. Indeed, on a global scale, youth suicidal behavior affects hundreds of thousands of children, adolescents, and their friends and families each year.

Youth Suicide Prevention and the Schools

Because children and adolescents spend so much time in them, schools are ideal focal points for focused suicide prevention efforts (Miller, 2011). Research examining the effectiveness is still in its infancy, however, and there remain many challenges and unresolved questions on how to best make use of schools in youth suicide prevention efforts. For example, most of the research that informs youth suicide prevention efforts is from studies that have been conducted in clinical settings involving samples of adolescents who have already engaged in suicidal behavior (Brent, Baugher, Bridge, Chen, & Chiappetta, 1999). Although these studies provide an important foundation for examining different risks and protective factors associated with youth suicidal behavior, the applicability of these findings is often limited. Given that only a small percentage of youth who make suicide attempts receive medical attention, generalizing findings from this small subset of suicide attempters to the vast majority of suicidal youth who do not receive medical intervention for suicidal behavior may not be representative of school-based populations (Mazza & Miller, in press).

Additionally, research among school-based populations is not as prevalent as research among clinical populations and often lacks the level of scientific rigor of clinical studies (Mazza & Miller, in press). In the past, school-based programs that targeted suicidal behavior were often divided into suicide prevention and intervention programs. This distinction is important because the first generation of school-based programs often focused on teaching students and school personnel about risk factors, warning signs, and other issues to increase knowledge about suicide, but often did not address prevention and intervention services focused on reducing actual suicidal behavior (Kalafat, 2003; Mazza, 1997; Mazza & Reynolds, 2008; Miller, Eckert, & Mazza, 2009). Second-generation prevention programs have become more comprehensive by providing services that identify individuals who may be at risk for suicide and measuring suicidal behavior and referrals as outcomes to establish effectiveness (e.g., Reconnecting Youth, Sources of Strength).

School-Based Suicide Prevention: Effective Elements

When examining suicide prevention programs and services in schools, it is useful to be cognizant of elements that have been found to be effective as well as those that have been found to be ineffective. In terms of effective programs, it has become increasingly apparent that providing school-based services that are comprehensive, in the sense that they address suicide prevention as well as intervention, is critically important. For example, suicide prevention programs need to have a mechanism to identify students who may be at risk and who may consequently require additional, more intensive services (Mazza & Miller, in press). Effective school-based suicide prevention and intervention programs identify high-risk students and provide resource contact numbers and/or contact people to empower and encourage students to seek help. This is extremely important because adolescents often tell and/or provide clues to their peers before (or rather than) an adult regarding their suicidal thoughts and behaviors. Consequently, it is important that peers know who to turn to at their school for help, as well as available community resources and help lines. It is important to note, however, that in

teaching youth to be helpful resources for peers, they are not responsible for another student's life. Programs that use natural helpers or peer-to-peer models emphasize that information about a suicidal peer should be passed on to an appropriate adult in the school (Mazza & Miller, in press).

Second, effective school-based suicide prevention programs should be integrated into the school and be considered part of the general education curriculum (Kalafat, 2003; Mazza & Reynolds, 2008). When this occurs, all students within a grade level and/or school are assured of receiving a universal set of interventions, while a subset of these students will receive additional services to meet their unique needs. This model is consistent with other population-based, public health models designed to provide academic, social, emotional, and behavioral supports in schools (Doll & Cummings, 2008). For example, the Collaborative for Academic, Social, and Emotional Learning (CASEL) advocates that social and emotional learning (SEL) programs should be an integral part of the academic curriculum rather than being designated as supplemental (CASEL, 2015).

Third, discussions of youth suicidal behavior should be grounded in the field of mental health, and mental health should be viewed on a continuum and from the perspective of a dual factor model which includes both mental health problems and subjective well-being (Suldo & Shaffer, 2008). Providing such a structure allows for students to understand that an absence of mental health problems is not necessarily equated with good mental health, a finding which may be particularly important for high-achieving students and/or athletes who are often overlooked regarding mental health issues (Mazza & Miller, in press).

School-Based Suicide Prevention: Ineffective Elements

In addition to understanding some common elements of effective school-based suicide prevention programs, it is equally important to understand what types of services or programs are ineffective (Kalafat, 2003; Mazza, 1997; Mazza & Reynolds, 2008; Miller, Eckert, & Mazza, 2009). For example, brief one-time in-service programs (e.g., 1–3 h) have not been shown to be effective (Kalafat, 2003). Students often do not retain the knowledge that was taught, and there is rarely follow-up to determine if students are utilizing or benefitting from the content. Similar to other short duration mental health programs, knowledge gain does not necessarily equate to behavioral change, and in the case of suicidal behavior, behavior change is the most important variable (Mazza & Miller, in press).

Second, it is important that suicidal behavior is not discussed either with students or school personnel from a "stress-orientation" perspective but rather from a mental health perspective (Mazza, 1997). Research from clinical settings has shown that the vast majority of youth who attempted suicide and were seen in a medical setting had one or more diagnosable mental health disorders (Brent et al., 1999). In addition, suicide prevention programs that utilize a stress-orientation model, which inherently suggest that anyone can become suicidal if they experience enough stress, are not empirically supported (Mazza & Miller, in press).

Third, the evaluation of suicide prevention programs needs to include assessment of actual behaviors rather than only relying on knowledge gains or attitude change to determine effectiveness (Kalafat, 2003; Mazza, 1997, 2006; Mazza & Reynolds, 2008; Miller, 2011; Miller & Mazza, 2013). Knowledge gains (including dispelling myths about suicide) and attitudes about asking for help are important, but they do not often translate into a reduction of actual suicidal behavior. Similarly, for suicide prevention programs to be effective, they need to demonstrate long-term impact on related outcome variables such as referrals, a reduction in suicidal ideation, and/or a lower frequency of suicide attempts (Mazza, 2006; Miller, 2011; Zenere & Lazarus, 2009).

Finally, most suicide prevention programs do not provide explicit skills to assist students in helping them reduce the severity of their suicidal behavior and the mental health problems (e.g., depression) that typically underlie it. Given that psychotherapeutic interventions such as dialectical behavior therapy (DBT; Linehan, 1993,

2015) and acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 2016) have demonstrated empirical effectiveness in reducing the severity of suicidal behavior and depression (A-Tjak et al., 2015), integrating core components of these therapeutic strategies into school-based programs is warranted (Mazza & Miller, in press).

Ideation-to-Action Models of Suicidal Behavior

Child and adolescent suicidal behavior is highly complex, and no single factor can provide a complete explanation of why suicide, including youth suicide, occurs. A comprehensive understanding of youth suicidal behavior requires knowledge of a broad range of interrelated variables, including genetic, neurobiological, social, cultural, and psychological influences (Berman, Jobes, & Silverman, 2006). That said, theories are essential for understanding suicide because they provide a context for integrating disparate findings from research and good theories provide practical frameworks for prevention and intervention efforts (Joiner, 2005).

Earlier theories of suicidal behavior emphasized the most potent risk factors for suicide and potential variables that may lead to the desire for suicide (Anestis et al., in press). Unfortunately, a recent meta-analysis indicated that the last 50 years of research on general risk factors for suicide has not led to any improvement in our ability to prospectively predict death by suicide (Franklin et al., 2017). Moreover, research has repeatedly found that the vast majority of people who think about suicide will not make an actual attempt and that the vast majority who make an attempt will not die by suicide (Nock et al., 2008). Consequently, more contemporary theories of suicide have attempted to better understand the transition from suicidal ideation to suicide attempt and completion – theories which, collectively, have been described as "ideation-to-action" models of suicide. Prominent examples of ideation-to-action models include O'Connor's (2011) integrated motivational-volitional theory and Klonsky and May's (2015) three-step theory.

The most influential ideation-to-action theory to date, however, and the one that currently has the greatest influence among suicidology researchers as well as the most empirical support (Anestis et al., in press), is Thomas Joiner's interpersonal theory of suicide (2005). Given that Joiner's theory has important implications for preventing suicide, including preventing youth suicide in schools, we provide a brief explanation of the theory below. A more detailed description of this theory is beyond the scope of this chapter, but readers interested in a comprehensive discussion of it are encouraged to review Joiner (2005), Joiner, Van Orden, Witte, and Rudd (2009), and Van Orden et al. (2010).

There are three overlapping components of the interpersonal theory of suicide (Joiner, 2005; Van Orden et al., 2010). The first component of the model is *perceived burdensomeness.* Perceived burdensomeness includes negative life perceptions such as being a burden to one's family or the belief that one is expendable. The two primary dimensions of perceived burdensomeness are self-hate and liability, the perception that "my death is worth more than my life to others" (Van Orden et al., 2010, p. 584). With the developmental stage of adolescence including a greater emphasis on self-identification and peer relationships as well as an imaginary audience, adolescents who perceive themselves to be a burden to their family and/or peers can often experience high levels of emotional distress.

The second component of the theory is *thwarted belongingness*. Thwarted belongingness is a multidimensional construct consisting of two primary dimensions: loneliness and an absence of reciprocal caring relationships (Van Orden et al., 2010). This component is especially important among adolescents who are in the process of becoming more independent from their parents while simultaneously relying more on their peers for support and in developing intimate relationships. If those attempts are being rejected (thwarted) by the desired peer group or intimate person, those adolescents are more likely to experience thwarted belongingness.

The combination of perceived burdensomeness and thwarted belongingness may increase the student's desire to die by suicide, but it is not

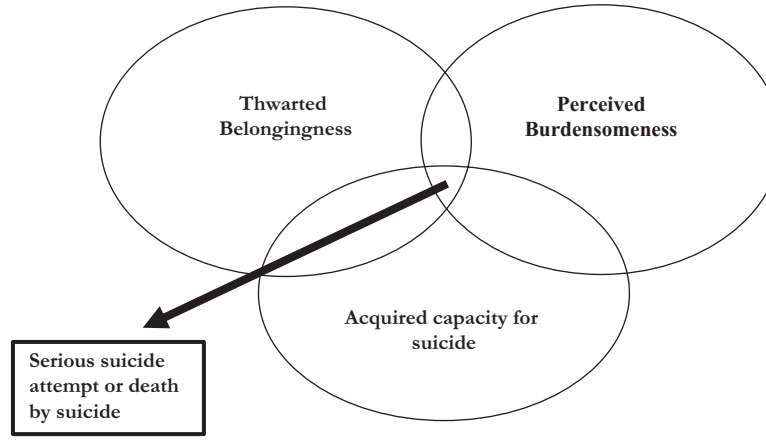

Fig. 15.1 The interpersonal theory of suicide (Note: Adapted from Joiner (2005))

Note:Adapted from Joiner (2005)

sufficient for the individual to make a serious suicide attempt, according to the theory, without possessing a third component: the *acquired capability* for suicide. This acquired capability for suicide does not come naturally and is comprised of two components: lowered fear of death and elevated physical pain tolerance (Van Orden et al., 2010). Thus, adolescents who are engaging in self-harming behavior, such as non-suicidal self-injury, or gaining familiarity with lethal weapons, such as guns, may be acquiring/developing the capacity for suicide. According to the theory, it is not until an individual has all three of these components that the risk of a serious suicide attempt or death due to suicide is present (Joiner, 2005). See Fig. 15.1 for a visual representation of the interaction of the components (Joiner, 2005; Van Orden et al., 2010).

Youth Suicide Prevention Within a Multi-tier Systems of Support Framework

Joiner's (2005) interpersonal model of suicidal behavior explicated above highlights two different areas where prevention and intervention services in schools can be applied: perceived burdensomeness and thwarted belongingness (the third component, acquired capability, would appear to be a more difficult area for schools to directly intervene and so is probably not as viable as a prevention target; Joiner, 2009). For example, a recent meta-analysis found that higher school connectedness (i.e., belongingness) was associated with reduced reports of suicidal thoughts and behaviors among general, high-risk, and sexual minority adolescents (Marraccini & Brier, 2017).

For schools to take a proactive approach in helping to prevent and reduce youth suicidal behavior, they need to implement social emotional learning (SEL) curricula that help students acquire emotion regulation skills that (a) focus on perceived burdensomeness and interpersonal relationship skills and (b) target thwarted belongingness at all levels within a multi-tier systems of support (MTSS) structure. Given that subjective well-being is a major tenet of the dual factor model of mental health (Suldo & Shaffer, 2008), SEL programs also need to address issues of school climate and connectedness and perceptions of school and life satisfaction in addition to symptomatology related to mental health problems.

Schools often tend to focus on high-risk students when it comes to mental health issues, and there are several important reasons why this might be the case (Mazza, 1997, 2006). Using a service approach that only focuses on those students currently experiencing mental health difficulties (i.e., students at the Tier 3 level within a MTSS structure), however, does little or nothing to stem the flow of youth who may experi-

ence future mental health problems. In addition, adopting this type of approach is reactionary rather than preventive and implies that students must exhibit clear and severe mental health problems (i.e., ones that are having a significant impact on their behavior at school) before they can receive mental health services (Mazza, 1997, 2006).

Current best practices indicate that a focus on mental health issues in schools needs to take a comprehensive approach and integrate SEL programs at the Tier 1, Tier 2, and Tier 3 levels (Cook, Burns, Browning-Wright, & Gresham, 2010). Below is a list of individual SEL programs at each tier that address youth suicidal behavior and/or mental health issues associated with reducing and/or preventing suicidal behavior.

Tier 1

Tier 1 prevention programs are designed to be implemented at the universal level, meaning that the services, skills, and/or content of program/curriculum is for all students in a population (e.g., all students in a classroom, all students in a grade level, all high school students, etc.). When applied to behavioral/mental health issues, Tier 1 I SEL programs are often viewed as "upstream" approaches (Wyman, 2014) that reduce the likelihood of the targeted behaviors from developing or occurring. There are several Tier 1 programs that have been identified to prevent youth suicidal behavior, four of which we describe below.

Sources of Strength

Sources of Strength (LoMurray, 2005) is a universal suicide prevention program that utilizes peer leaders to help strengthen protective factors and identify students who may be at risk for suicide. The Sources of Strength program attempts to reduce suicidal behavior by increasing help-seeking behavior among youth through peer social networks in conjunction with caring adults. By utilizing the vast reach of peer social networks, peer leaders communicate with school personnel about those students who may be at risk for suicide. School personnel (e.g., school psychologists, school counselors, school social workers) then provide services to the student or are the conduit for linking the student to community services.

The Sources of Strength program incorporates eight different components including mental health, family support, positive friends, mentors, healthy activities, generosity, spirituality, and medical access. The principle behind this upstream approach is to strengthen these eight related protective factors so that youth can call upon them when they are experiencing suicidal problems and/or emotional dysregulation.

The outcome data on Sources of Strength has been promising (Wyman et al., 2010). Results from a randomized control trial found that Sources of Strength increased peer leader connectedness to adults, increased peer leader's school engagement, increased peer leaders' referral of a suicidal friend to an adult (especially in larger schools), and increased positive perceptions of adult support for suicidal youth and acceptability in seeking help. The Sources of Strength program has also been identified on the National Registry of Evidence-Based Programs and Practices (Sources of Strength. Intervention summary retrieved on June 15, 2017 from the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices, http://nrepp.samhsa.gov/AdvancedSearch.aspx).

Signs of Suicide

Signs of Suicide Middle School and High School Prevention Programs is a universal curriculum design to teach about depression awareness and suicide prevention to middle and high school students. The goals of SOS are to decrease youth suicidal behavior by increasing students' knowledge about suicide and depression, to encourage help-seeking behavior for a friend or self, to reduce the stigma of suicide and mental health, to engage parents and school staff as partners through gatekeeper education, and to encourage community-based partnerships that support youth mental health.

The lessons of the Signs of Suicide curriculum focus on raising awareness of the relationship between depression and suicide, identifying the signs of depression in themselves and others, identifying risk factors of suicidal ideation and depression, and completing a screening measure for depression and suicidal behavior. Students are taught to seek help using the ACT (acknowledge, care, and tell) technique, which is similar to other gatekeeper training models. Finally, at the completion of the curriculum, students are provided with a referral card indicating that they or a peer may benefit from speaking with a trusted adult about any mental health problems they may be experiencing.

The outcome data on Signs of Suicide Middle School and High School Prevention Programs is promising. At 3-month posttest, Aseltine, James, Schilling, & Glanovsky (2007) found that students who completed the curriculum were less likely to have suicidal thoughts compared to peers who did not receive it. For middle school students, those who received the program had less suicidal behavior than peers who did not receive the program (Schilling, Lawless, Buchanan, & Aseltine, 2014). Finally, Schilling, Aseltine, and James (2016) reported that among high school students, after controlling for pretest scores and lifetime suicide attempts, the Signs of Suicide group was significantly less likely to report making suicide attempts compared to control peers in the past 3 months (Schilling, Aseltine, & James, 2016). The Signs of Suicide Middle School and High School Prevention Programs is listed on the National Registry of Evidence-Based Programs and Practices (Signs of Suicide. Intervention summary retrieved on June 15, 2017 from the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices, http://nrepp.samhsa.gov/AdvancedSearch.aspx).

Lifelines: A Suicide Prevention Program

A third suicide prevention program that targets a universal population is *Lifelines: A Suicide Prevention Program* (Underwood & Kalafat, 2009). The Lifelines curriculum is designed for middle and high school students with the primary goal of developing and promoting a caring and competent school community where help seeking is modeled and encouraged. The Lifelines curriculum emphasizes that suicidal behavior is not a topic to be kept secret and helps school staff and students to recognize the signs of suicide among youth.

The Lifelines curriculum is only one component of the comprehensive approach within the larger Lifelines program. The curriculum was developed specifically for grades 8–10, covering the transition from middle to high school for most students. The curriculum consists of four 45-min lessons or two 90-min lessons that utilize a social development model and employ student role-plays and interactive teaching strategies. The curriculum is often taught by health teachers or guidance counselors.

The outcome data on the Lifelines curriculum is promising with regard to knowledge gains and changing attitudes about suicide and suicide intervention. Kalafat, Madden, Haley, and O'Halloran (2007) found that students who received the Lifelines curriculum had greater increased knowledge about suicide, improved attitudes regarding suicide interventions, improved attitudes in seeking adult help, and reduced willingness to keep a friend's suicidal thoughts a secret compared to peer who did not receive the curriculum. The Lifelines curriculum is listed on the National Registry of Evidence-Based Programs and Practices (Lifelines. Intervention summary retrieved on June 15, 2017 from the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices, http://nrepp.samhsa.gov/AdvancedSearch.aspx).

DBT Skills in Schools: Skills Training for Emotional Problem Solving for Adolescents

DBT Skills in Schools: Skills Training for Emotional Problem Solving for Adolescents (DBT STEPS-A; Mazza, Dexter-Mazza, Miller, Rathus, & Murphy, 2016) is a newly developed SEL

curriculum based on the foundation of dialectical behavior therapy, or DBT (Linehan, 1993, 2015; Rathus & Miller, 2015). The curriculum is designed for students ages 12–19 years and taught at the Tier 1 level by general education teachers who demonstrate an awareness of mental health issues (e.g., health teachers). DBT STEPS-A can also be implemented at the Tier 2 and 3 levels, with added strategies to help provide services to students with more intensive needs.

DBT STEPS-A incorporates the four primary modules of DBT: mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness. The curriculum is comprised of 30 manualized lessons that are structured for 50-min periods. The lessons are designed to be taught once a week for the academic year or twice a week for an academic semester. Although its foundation is based on skills used in DBT, the DBT STEPS-A curriculum is not a suicide prevention program per se but rather an emotion regulation and coping strategy program, two major components that are related to adolescent suicidal behavior (Rathus & Miller, 2015).

The initial outcome data on DBT STEPS-A appears promising, with over nine school districts reporting anecdotal information (Mazza, 2016). Formal studies evaluating program implementation fidelity and effectiveness are in their early stages given that the curriculum only became available in 2016.

Tier 2 and 3

Suicide prevention programs that are designed to help students who are at risk of engaging in self-harming and/or suicidal behavior due to emotional difficulties, mental health issues, or other related risk factors are considered Tier 2 or selective programs. Tier 3 programs are those that target students who are already engaged in self-harming or suicidal behavior. These two tiers are combined for purposes of this chapter because most suicide prevention programs designed for higher-need students target similar risk factors related to suicidal behavior. Two such programs are briefly summarized below.

American Indian Life Skills Development/Zuni Life Skills Development

The American Indian Life Skills Development/Zuni Life Skills Development program was developed to help reduce the risk of suicide among Native American youth – a group whose rate of suicide is estimated to be three times higher than similar age peers from other groups (CDC, 2015). The curriculum goals are to reduce risk factors among Native American adolescents and also improve protective factors. First developed to address the cultural components of the Zuni Pueblo people in New Mexico, the curriculum was later broadened to allow for culturally appropriate modifications for other groups of Native American adolescents (LaFromboise, 1996). The focus of the current curriculum is high school students ages 14–19.

The curriculum offers 28–56 lesson plans that cover varying topics and are delivered three times per week over a 30-week period. The structured lessons are interactive and incorporate role-plays and experiences that are central to Native American adolescent life. Lessons are delivered in a team approach, with teachers working with community leaders and local representative to provide and translate content materials to tribal activities, beliefs, and values. The on-site curriculum coordinator is often a school counselor who is similar in heritage to the intended audience.

LaFromboise and Howard-Pitney (1995) found that adolescents who received the curriculum had less feelings of hopelessness than control peers. In addition, students receiving the Zuni curriculum demonstrated higher levels of suicide intervention skills than peers in the control group. The American Indian Life Skills Development Curriculum is listed on the National Registry of Evidence-Based Programs and Practices (American Indian Life Skills Development Curriculum. Intervention summary retrieved on June 15, 2017 from the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices, http://nrepp.samhsa.gov/AdvancedSearch/aspx).

Reconnecting Youth

A second Tier 2/3 suicide intervention program is called *Reconnecting Youth: A Peer Group Approach to Building Life Skills* (Reconnecting Youth [RY], 2009). This curriculum focuses not only on reducing adolescent suicidal behavior but also on the risk and mental health factors related to youth suicide, such as depression and substance abuse. The curriculum is designed for high school adolescents and targets those students who are at risk for school dropout, have demonstrated poor achievement skills, and/or have been identified by school personnel as having difficulties with aggressive behavior, substance abuse, depression, and/or suicidal behavior. The student selection process is based on multiple risk factors which align with Tier 2 and Tier 3 services.

The RY curriculum is comprised of four main modules: self-esteem building, decision-making, personal control, and interpersonal communication. The lessons are designed for 55–60-min periods and are manualized, providing teachers with examples that highlight the skill or application of that particular lesson. In addition, the RY curriculum also incorporates supplemental supports, such as setting up peer and school bonding activities, parent involvement, and the development of a crisis response plan that aligns with the school's suicide prevention program. The course is taught by an RY leader who has received training on working with high-risk youth (Reconnecting Youth.: A Peer Group Approach to Build Life Skills. Intervention summary retrieved on June 15, 2017 from the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices, http://nrepp.samhsa.gov/AdvancedSearch/aspx).

The outcome data for Reconnecting Youth has been positive, showing effective outcomes for students who receive the curriculum. In one study (Eggert, Thompson, Herting, Nicholas, & Dicker, 1994), students who received the RY curriculum showed reductions in depression, perceived stress, and anger, as well as increases in GPA and less absenteeism, compared to peers who were assigned to a control group. Another study (Eggert, Thompson, Herting, & Nicholas, 1995) involved three groups of high-risk students: those receiving an assessment and the RY curriculum for one semester, those receiving an assessment and the RY curriculum for two semesters, and those in an assessment-only group. All groups showed decreased suicide risk behaviors, depression, hopelessness, stress, and anger, as well as increased self-esteem and network social support. Increased personal control was observed only in the experimental groups, and not in the assessment-only control group. The *Reconnecting Youth: A Peer Group Approach to Building Life Skills* curriculum is listed on the National Registry of Evidence-Based Programs and Practices (Reconnecting Youth: A Peer Group Approach to Build Life Skills. Intervention summary retrieved on June 15, 2007 from the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices).

School-Based Screening to Identify Potentially Suicidal Youth

It is important to note that even with the best SEL program in place at schools, the issue of identifying students who may be at risk for suicide remains central to providing effective prevention and intervention services. Moreover, the issue of screening and risk assessment is a multifaceted one that cuts across all three tiers. Screening, for example, can occur at the universal level (Tier 1) or with students who may be at risk (Tier 2). Suicide risk assessment, especially in the form of individual student interviews, is typically conducted at Tier 3.

Unfortunately, adolescents who have thoughts about suicide, or have recently attempted suicide, do not often self-refer. Consequently, the screening of students across the different levels of multi-tiered systems of support structure needs to be conducted if schools are truly invested in a comprehensive suicide prevention program. This means that questions about past and current suicidal thoughts, suicidal intent, and suicide attempts need to be included as part of a universal screening program that is imbedded in the MTSS identification and progress monitoring components.

Screening for suicidal behavior in schools is not a new concept. In fact, over 25 years ago, Reynolds (1991) provided a model of how to conduct universal screening regarding suicidal ideation. Furthermore, in 2001, the surgeon general recommended screening procedures as an effective method for proactively identifying individuals at risk for suicidal behavior (DHHS, 2001). Robinson et al. (2013), in a review of suicide screening programs, found that they successfully identified students at risk for suicide and who were not likely to self-refer for help, with studies reporting that between 4% and 45% of those were identified as needing further support.

Despite the extensive literature suggesting that screening for suicidal behavior is an effective and efficient means for identifying youth at risk for suicidal behavior (e.g., Mazza, 2006; Mazza & Reynolds, 2008; Miller, 2011; Miller & Mazza, 2017; Reynolds, 1991; Robinson et al., 2013), schools have been reluctant to implement this strategy for several reasons. First, adequate school-based resources are needed to follow up with students who were positively identified by the screening process to provide the level of support services needed. Schools often do not have enough personnel who are properly trained to provide a risk assessment of youth suicidal behavior. Second, student screening procedures are both time and labor intensive, particularly for school-based mental health professionals such as school psychologists, school counselors, and/or social workers who are typically the individuals with the greatest responsibility for screening and follow-up assessment.

Third, when screenings are conducted, there are often false positives (i.e., students who were identified by the screening as being at risk but upon the follow-up assessment are found to be at low risk or not at risk for suicidal behavior). Additionally, because thoughts about suicide can wax and wane (e.g., some students who are at risk in the fall may not be at risk in the spring), determining when and how often to implement the screening has been viewed as a barrier. Finally, screening measures for youth suicide have been found to be less acceptable than other forms of school-based suicide prevention, such as curriculum programs presented to students and in-service training for school personnel, among both school personnel (Eckert, Miller, DuPaul, & Riley-Tillman, 2003; Miller, Eckert, DuPaul, & White, 1999; Scherff, Eckert, & Miller, 2005) and students (Eckert, Miller, Riley-Tillman, & DuPaul, 2006).

Although these barriers/challenges to implementing screening programs in schools are significant, none are insurmountable. In fact, several states (e.g., Washington) now have laws requiring school personnel such as school psychologists, social workers, and counselors to receive professional development in the areas of suicide assessment and referral, with screening being a primary focus. With more states following this lead and more school psychologists (as well as other school personnel) being trained to assess and provide services to youth at risk for suicide, the barriers to providing proactive identification of suicidal youth are decreasing.

Suicide Postvention in Schools

Even in situations in which multi-tier systems of support are provided in schools to prevent youth suicide, there may still be rare circumstances in which a student takes his or her own life. In those tragic circumstances, the school and school district in which the deceased student attended often quickly becomes a focal point of attention and scrutiny from other students, school personnel, parents/caregivers, the local community, and the media (Poland, 1989). Further exacerbating this problem is the finding that school personnel frequently report being ill-prepared to implement effective strategies following the death of a student by suicide (Miller & Mazza, 2013). As noted by Poland (1989), "the one question school personnel are probably the least trained to deal with and the most apprehensive about is what to do in the aftermath of a suicide" (p. 122).

The term *postvention* refers to a series of proactive, preplanned procedures that are implemented after a suicide occurs. The primary goals of suicide postvention include providing resources for those affected by the suicide, facilitating coping strategies, preventing possible sui-

cide contagion or imitative behaviors, identifying the ongoing needs of members of the school community, and ultimately returning the focus of the school to academic education (Hart, 2012). Perhaps most crucially, school personnel should be aware that suicide *postvention* is also a form of *prevention.* That is, given that the death of a student by suicide may increase the probability of suicidal behavior in other students within that student's life space, an important component of suicide postvention is to prevent the probability of any further suicides from occurring.

The MTSS model mentioned earlier in the context of school-based suicide prevention can also be used in postvention procedures. For example, all students within a given population (e.g., a high school in which a student died by suicide) should be read the death announcement and be provided with an opportunity to ask questions. Among other tasks at this level, rumors should be dispelled, and all students should be informed how, when, and where they can get additional help. At Tier 2, intervention services would be directed toward a selected group of students who may need some additional support, either in groups or individually. Finally, at the Tier 3 level, intervention services would be provided for those students most impacted by the death and who might require more sustained and individualized levels of support, possibly including psychotherapeutic interventions (Erbacher, Singer, & Poland, 2015).

Miller (2011) and Miller and Mazza (2013) provide some general suicide postvention guidelines for schools, which include both recommended procedures (i.e., what school personnel should do) and some practices to avoid (i.e., what should personnel should not do). They include the following:

- Plan in advance of any crisis, and review guidelines from reputable organizations such as the American Association of Suicidology (www.suicidology.org), the American Foundation for Suicide Prevention (www.afsp.org), the Suicide Prevention Resource Center (www.sprc.org), and the National Association of School Psychologists (www.nasponline.org).
- Have the school crisis team meet or communicate as soon as possible following the suicide to make plans and assign duties.
- Verify and confirm that a suicide occurred. This should be accomplished through communicating with the medical examiner, police, and family of the deceased.
- Do not dismiss school or encourage funeral attendance during school hours, but let students know they can attend the funeral (if open to the public) with parental approval.
- Do ensure that school staff members attend the funeral to support affected students as well as the family members of the deceased student.
- Do not dedicate a physical memorial to the deceased (e.g., yearbooks, tree, bench). However, "living" memorials, such as donating to an organization promoting suicide prevention made in the name of the victim or engaging in fundraising projects in the student's name to promote suicide awareness, can contribute comfort, increase awareness, and create something positive out of a tragic event.
- Contribute to a suicide prevention effort on behalf of the school district and/or community.
- Contact the family of the deceased youth and offer condolences. Offer support to siblings of the deceased attending the school and provide assistance as needed or requested. Inform the family of how the school is responding to the suicide.
- Do not release information to students by announcing the suicide in a large assembly or over intercom systems. Instead, disseminate information to the faculty and students in small groups, preferably in their regular classrooms. Be truthful in verifying that the cause of the student's death was due to suicide, but avoid explicit details regarding the method used. Focus instead on general factors in suicide prevention, emphasizing coping skills and letting students know the school and community resources available to help them.
- Make available additional mental health professionals, either from within the school district or outside it, for several days after the suicide and have them be "on call" should stu-

dent and/or school personnel require additional supports.
- Monitor friends and other potentially vulnerable classmates of the deceased.
- Arrange for makeshift counseling rooms to be made available in the school building so that mental health professionals can meet with students and staff privately.
- Provide counseling and discussion opportunities for school faculty and staff.
- Collaborate with the media, law enforcement, and community agencies.
- Provide follow-up services to those most affected by the suicide and be cognizant of anniversary dates, such as the deceased's birthday and anniversary of the student's death.
- Evaluate the postvention response.

One of the most important goals of postvention procedures is to prevent any further deaths by suicide, a phenomenon known as suicide contagion. Exposure to suicidal behaviors, either through personal experience or the media, can potentially lead vulnerable individuals to either develop or act upon their own suicidal behaviors. Although contagion is rare, when it does occur, adolescents appear to be particularly susceptible to it, especially individuals who have prior existing risk factors (e.g., psychopathology, previous suicidal behavior, a history of previous loss) and who knew the suicide victim (Brent et al., 1989). Research suggests that suicidal behavior can be triggered in adolescents by suicide attempts made by friends and family and that these effects can last for several years (Abrutyn & Mueller, 2014).

An important component of preventing possible contagion is ensuring that appropriate messages about the suicide are conveyed to and by the media. School personnel should carefully consider how information is to be shared with the media and appoint a spokesperson to communicate with media outlets. Although media coverage is often perceived by school personnel as unwelcome and intrusive, it should also be viewed as an opportunity for public education and community outreach. For example, the media can play a powerful role in educating the public about suicide, reducing the stigma often associated with suicidal people, describing what individuals can do to help others, and providing information for anyone who might be feeling suicidal, such as the National Suicide Prevention Lifeline phone number (1-800-273-8255) and website (www.suicidepreventionlifeline.org). Two key points that school personnel should emphasize to the media are that (1) suicide is preventable and (2) we all have a role to play in that process (Miller, 2011).

Whenever possible, school personnel should also proactively use and monitor social media (Erbacher et al., 2015). For example, school personnel may use social media to dispel rumors, communicate facts about the death, announce funeral arrangements, and provide information and resources for students who may be experiencing grief and mental health problems. Social media platforms such as Twitter, Instagram, Snapchat, and Facebook are now a significant part of young people's lives and are rapidly becoming a primary means of communication among them. In the immediate aftermath of a student's death by suicide, students may use social media for a variety of purposes, including calling for impromptu memorials or candlelight vigils, posting messages about the deceased (which may or may not be true), and sometimes even blaming specific individuals or institutions for the suicide. School personnel may understandably be tempted to control or limit student communication on social media, but this is likely to be highly ineffective (as well as virtually impossible) and should therefore be avoided (Erbacher et al., 2015).

Given that how schools respond to a student's suicide can potentially have a profound effect on promoting resiliency and coping mechanisms among other students (Erbacher et al., 2015) and has the potential to prevent additional suicides, having effective suicide postvention procedures in place before a crisis occurs is critical. Consequently, suicide postvention procedures should be viewed as an essential component of school-based suicide prevention. For more information on suicide postvention procedures in schools, the reader is encouraged to review *After A Suicide: A Toolkit for Schools* (2011), Erbacher et al. (2015), Hart (2012), and Miller (2011).

The Role of School-Based Mental Health Professionals in Suicide Prevention

Although all school personnel have important roles to play in school-based suicide prevention efforts, school-based mental health professionals (e.g., school psychologists, school counselors, school social workers) can and should play a central role across the continuum of services – from upstream approaches to crisis management and to serving on postvention teams.

One important part of this continuum that to date has eluded most school-based mental health professionals is providing evidence-based psychotherapeutic interventions that utilize one-to-one or small group structures as a means for delivering services to students at risk for suicide. Given that most school-based mental health professionals are not trained to work with suicidal students and for a variety of reasons do not typically work with them, high-risk students are often referred out to community agencies. Yet, as researchers have noted, less than 20% of students who have been referred for mental health services to outside agencies received them, compared to 98% of students who were referred for mental health services within their schools (Catron & Weiss, 1994; Cook et al., 2010; Kataoka, Zhang, & Wells, 2002). Consequently, having school-based mental health professionals providing direct mental health services in the schools, including evidence-based interventions such as cognitive-behavior therapy (CBT) and dialectical behavior therapy (DBT), would appear to be a viable role for school-based mental health professionals. Although there will likely be barriers and challenges to these roles, if school-based mental health professionals are serious about making a difference in youth suicide prevention, they will find ways to overcome them.

School-based mental health professionals can also contribute to suicide prevention in schools through advocating for, implementing, and supporting student screening for suicide; enhancing their skills in conducting suicide risk assessments; and consulting with school personnel in promoting student wellness and mental health generally (Miller, Gilman, & Martens, 2008). For example, mental health professionals in the schools can consult with school administrators and teachers to develop and implement systems-level interventions for improving school climate and student connectedness to schools.

School and Community Partnerships to Prevent Youth Suicide

Although school-based suicide prevention programs are important, by themselves they will likely not substantially reduce the rate of youth suicide unless such programs are combined with community-based interventions. Three important community-based interventions include means safety, crisis hotlines and social media, and psychopharmacological interventions. Each is briefly described below.

Means Safety

Means safety refers to any procedure for limiting the availability of, or access to, potentially life-threatening objects (e.g., guns, knives, toxic substances, tall buildings) for the purposes of promoting safety and preventing suicide. Although it is commonly believed that restricting access to lethal means in one area (e.g., restricting access to guns) will result in an increase in another nonrestricted suicide method (e.g., hanging), this typically does not occur. In fact, restricting access to lethal means is associated with reductions in suicide (Lester, 2013).

One example of means safety to prevent youth suicide is the use of firearms, particularly handguns. There is clear and compelling evidence that the presence of guns in a young person's home, especially unlocked loaded handguns, is associated with a significant increase in the risk for suicide (Leenaars, 2009). Public policy initiatives that have restricted the access to guns (especially handguns) are associated with a reduction of suicide generally, especially among young people (Leenaars, 2009). As such, one of the most potentially effective youth suicide prevention programs is removing the access of guns to children and

adolescents in their home environment (American Psychological Association, 2013). School-based mental health professionals can partner with the parents and caregivers of potentially suicidal youth to ensure that guns are removed or safely stored in places of residence of high-risk youth. Such efforts may lead to a decrease among suicidal youth who have the capability for engaging in suicidal behavior via firearms.

Crisis Hotlines and Social Media

Various forms of technology (e.g., crisis hotlines, smartphones, social media) offer immediate and 24-h, 7 days per week availability to suicidal or potentially suicidal individuals. Research conducted on telephone crisis lines indicates that they can be beneficial for suicidal individuals and that youth who use them are frequently helped by them (Gould & Kalafat, 2009). Unfortunately, those who are at highest risk for suicide (males) are much less likely to use them than those at lower risk (females). Additionally, many young people appear to have negative attitudes toward hotlines, especially adolescents, who are most vulnerable to suicidal behavior (Gould & Kalafat, 2009).

Rather than crisis telephone hotlines, the Internet and social media may be more congruent with the preferences and lifestyles of contemporary youth. Teenagers have been found to be as likely to access the Internet for help as they are to see a mental health professional in or out of schools (Gould & Kalafat, 2009), and advances in technology have resulted in traditional hotline centers developing various social media platforms more likely to be accessed by young people (Kerr, 2013). Although studies examining the utility and effectiveness of social media for preventing suicide are nascent, these types of interventions clearly have the potential to reach and affect an unprecedented number of young people (Miller & Mazza, 2017). School personnel are encouraged to partner with local and national crisis centers and share information with students and staff about various social media platforms that may be of assistance to potentially suicidal youth.

Psychopharmacological Interventions

There currently is no medication that will treat suicide directly. Psychopharmacological interventions often focus on the emotional and behavioral issues likely to be associated with suicidal behavior, including depression, bipolar disorder, anxiety, and other mental health problems, and they are often successful in treating them. That said, mental health disorders appear to increase the risk for suicide rather than directly cause it (Kaut, 2013).

Psychopharmacological treatments have generated some controversy due to reports that they may increase suicidal behavior (Kaut, 2013). Although some clinical trials have found a slight increase in suicidal ideation among youth taking antidepressant medication, an increased number of deaths by suicide have not been found. For example, a meta-analysis of 24 clinical trials involving 9 medications administered to approximately 4400 pediatric patients found that there were no suicides within any of the trials (Hammad, Laughren, & Racoosin, 2006). Indeed, among individuals at risk for suicide, it has been suggested that *not* taking antidepressant medications will likely lead to a greater risk for suicide than using them (Joiner, 2010). School personnel can partner with medical professionals in the community by collecting data on the effects of medications to better inform decision-making (e.g., collecting student self-report data on suicidal ideation during periods of medication trials, changes in medication, and/or changes in dosage levels).

Conclusion

Youth suicide is a leading cause of death in the United States, Canada, and throughout the world, yet the stigma surrounding mental health issues in general and suicidal people specifically is complicating efforts to reduce and prevent youth suicidal behavior. School personnel can play a prominent role in youth suicide prevention by reducing the barriers for identification and inter-

vention services in schools while also reducing the stigma regarding talking about suicide. Additionally, given that youth suicidal behavior is likely to be an outcome from significant mental health problems, school personnel should be aware that promoting wellness and mental health generally is an important aspect of comprehensive suicide prevention programs in schools. Helping children and adolescents in schools to develop effective coping strategies and skills to address mental health challenges and stressful life events is critical, as is advocating for youth mental health services and mental health promotion within schools. These actions, combined with a positive school climate, caring and supportive teachers and school personnel, and effective school and community partnerships, can potentially result in more student lives being saved from tragic and unnecessary deaths due to suicide.

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School-Based Prevention and Early Intervention Programs for Depression

16

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Abstract

The risk of developing a depressive disorder increases with age during this period, with rates of depression amongst adolescents comparable to the lifetime prevalence rates reported in the adult population, and is one of the leading causes of disease burden in children and adolescents aged 10–24 years. The school setting provides an opportune environment in which to target all individuals, particularly those with elevated symptoms of depression who may not have sought help yet or been identified as being symptomatic, those at risk of developing symptoms due to external stressors or internal vulnerabilities, those with subthreshold symptoms of depression and those who are asymptomatic but who may develop symptoms in the future. School-based programs can also reduce and alleviate many of the common barriers to treatment in the community, such as cost, location, time, transportation and stigmatisation by offering low-cost, convenient and non-threatening alternatives.

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Unipolar depression is a common mental disorder that can be present as early as childhood, with a marked increase in prevalence observed from mid-adolescence (Kessler, Avenevoli, & Merikangas, 2001; Merikangas, He, Burstein et al., 2010). The risk of developing a depressive disorder increases with age during this period, with rates of depression amongst adolescents comparable to the lifetime prevalence rates reported in the adult population (Merikangas, He, Burstein et al., 2010). The 1-year prevalence rate of major depression amongst the child and adolescent population has been reported to be between 1% and 8%, with up to 25% of young people experiencing an episode of major depression by the age of 18 years (Kessler et al., 2001, 2012; Merikangas, He, Brody et al., 2010; Thapar, Collishaw, Pine, & Thapar, 2012). However, these figures are likely to be an underestimate of the true extent of emotional difficulties in the community, with many children and adolescents exhibiting elevated, but subclinical, levels of depressive symptoms (Kessler et al., 2001; Wesselhoeft, Sørensen, Heiervang, & Bilenberg, 2013).

Depression is one of the leading causes of disease burden in children and adolescents aged 10–24 years (Gore et al., 2011), with the disorder often taking a chronic, recurrent and episodic course (Kessler et al., 2001; Merry, McDowell, Wild, Bir, & Cunliffe, 2004). Some of the negative effects associated with depressive disorders

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include poor academic performance, physical ill health, family and social dysfunction, low self-esteem and suicide (Jaycox et al., 2009; Johnson & Greenberg, 2013; Merry et al., 2004). Depression is also often co-morbid with a number or other psychiatric conditions in children and adolescents, including anxiety, attention deficit hyperactivity disorder, conduct disorder and substance use disorders (Kessler et al., 2001; Thapar et al., 2012). If left untreated, the negative effects associated with depression can continue into adulthood where further social, occupational and economic difficulties can arise (Thapar et al., 2012).

Depression Prevention in Schools

Given the high prevalence rate and associated adverse effects, the need to prevent the development of depressive disorders is paramount. The importance of prevention is further reflected in research that indicates that fewer than 50% of young people with a depressive disorder receive clinical treatment (Kessler et al., 2001; Merikangas, He, Brody et al., 2010, Merikangas et al., 2011). Most prevention and early intervention programs for children and adolescents are implemented in the school environment, due to its unparalleled contact with youth (Masia-Warner, Nangle, & Hansen, 2006).

The school setting provides an opportune environment in which to target all individuals, particularly those with elevated symptoms of depression who may not have sought help yet or been identified as being symptomatic, those at risk of developing symptoms due to external stressors or internal vulnerabilities, those with sub-threshold symptoms of depression and those who are asymptomatic but who may develop symptoms in the future. School-based programs can also reduce and alleviate many of the common barriers to treatment in the community, such as cost, location, time, transportation and stigmatisation by offering low-cost, convenient and non-threatening alternatives (Masia-Warner et al., 2006).

There are three types of prevention and early intervention programs – universal, indicated and selective programs. These program types can all be delivered in schools, with each exhibiting a number of advantages and disadvantages (Mrazek & Haggerty, 1994). Universal prevention programs are delivered to all students regardless of symptom level or risk status and are often designed to enhance general mental health or build resilience. The advantage of universal programs is their broad application, in that both symptomatic and nonsymptomatic young people can garner benefit from participating, as well as the reduced stigma and time-scheduling considerations associated with them, as the screening of participants isn't necessary (Horowitz, Garber, Ciesla, Young, & Mufson, 2007).

Selective prevention programs target children and adolescents who are at risk of developing depression by virtue of particular risk factors, such as parental divorce or growing up in an impoverished environment, while indicated programs target young people with early or mild symptoms of depression that do not meet clinical criteria for disorder (Mrazek & Haggerty, 1994). There are a number of benefits associated with selective and indicated programs, which are often collectively referred to as targeted interventions. These benefits include the tailoring of programs to the specific needs of participants and the potential for achieving substantial individual effects (Horowitz et al., 2007).

The aims of the present chapter are to (i) review the evidence for depression prevention programs in schools, drawing on the results from a recent meta-analysis (Werner-Seidler, Perry, Calear, Newby, & Christensen 2017), (ii) provide an update of the aforementioned meta-analysis to present new evidence in this area, (iii) provide a summary of the programs with the strongest evidence for their effectiveness and (iv) discuss future directions in school-based depression prevention, including the utility of online prevention programs, the growing interest in mindfulness-based interventions and the use of social networks to disseminate positive health messages.

The Evidence for Prevention and Early Intervention Depression Programs

Over the past 10 years, a number of systematic reviews and meta-analyses have been conducted to identify and determine the efficacy and effectiveness of depression prevention programs for young people (Brunwasser & Garber, 2016; Calear & Christensen, 2010; Hetrick, Cox, Witt, Bir, & Merry, 2016; Werner-Seidler et al., 2017). Generally these reviews have been positive, finding modest but significant effects for universal and targeted prevention programs for depression.

Systematic Review and Meta-analysis of School-Based Depression Prevention Programs

One of the most recent reviews, which focused specifically on school-based depression prevention programs targeted at children and adolescents, was conducted by Werner-Seidler and colleagues (2017) and aimed to describe and evaluate their short- and long-term effects. This review also included meta-analyses of intervention effects, including subsample analyses by prevention type (universal vs. targeted), intervention leader (classroom teacher vs. health professional), intervention content (cognitive behaviour therapy [CBT] vs. other) and age of target sample (children [<10 years] vs. early adolescent [10–14 years] vs. late adolescent [>14 years]).

In brief, the inclusion criteria for the review were that (a) participants were children and/or adolescents with a mean age between 5 and 19 years, (b) interventions were manualised psychological or psychoeducational programs designed to prevent depressive symptoms and/or promote well-being (e.g. cognitive behaviour therapy [CBT], interpersonal psychotherapy [IPT], mindfulness), (c) interventions were school-based, (d) the effects of the intervention were compared to a control condition, (e) depression or depressive symptoms was a primary outcome of the study, (f) studies used randomised controlled trial (RCT) methodology, and (g) studies were published in an English language, peer-reviewed journals. Relevant studies were identified and coded from electronic searches of PsycINFO, PubMed and the Cochrane Library up to the 12th February 2015 (please see Werner-Seidler et al., 2017 for further details on the inclusion criteria and search strategy).

Sixty-five relevant articles were identified from the systematic review of the literature, consisting of 59 studies evaluating a depression prevention program implemented in the school environment. Table 16.1 presents the characteristics of included studies, as well as a summary of immediate, short- and longer-term intervention effects. Hedges' g effect size calculations (Hedges & Olkin, 1985) were undertaken to quantify intervention effects, with effects reported, where possible, at post-intervention, short-term (0–6 months), medium-term (6–12 months) and long-term (>12 months) follow-up. Due to the small number of selective (n = 6) and blended trials (n = 1), these were combined with the indicated trials (n = 21) for the meta-analyses and collectively labelled 'targeted' trials (n = 28; 48%), resulting in a relatively even proportion of universal and targeted trials in the review.

The sample size of included studies varied considerably from 21 participants (Hains & Ellmann, 1994; Hains & Szyjakowski, 1990) to 2512 participants (Araya et al., 2013), with a median of 225 participants. The variability in sample sizes likely reflects the different prevention program types, with universal intervention trials often requiring much larger sample sizes than targeted interventions. Just over half of the studies (52%) identified were of a universal program, 36% were indicated programs, 10% selective programs and 2% a selective/indicated program. The selective programs defined 'risk' as: living in a low-income area (Cardemil, 2002; Kindt, 2014), conduct or behavioural problems (King & Kirschenbaum, 1990), personality factors (Castellanos & Conrod, 2006) or exposure to community violence (Tol et al., 2008). Forty-

Table 16.1 School-based prevention programs for depression (1990–2014)

Study	Country	Prevention type	Age range	*N*	Control	Program content	Mode of delivery	Number sessions	Post ES	Follow-up ES (period)
Adolescents Coping with Emotions										
Sheffield et al. (2006)	Australia	Targeted (indicated)	13–15 years	629	NI	CBT	Teacher	8	0.05	0.08 (M)
Woods and Jose (2011; Kiwi adaption)	New Zealand	Targeted (indicated)	NR	56	NI	CBT	School MHP	8	0.74	0.73 (S)
										2.16 (M)
Aussie Optimism Program										
Quayle, Dziurawiec, Roberts, Kane, and Ebsworthy (2001)	Australia	Universal	11–12 years	47	NI	CBT	MHP	8	−0.30	0.77 (S)
Rooney et al. (2006)	Australia	Universal	8–9 years	120	NI	CBT	MHP	8	0.53	0.25 (M)
					NI					0.06 (L)
Roberts et al. (2010)	Australia	Universal	11–13 years	496		CBT	Teacher	20	0.12	0.12 (S)
										0.05 (L)
Johnstone, Rooney, Hassan, and Kane (2014); Rooney, Hassan, Kane, Roberts and Nesa (2013)	Australia	Universal	9–10 years	910	NI	CBT	Teacher	10	0.20	0.07 (S)
										0.05 (L)
										0.17 (VL)
Behavioural intervention										
Clarke, Hawkins, Murphy, and Sheeber (1993; Study 2)	USA	Universal	NR	380	NI	CBT	Teacher	5	0.06	0.27 (S)
Blues Group										
Stice, Burton, Bearman, and Rohde (2007)	USA	Targeted (indicated)	15–22 years	225	WL	CBT	Grad	4	0.86	0.13 (S)
Stice, Rohde, Gau, and Wade (2010); Stice, Rohde, Seeley, and Gau (2008)	USA	Targeted (indicated)	14–15 years	341	NI	CBT	Grad	6	0.69	0.39 (S)
										0.19 (M)
										0.16 (L)
Rohde, Stice, Shaw, and Gau (2014)	USA	Targeted (indicated)	13–19 years	378	AC + NI	CBT	School MHP	6	NI: 0.25	NI: 0.06 (S)
									AC: 0.03	AC: 0.00 (S)
Coping with Stress Course										
Clarke et al. (1995)	USA	Targeted (indicated)	14–16 years	150	NI	CBT	MHP	15	0.56	0.08 (S)
										0.01 (M)
Horowitz et al. (2007)	USA	Universal	14–15 years	281	NI	CBT	MHP	8	0.22	0.23 (S)

Study	Country	Prevention type	Age range	*N*	Control	Program content	Mode of delivery	Number sessions	Post ES	Follow-up ES (period)
Feelings Club										
Manassis et al. (2010)	Canada	Targeted (indicated)	8–12 years	148	AC	CBT	Grad + MHP	12	0.37	0.19 (M)
Nobel, Manassis, and Wilansky-Traynor (2012)	Canada	Targeted (indicated)	8–11 years	78	AC	CBT	MHP	12	0.25	NM
Friends Program										
Lowry-Webster, Barrett, and Dadds (2001); Lowry-Webster, Barrett, and Lock (2003)	Australia	Universal	10–13 years	594	NI	CBT	Teacher	10+2 booster	0.11	0.34 (M)
Siu (2007)	China	Targeted (indicated)	8–10 years	47	WL	CBT	MHP	8	0.88	NM
I Think Feel Act										
Araya et al. (2013)	Chile	Universal	NR	2512	WL	CBT	MHP	11+2 booster	0.04	NM
Interpersonal Psychotherapy – Adolescent Skills Training										
Young, Mufson, and Davies (2006)	USA	Targeted (indicated)	11–16 years	41	AC	IPT	Grad + researcher	10	1.06	1.07 (S)
Horowitz et al. (2007)	USA	Universal	14–15 years	268	AC+NI	IPT	MHP	8	0.12	0.05 (S)
Young, Mufson, and Gallop (2010)	USA	Targeted (indicated)	13–17 years	57	NI	IPT	MHP	10	0.81	0.44 (S) 0.36 (M) 0.46 (L)
LARS&LISA										
Pössel, Horn, Groen, and Hautzinger (2004; LISA-T)	Germany	Universal	13–14 years	347	NI	CBT	MHP	10	0.49	0.48 (S)
Pössel, Seemann, and Hautzinger (2008); Pössel, Adelson, and Hautzinger (2011)	Germany	Universal	12–13 years	301	NI	CBT	Grad + MHP	10	0.08	0.02 (S) 0.09 (M)

(continued)

Table 16.1 (continued)

Study	Country	Prevention type	Age range	*N*	Control	Program content	Mode of delivery	Number sessions	Post ES	Follow-up ES (period)
Pössel, Martin, Garber, and Hautzinger (2013)	USA	Universal	14–16 years	518	AC + NI	CBT	Grad + MHP	10	NI: 0.23	NI: 0.30 (S)
									AC: 0.04	AC: 0.29 (S)
										NI: 0.00 (M)
										AC: 0.03 (M)
Learn Young Learn Fair										
Kraag, Van Breukelen, Kok, and Hosman (2009)	Netherlands	Universal	NR	1467	NI	CBT	Teachers	8+5 booster	0.10	0.02 (M)
Mindfulness										
Raes, Griffith, Van der Gucht, and Williams (2014)	Belgium	Universal	13–20 years	408	NI	MI	MHP	8	0.34	0.42 (S)
MoodGYM										
Calear, Christensen, Mackinnon, Griffiths, and O'Kearney (2009)	Australia	Universal	12–17 years	1477	WL	iCBT	Computer	5	0.11	0.13 (S)
Op Volle Kracht										
Kindt, Kleinjan, Janssens, and Scholte (2014)	Holland	Targeted (selective)	11–16 years	1440	NI	CBT	Teacher	16	0.02	0.12 (S)
										0.09 (M)
Wijnhoven, Creemers, Vermulst, Scholte, and Engels (2014)	Holland	Targeted (indicated)	11–15 years	102	NI	CBT	MHP	8	0.55	0.73 (S)
Penn Optimism Program										
Yu and Seligman (2002)	China	Targeted (indicated)	8–15 years	220	NI	CBT	Teacher	10	0.32	0.39
Penn Prevention Program										
Pattison and Lynd-Stevenson (2001)[a]	Australia	Universal	9–12 years	66	AC + NI	CBT	MHP	11	NI: 0.15	NI: 0.36 (M)
									AC: 0.02	AC: 0.22 (M)
Roberts, Kane, Bishop, Matthews, & Thomson (2004); Roberts, Kane, Thomson, Bishop, and Hart (2003)	Australia	Targeted (indicated)	11–13 years	189	NI	CBT	MHP	12	0.12	0.07 (S)
										0.12 (L)
Penn Resiliency Program (PRP)										

Study	Country	Prevention type	Age range	*N*	Control	Program content	Mode of delivery	Number sessions	Post ES	Follow-up ES (period)
Cardemil, Reivich, and Seligman (2002; Study 1)[d]	USA	Targeted (selective)	NR	49	NI	CBT	MHP	12	NA	NA
Cardemil et al. (2002; Study 2)[d]	USA	Targeted (selective)	NR	103	NI	CBT	MHP	12	NA	NA
Chaplin et al. (2006)	USA	Universal	11–14 years	208	NI	CBT	Grad + teacher	12	0.41[b] 0.38[c]	NA
Cutuli, Chaplin, Gillham, Reivich, and Seligman (2006)[d]	USA	Targeted (selective)	NR	294	NI	CBT	NR	12	NA	NA
Gillham, Hamilton, Freres, Patton, and Gallop (2006)	USA	Universal	NR	44	NI	CBT	MHP	8	0.02	0.63 (S) 0.46 (M)
Gillham et al. (2007)	USA	Universal	11–14 years	697	AC + NI	CBT	Teacher + MHP	12	NI: 0.20 AC: 0.21	NI: 0.18 (S) AC: 0.07 (S) NI: 0.40 (M) AC: 0.16 (M) NI: 0.49 (L) AC: 0.27 (L)
Gillham et al. (2012; PRP-Adolescent)	USA	Targeted (indicated)	10–15 years	408	NI	CBT + IPT	Teacher + school MHP	10	0.16	0.15 (S)
Personality matched cognitive behavioural intervention										
Castellanos and Conrod (2006)	UK	Targeted (selective)	13–16 years	423	NI	CBT	MHP	2	0.07	NM
Positive Thoughts and Actions										
McCarty, Violette, Duong, Cruz, and McCauley (2013)	USA	Targeted (indicated)	11–15 years	120	AC	CBT	MHP	12	0.43	NM
McCarty, Violette, and McCauley (2011)	USA	Targeted (indicated)	NR	67	NI	CBT	MHP	12	0.21	0.09 (S) 0.18 (L)
Problem Solving for Life										
Spence, Sheffield, and Donovan (2003, 2005)	Australia	Universal	12–14 years	1250	NI	CBT	Teacher	8	0.34	0.03 (M) 0.04 (L) 0.05 (VL)

(continued)

Table 16.1 (continued)

Study	Country	Prevention type	Age range	*N*	Control	Program content	Mode of delivery	Number sessions	Post ES	Follow-up ES (period)
Sheffield et al. (2006)	Australia	Universal	13–15 years	1045	NI	CBT	Teacher	8	0.01	0.02 (M)
Psychoeducation										
Clarke et al. (1993; Study 1)	USA	Universal	NR	622	NI	EDU	Teacher	3	0.19	−0.05 (S)
Resourceful Adolescent Program										
Merry et al. (2004; Kiwi Adaptation)	New Zealand	Universal	13–15 years	392	AC	CBT + IPT	Teacher	11	0.21	0.21 (S) 0.01 (M) 0.20 (L)
Rivet-Duval, Heriot, and Hunt (2011)	Mauritius	Universal	12–16 years	160	WL	CBT + IPT	Teacher	11	0.44	0.02 (S)
Stallard et al. (2012; UK adaptation)	England	Targeted (indicated)	12–16 years	1064	AC + NI	CBT	Grad	9	NI: 0.09 AC: 0.04	NI: 0.23 (M) AC: 0.05 (M)
Rose, Hawes, and Hunt (2014; + Peer Interpersonal Relatedness)	Australia	Universal	9–14 years	210	AC + WL	CBT + IPT	Grad	20	WL: 0.29 AC: 0.41	WL: 0.03 (M) AC: 0.02 (M)
Stress inoculation training										
Hains and Szyjakowski (1990)	USA	Universal	16–17 years	21	WL	CBT & AM	MHP	9	0.6	NM
Hains (1992)	USA	Universal	15–16 years	25	WL	CBT	Grad + MHP	9	0.54	NM
Hains and Ellmann (1994))[d]	USA	Universal	NR	21	WL	CBT	Grad + MHP	13	NA	NM
Teaching Kids to Cope										
Puskar, Sereika, and Tusaie-Mumford (2003)	USA	Targeted (indicated)	14–18 years	89	NI	CBT	MHP	10 + 1 booster	0.46	0.49 (S) 0.30 (M)
Thiswayup Schools: Combating Depression										
Wong, Kady, Mewton, Sunderland, and Andrews (2014)	Australia	Universal	14–16 years	976	NI	iCBT	Computer	7	0.14	NM
Well-being therapy										
Ruini et al. (2009)	Italy	Universal	NR	227	AC	WBT	MHP	6	0.04	0.24 (S)

Study	Country	Prevention type	Age range	*N*	Control	Program content	Mode of delivery	Number sessions	Post ES	Follow-up ES (period)
Wisconsin early intervention										
King and Kirschenbaum (1990)	USA	Targeted (selective)	8 years	127	NI	SS	MHP	24	1.01	NM
Unnamed programs										
Arnarson and Craighead, (2009, 2011)	Iceland	Targeted (selective/ indicated)	14–15 years	171	NI	CBT	School MHP	14	0.82	1.22 (S) 1.03 (M)
Jordans et al. (2010)	Nepal	Targeted (indicated)	11–14 years	325	WL	CBT + CEET	MHP	15	0.56	NM
Lamb, Puskar, Sereika, and Corcoran (1998)[d]	USA	Targeted (indicated)	14–19 years	46	NI	CBT	School MHP	8	NA	NM
Ruini, Belaise, Brombin, Caffo, and Fava (2006)	Italy	Universal	NR	111	AC	CBT	MHP	4	0.20	NM
Tol et al. (2008)[d]	Indonesia	Targeted (selective)	NR	403	NI	CBT	MHP	15	NA	NA

[a]Two versions of the program were evaluated, the comparison here is between the 'normal' Penn Prevention Program and controls
[b]Female-only group
[c]Female and male group
[d]Data not included in meta-analysis
Control group – *WL* wait-list control, *NI* no intervention control, *AC* attention control. **Program content** – *CBT* cognitive behaviour therapy, *IPT* interpersonal psychotherapy, *SS* social skills, *iCBT* Internet-based cognitive behaviour therapy, *AM* anxiety management, *CEET* creative expressive experiential therapy, *MI* mindfulness, *WBT* well-being therapy. **Program leader –** *MHP* mental health professional, *School MHP* school mental health professionals (includes school counsellors, psychologists, nurses), *Grad* graduate student/ intern. *ES* Hedges' g effect size. **Effect sizes –** *NA* data not available, *NM* outcomes not measured beyond post-test, *S* short-term follow-up (0–6 months), *M* medium-term follow-up (6–12 months), *L* long-term follow-up (>12 months)

eight percent of the studies identified in the review evaluated an intervention delivered to young adolescents, with the mean age of participants between 10 and 14 years, while 42% of studies were conducted with older adolescents who had a mean age between 14 and 19 years. The remaining studies (10%) were undertaken with children with a mean age of less than 10 years.

The vast majority (81%) of the depression prevention programs identified in the review were CBT-based. Other therapeutic approaches implemented included IPT (5%), a combination of CBT and IPT (7%), social skills training (2%), mindfulness (2%), well-being therapy (2%) and psychoeducation (2%). The propensity towards CBT-based interventions is likely due to the strong evidence base for CBT as an effective treatment for depression (Hetrick et al., 2016; Thapar et al., 2012). Over half (63%) of the included interventions were delivered by personnel external to the school setting, while 34% were administered by school staff (including two computer-based programs in which school staff supervised student completion) and 3% were delivered by both school and external staff. Of the interventions administered by external personnel, 73% were delivered by mental health professionals/researchers, 11% by graduate students and 16% by a combination of the two. In terms of interventions administered by school staff, 75% were delivered exclusively by classroom teachers, 20% exclusively by school health staff (e.g. counsellor, nurse) and 5% involved a combination of the two. Training and supporting school staff to deliver a depression prevention programs is essential to its ongoing sustainability and wider dissemination.

The length of the interventions identified in the review also varied considerably from 2 to 24 sessions, with a median of 10 sessions. Most interventions (68%) were delivered between 8 and 10 sessions, while 19% were administered over two to seven sessions and 13% across 13–24 sessions. Session length tended to be between 45 and 60 min. Only a small proportion (7%) of the interventions identified included a booster session, with two studies offering two booster sessions, one program providing up to five booster sessions and one study offering one booster session. Booster sessions provide an opportunity for participants to refresh their learning and reinforce the skills and strategies taught within the intervention.

Initial meta-analyses were undertaken in the review to compare the intervention and control conditions on depressive symptoms at post-intervention and follow-up. The overall effect size at post-intervention was small (g = 0.23, 95% CI: 0.19–0.28), with moderate heterogeneity (I^2 = 57, CI: 0–0.97). The effect was also small at short-term (g = 0.20, 95% CI: 0.14–0.26), medium-term (g = 0.12, 95% CI: 0.07–0.17) and long-term (g = 0.11, 95% CI: 0.04–0.18) follow-up. These findings highlight the gradual decline in intervention effects over time and the possible need for booster sessions to assist in the maintenance of effects.

A series of subgroup meta-analyses were also conducted in the review to explore if certain intervention characteristics impacted intervention effects. The first subgroup meta-analyses were undertaken to investigate if post-intervention and follow-up effect sizes differed according to prevention type (universal vs. targeted). At post-intervention, there was a statistically significant difference (Q = 6.05, df = 1, p = 0.01) in the effect sizes obtained for universal (g = 0.19, 95% CI: 0.14–0.24) compared to targeted (g = 0.32, 95% CI: 0.23–0.41) prevention programs. No significant differences were evident at any of the other follow-up periods. The identification of stronger post-intervention effects amongst targeted interventions is not surprising, given that participants of these programs tend to present with higher levels of symptoms at pre-intervention than participants in universal programs, due to their elevated risk of depression. As a consequence, there is more scope for improvement in symptom levels in targeted than universal programs.

A second subgroup meta-analysis was conducted to explore if the personnel (classroom teachers/school health staff vs. external providers) involved in the delivery of the intervention influenced program effects. A significant effect (Q = 7.41, df = 1, p = 0.006) was detected at post-

intervention, with externally delivered interventions having a larger effect (g = 0.30, 95% CI: 0.22–0.37) than interventions administered or supported by school staff (g = 0.17, 95% CI: 0.11–0.22). This difference remained significant at the short-term (0–6 months) follow-up period (Q = 11.56, df = 1, p = 0.001), with externally administered programs again showing stronger intervention effects (g = 0.29, 95% CI: 0.20–0.38) compared to those delivered by school staff (g = 0.11, 95% CI: 0.05–0.16). At medium- and long-term follow-up, the difference was no longer significant (please see Werner-Seidler et al., 2017 for further details). The larger intervention effects found for programs delivered by external providers likely reflects their increased comfort and confidence in delivering mental health information as a result of their formal training and expertise in the area.

Final subgroup meta-analyses were conducted to establish if the age (children vs. early adolescent vs. late adolescent) at which interventions were delivered influenced the size of intervention effects and thus if interventions should be targeted towards one age group. No significant differences were found at post-intervention, Q = 3.07, df = 2, p = 0.022 (children: g = 0.50, 95% CI: 0.19–0.80, early adolescents: g = 0.23, 95% CI: 0.16–0.30, late adolescents: g = 0.22, 95% CI: 0.15–0.28), or follow-up.

School-Based Depression Prevention Program Update

A further search of the literature was undertaken, using the search strategy outlined by Werner-Seidler et al. (2017), to identify any additional studies that may have been published in 2 years (2015–2017) since the aforementioned review was conducted. Nine new papers were identified that fulfilled the original inclusion criteria and are presented in Table 16.2. Eight of the nine (89%) papers presented the results of a new depression prevention trial, while the remaining paper (Rohde, Stice, Shaw, & Gau, 2015) provided follow-up data for a previous study (Rohde et al., 2014). Interestingly, just over half (56%) of the interventions were based on CBT and only two (20%) of the interventions were delivered by school staff. The distribution of universal (56%) and targeted (44%) programs continued to be relatively evenly distributed, while program length ranged from 1 to 16 sessions, with a median of 8 sessions. Overall, the effect of these interventions on depressive symptoms was small, with effect sizes ranging from 0.03 to 0.87 (median = 0.14, n = 8) at post-intervention and between 0.00 and 0.32 (median = 0.10, n = 5) at follow-up.

Leading School-Based Depression Prevention Programs

The following school-based depression prevention programs have a strong evidence base for their effectiveness in preventing and reducing symptoms of depression (Brunwasser & Garber, 2016; Werner-Seidler et al., 2017). The majority of these programs have been evaluated multiple times in both universal and targeted populations and provide strong support for the ongoing implementation of depression prevention programs in schools.

Blues Group The Blues Group is a brief cognitive behavioural program designed for adolescents that aims to help participants (i) increase their involvement in pleasant activities, (ii) develop cognitive restructuring techniques and (iii) develop a response plan for future life stressors (Rohde et al., 2014; Stice et al., 2008). The program is delivered in small groups and includes interactive activities that allow participants to apply the skills taught, homework exercises to reinforce learning and group activities to build social support and group cohesion. Three indicated trials have been conducted, each finding positive effects on depression at post-intervention (g = 0.25–0.86) and/or follow-up (g = 0.13–0.39; Rohde et al., 2014; Stice et al., 2007, 2008, 2010).

Coping with Stress Course (CwSC) The CwSC is a cognitive behavioural-based intervention designed for adolescents aged 13–18 years

Table 16.2 School-based prevention programs for depression (2015–2017)

Study	Country	Prevention type	Age range	N	Control	Program content	Mode of delivery	Number sessions	Post ES	Follow-up ES (period)
Aussie Optimism Program: Feelings and Friends										
Pophillat et al. (2016)	Australia	Universal	6–9 years	206	NI	CBT	Teacher	10	0.03	NM
.b ('dot be') Mindfulness in Schools										
Johnson, Burke, Brinkman, & Wade (2016)	Australia	Universal	NR	308	NI	MI	Researcher	8	0.12	0.13 (S)
I Think Feel Act – Revised										
Gaete et al. (2016)	Chile	Targeted (indicated)	14–19 years	342	NI	CBT	MHP	8	0.08	NM
Learning to BREATHE										
Bluth et al. (2016)	USA	Targeted (selective)	NR	27	AC	MI	Researcher	11	0.87	NM
Op Volle Kracht										
Tak, Lichtwarck-Aschoff, Gillham, Van Zundert, and Engels (2016)	Netherlands	Universal	NR	1341	NI	CBT	MHP	16 + 1 booster	0.20	0.06 (S) 0.06 (M) 0.07 (L)
Poppelaars et al. (2016)	Netherlands	Targeted (indicated)	11–16 years	101	NI	CBT	MHP	8	0.04	0.15 (S) 0.10 (M) 0.09 (L)
Unnamed										
Eslami, Rabiei, Afzali, Hamidizadeh, and Masoudi (2016)	Iran	Universal	NR	126	NI	AT	Researcher	8	0.20	0.32 (S)
Miu and Yeager (2015)	USA	Universal	NR	599	AC	ITP	Researcher	1	0.15	NM
Rohde et al. (2015)	USA	Targeted (indicated)	13–19 years	378	AC+ NI	CBT	School MHP	6	See Table 16.1	NI: 0.00 (M) AC: 0.12 (M) NI: 0.11 (L) AC: 0.02 (L)

Note: **Control group –** *NI* no intervention control, *AC* attention control. **Program content** – *CBT* cognitive behaviour therapy, *ITP* incremental theory of personality, *AT* assertiveness training, *MI* mindfulness. **Program leader –** *MHP* mental health professional, *School MHP* school mental health professionals (includes school counsellors, psychologists, nurses). *ES* Hedges' g effect size. **Effect sizes** – *NM* outcomes not measured beyond post-test, *S* short-term follow-up (0–6 months), *M* medium-term follow-up (6–12 months), *L* long-term follow-up (>12 months)

(Clarke et al., 1995). CwSC aims to promote adaptive coping by teaching a range of cognitive skills to identify and challenge negative or irrational thoughts. The program consists of cartoons, role plays and group discussions (Clarke et al., 1995). This group-based intervention has been evaluated, with positive effects at post-intervention, as a universal (g = 0.22; Horowitz et al., 2007) and indicated (g = 0.56; Clarke et al., 1995) prevention program in schools.

Interpersonal Psychotherapy-Adolescent Skills Training (IPT-AST) The IPT-AST program is based on interpersonal psychotherapy and aims to teach the social and communication skills that are necessary to develop and maintain positive relationships (Horowitz et al., 2007). The program is targeted towards young people aged 11–16 years and consists of individual and group sessions. The group sessions are based on psychoeducation and general skill building around interpersonal role disputes, role transitions and interpersonal deficits. Program strategies are taught through didactics, communication analysis, role plays and games (Young, Mufson, & Davies, 2006). IPT-AST has been evaluated as both a universal and indicated classroom program. The results of these trials have been positive, with a significant effect size of 0.12 reported at post-intervention for the universal trial (Horowitz et al., 2007) and significant effect sizes of between 0.36 and 1.07 for the indicated trials (Young et al., 2006, 2010) at post-intervention and follow-up.

Penn Resiliency Program (PRP) PRP is a group intervention designed for young people aged 10–14 years. The program aims to teach cognitive behavioural and social problem-solving skills, including cognitive restructuring, assertiveness skills and relaxation. The cognitive and problem-solving techniques are taught and applied through group discussions and weekly homework assignments (Gillham et al., 2007). PRP is one of the most widely researched school-based depression prevention programs (Brunwasser, Gillham, & Kim, 2009), with more than ten school-based randomised controlled trials conducted with PRP or a PRP-based program (e.g. Aussie Optimism program, Op Volle Kracht) since 2001. PRP has been evaluated as a universal, indicated and selective program, with positive results reported in many of the trials at post-intervention and/or follow-up, with effect sizes ranging from 0.07 to 0.63. PRP has been delivered by a range of program leaders, including classroom teachers, graduate students and mental health professionals.

Stress Inoculation Training (SIT) The SIT program is a CBT-based intervention that provides both individual and group-based sessions for young people aged 15–18 years. The program is delivered over 9–13 sessions and parallels a three-phase stress inoculation model: a conceptualisation phase, a skill acquisition phase and a skill application phase. Techniques taught in the SIT program include cognitive restructuring, problem-solving and relaxation (Hains & Ellmann, 1994). SIT has been evaluated in three universal school-based trials, two of which found significant post-intervention effects (g = 0.54; Hains, 1992; Hains & Ellmann 1994).

Future Research Directions

In recent years, there has been a movement towards the delivery and evaluation of online depression prevention programs in schools in an effort to improve the reach and availability of these programs and reduce the burden of program delivery on schools. The automated nature of online interventions allows these programs to be disseminated widely, reduces the need for program leader training and maintains program fidelity and quality (Brunwasser & Garber, 2016). Two online depression prevention programs, MoodGYM and Thiswayup Schools: Combating Depression, were identified by the review conducted by Werner-Seidler et al. (2017), both of which were delivered as universal interventions under the guidance of classroom teachers.

The MoodGYM program is a free, interactive, internet-based intervention designed to prevent and decrease symptoms of depression in young

people. Consisting of five sessions, the program is based on CBT and contains information, animated demonstrations, quizzes and 'homework' exercises. The overall aims of the MoodGYM program are to change dysfunctional thoughts, to improve self-esteem and interpersonal relationships and to teach important life skills, such as relaxation and problem-solving (Calear, 2009). The MoodGYM program has been evaluated as a universal school-based program with young people aged 13–17 years. No significant effects were found for depression overall; however significant effects were found amongst male participants at both post-intervention (g = 0.40) and 6-month follow-up (g = 0.29; Calear et al., 2009).

The Thiswayup Schools: Combating Depression program is a CBT-based intervention consisting of seven online sessions covering psychoeducation and the management of emotions, thoughts and behaviour (Wong et al., 2014). The program aims to teach participants skills and techniques to identify and deal with depression effectively. The material within the program is delivered via a cartoon-based storyline of teenagers with depression solving real-life problems. The online program is reinforced by classroom discussion and has been found to be effective at post-intervention (g = 0.14) in a universal sample of young people (Wong et al., 2014). Given the positive effects of these interventions, and the potential for widespread dissemination, further research is needed to strengthen the evidence base for online interventions, as well as the development of new interventions that capitalise on the appeal and accessibility of this medium.

Another area of research that requires further investment is the evaluation of mindfulness-based interventions for the prevention of depression in schools. There is a growing interest in mindfulness-based interventions in schools (Zoogman, Goldberg, Hoyt, & Miller, 2015), which aim to develop focused attention, decentring and emotion regulation (Zoogman et al., 2015). Three mindfulness-based interventions were identified in the aforementioned reviews, two of which were published in the past 2 years. Of these three studies, two found significant effects at post-intervention (g = 0.34–0.87; Bluth et al., 2016; Raes et al., 2014) and 6-month follow-up (g = 0.42; Raes et al., 2014), while the other study did not find an effect (g = 0.12–0.13; Johnson et al., 2016). The promising findings for mindfulness-based interventions in schools are echoed in a review of mindfulness-based interventions in young people more generally, which found mindfulness-based interventions to be helpful and were not associated with iatrogenic harm with small to moderate effects (Zoogman et al., 2015). A large-scale school-based trial is currently underway in the UK which will evaluate the effectiveness and cost-effectiveness of mindfulness training in over 5000 adolescents (Kuyken et al., 2017). This trial will provide a definitive assessment of mindfulness interventions in schools and their potential value as an alternate therapeutic approach to the prevention of depression.

The final two areas of recent innovation that require further exploration are (i) the delivery of transdiagnostic interventions in schools and (ii) the implementation of social networking interventions. Transdiagnostic interventions are designed to target the symptoms of more than one mental disorder at the same time and, in doing so, have the benefit of being more widely applicable and enabling time poor schools to address multiple concerns within a single program (Johnson et al., 2016). A growing number of interventions are taking a transdiagnostic approach, particularly as there is a high degree of overlap in symptoms between disorders (e.g. anxiety and depression) and the same therapeutic techniques (e.g. CBT) can be effective across conditions (Nehmy, 2010). Presently, transdiagnostic interventions for anxiety and depression are not uncommon and have been found to be effective for both mental disorders (e.g. Calear et al., 2009; Wong et al., 2014).

The second group of interventions are social connectedness programs that leverage social networks to disseminate positive health messages and elicit behaviour change. These programs have started to emerge in the school

environment, with promising effects. One example of a social connectedness intervention is the Sources of Strength suicide prevention program. The Sources of Strength program utilises peer leaders to improve help-seeking for suicide and general psychological distress by enhancing help-seeking norms, youth-adult communication and coping skills through whole school messaging (Wyman et al., 2010). The Sources of Strength program has been evaluated in a randomised controlled trial of 18 high schools in the USA, with results showing consistent intervention effects on the help-seeking norms, attitudes and behaviour of both youth peer leaders and the wider student population. In particular, training improved the young peer leaders' adaptive norms regarding suicide, their connectedness to adults and their referral of distressed peers to adults. In terms of the wider student population, the program increased perceptions of adult support for suicidal youth and the acceptability of seeking help (Wyman et al.). A current trial is underway in Australia (Calear et al., 2016) that will evaluate the impact of this program on both help-seeking behaviours and psychological outcomes, including depression. Further research is needed to develop the evidence base for different social connectedness interventions in the school environment, which have the potential to positively change social norms and behaviour.

In summary, depression is a significant public health problem that is associated with a number of negative short- and long-term effects. The school environment has been identified as an ideal setting for the implementation of depression prevention programs due to their ready access to young people. A number of effective depression prevention programs have been evaluated in schools, with positive effects reported for both universal and targeted interventions. Further research is needed to better understand the contribution that e-health and mindfulness-based interventions could make to the prevention of depression in schools, as well as the future role of transdiagnostic and social connectedness interventions.

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17

The Fourth R: Implementing Evidence-Based Healthy Relationships and Mental Health Promotion Programming in Diverse Contexts

Claire V. Crooks, Debbie Chiodo, Caely Dunlop, Alicia Lapointe, and Amanda Kerry

Abstract

There is an increasing awareness that youth mental health problems and violence are public health concerns that require public health approaches to prevention. Simply put, these are not challenges that we are going to treat or arrest our way out of but rather are more effectively approached through a public health lens for several reasons. The *Fourth R* is an approach that includes an array of evidence-based and evidence-informed programs designed to develop youth's healthy relationship skills, promote positive mental health, and prevent violence. This chapter describes the *Fourth R*, its evidence base, and lessons learned regarding successful school-based program implementation.

There is an increasing awareness that youth mental health problems and violence are public health concerns that require public health approaches to prevention. Simply put, these are not challenges that we are going to "treat" or "arrest" our way out of but rather are more effectively approached through a public health lens for several reasons. First, the prevalence of both mental health problems and relationship violence among adolescents warrants a public health approach. Second, both mental health problems and violence become more entrenched the longer they go unrecognized; without intervention, youth mental health problems predict ongoing challenges into adulthood. Depression during adolescence, for example, is a predictor of later mental health challenges, even if it does not meet diagnostic criteria. In one large, community-based study with adolescents, researchers found that youth with minor depressive disorders had an elevated risk for a range of psychiatric disorders during adulthood (Johnson, Cohen, & Kasen 2009). Similarly, relationship violence during adolescence is a strong predictor of ongoing interpersonal violence in adulthood, as both perpetration and victimization can increase the likelihood of victimization and perpetration later in life (Cui, Finchman, Gordon, & Ueno, 2013; Exner-Cortens, Echenrode, Bunge, & Rothman, 2017; Manchikanti Gomez, 2011). Third, there are effective health promotion and prevention programs that can reduce the prevalence of these challenges when implemented universally. Finally, these health promotion and prevention

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initiatives can be implemented from a strength-based perspective within schools. This approach to building capacities and resilience fits well with other educational frameworks such as social and emotional learning (note the advocacy of organizations such as the Collaborative for Academic, Social, and Emotional Learning at casel.org) and can benefit all youth, not just those demonstrating challenges.

The *Fourth R* is an approach that includes an array of evidence-based and evidence-informed programs designed to develop youth's healthy relationship skills, promote positive mental health, and prevent violence. This chapter describes the *Fourth R*, its evidence base, and lessons learned regarding successful school-based program implementation. We are conceptualizing implementation in a broad sense, including adaptation for specific populations. We begin the chapter by discussing our *Fourth R* classroom-based programming. We then turn to several extensions and adaptations that were developed to meet the needs of specific youth populations and/or settings. We include a discussion of our work with Indigenous youth, our small group programming, and extensions of our small group program for both LGBTQ2+ and justice-involved youth. For each of these programs, we briefly describe the rationale for adapting the programming, the modification process, and our current evaluation findings. We then identify considerations for implementing school-based programming with diverse youth in several areas, including the adaptation process, program implementation, research and evaluation, and organizational capacity and sustainability. We provide recommendations in each of these areas.

Overview of the Fourth R

The original Fourth R programming was developed as a dating violence prevention program designed to be implemented by teachers in standard health classes (Wolfe, Jaffe, & Crooks, 2008). The Fourth R refers to "relationships" and is based on the contention that relationship skills are equally important for schools to teach as are the first three R's (i.e., reading, 'riting, and 'rithmetic). The Fourth R began with a dating violence prevention focus, but it also applies a broader social-emotional learning framework with a strong emphasis on skill development. Furthermore, it looks at adolescent behavior in a holistic way, by addressing the overlaps among healthy relationships, different types of relationship violence, sexual health, and substance use and misuse. To cover these topics, the original grade 9 version consisted of 21 sessions, each 75 min in length, and matched to curriculum requirements (Wolfe et al., 2009).

Since initial development of the grade 9 program in the early 2000s, there are now many other Fourth R program options available, most of which continue to align with curriculum expectations to minimize barriers to implementation (i.e., as compared to add-on programs). In addition, over the past 5 years, all of the programs have been revised to have a stronger focus on mental health promotion since the field in general has come to view the complementarity of social and emotional learning and mental health (e.g., Zins, Weissberg, Wang, & Walberg, 2004). Beyond the original grade 9 program, other Fourth R programs include healthy living curricula for grades 7–8 and English curricula for grades 9–12. There are slightly different versions of these curricula that align with jurisdictional educational expectations to ensure that educators across Canada and the USA can meet their teaching requirements by implementing the program. The Fourth R offers various in-person and online teacher training options, including opportunities for educators and service providers to become master trainers, in order for school districts and community organizations to develop their own trainers certified in the Fourth R. Numerous translations of the Fourth R are also available (for more information regarding the Fourth R training, see www.youthrelationships.org).

Fourth R as an Evidence-Based Program

Over the past decade, a number of studies have demonstrated a range of positive benefits for the *Fourth R* across multiple settings. In the original

cluster randomized trial in Ontario, students in the *Fourth R* reported reduced dating violence and increased condom use among sexually active youth 2 years after intervention, compared to youth in regular, usual service health classes (Wolfe et al., 2009). Secondary analyses with the original RCT data demonstrated a protective effect on violent crime among maltreated youth (Crooks, Scott, Ellis and Wolfe, 2011). Beyond reducing negative outcomes, the *Fourth R* has been shown to develop positive peer relationship skills. A subset of youth from the original RCT (n = 200) participated in role-play tasks in an observational study, where they demonstrated improved peer resistance skills to interpersonal pressure compared to peers who had not participated in the *Fourth R* (Wolfe, Crooks, Chiodo, Hughes, & Ellis, 2012). A subsequent RCT of the grade 7 and 8 program with 57 schools in Saskatchewan found youth in *Fourth R* classrooms had an increased awareness regarding the impact of violence on others and improved awareness of healthy coping strategies (Crooks, Scott, et al., 2015). Finally, a recent analysis of the costs and benefits of the *Fourth R* has shown significant cost savings based on averted costs related to delinquency at a low cost per student (Crooks, Zwicker, et al., 2017).

Fourth R Implementation Considerations

There are a number of features of the *Fourth R* that have facilitated this scale-up success. The *Fourth R* was one of the first programs to align with Ministry of Education curriculum expectations such that teachers could implement the program within a credit-based course. Furthermore, we developed different versions to align with Ministry expectations in different provinces and also with different educational systems (i.e., making modifications so that it could be endorsed in the Catholic school system). The integrated nature of the programming (i.e., that it is taught by teachers during class time) has also made it robust against job action. Even during a work-to-rule situation or an impending strike, educators continue to implement the program as part of their typical workload. Beyond matching to the organizational system, the *Fourth R* training and curriculum materials are well-liked and highly regarded by educators. The importance of high levels of satisfaction among implementers should not be overlooked because teachers maintain complete autonomy over what they teach in their courses as long as they meet curriculum expectations.

One aspect of the *Fourth R* that has contributed to effective implementation is that, because it is comprehensive in nature, it can bring together multiple stakeholders. For example, in Alaska, statewide implementation was undertaken by a coalition that included numerous government departments and nongovernmental organizations. Education saw themselves as a major stakeholder but so did public health (mainly due to the link to healthy sexuality) and anti-violence community-based organizations and governmental bodies (Crooks, Exner-Cortens, Siebold, Moore, et al., 2018). In Alberta, continued implementation of the *Fourth R* has been embedded in a province-wide strategy to end domestic violence (see www.preventdomesticviolence.ca). Conversely in Atlantic Canada, it has been integrated into a regional effort to embed social and emotional learning across the lifespan.

In addition to the numerous implementation successes we have documented, there are also significant challenges. In 2011, we surveyed approximately 200 teachers examining their continued use of the *Fourth R* between 2 and 8 years after training (Crooks, Chiodo, Zwarych, Hughes, & Wolfe, 2013). Results indicated high levels of satisfaction with the program and relatively strong implementation fidelity among respondents. In addition, teachers' feelings of preparedness training, support, and accountability predicted sustained high-quality implementation. Respondents identified time frames as the most among the most significant barriers, followed by challenges with the skill-based role-play activities. Since 2013, we have been tracking implementation data from sites across Canada within the context of a Public Health Agency of Canada funded project focusing on scale-up and sustainability.

Implementation challenges related to the *Fourth R* have remained remarkably similar over time (Chiodo, 2017). The most consistently reported challenges continue to be related to time, with educators identifying difficulty both in fitting all the activities into the time frames (although that improves with successive implementation cycles for particular teachers) and in protecting the days that are hypothetically allotted to health classes. In our experience, it has been difficult to distinguish between "not enough time to complete the program" versus a lack of prioritization and/or adequate scheduling (i.e., districts not actually scheduling the required number of hours for health class). Perhaps it is due to a lack of accountability (i.e., students do not receive a mark for health class alone), since health class appears to be the first activity sacrificed for external assemblies or time lost to snow days. After 15 years of implementing and researching the *Fourth R*, we have a good sense of major implementation successes and challenges. As we began to develop programming for more specific populations and settings, we also wanted to examine the degree to which implementation considerations were comparable to our original classroom-based *Fourth R* work.

Importance of Extending Evidence-Based Practices (EBP) for Diverse Settings

The move toward endorsing evidence-based practices (EBP) in violence prevention and mental health promotion in general has been somewhat hampered by the lack of EBP, particularly for marginalized groups (Claussen, Exner-Cortens, Abboud, & Turner, 2016). One major working group concluded that "Little research has addressed the question of how transportable evidence-based interventions developed for one ethnic group are to a range of ethnic and cultural groups" (O'Connell, Boat, Warner, & National Research Council, 2009, p. 336). This gap is particularly concerning given that many identifiable ethnic and cultural groups experience disproportionate rates of negative mental health and violence outcomes.

In our review of the state of gender-based violence prevention programs in Canada, for example, we concluded that virtually all EBPs were delivered either in high schools or postsecondary settings (Jaffe, Crooks, Dunlop, & Kerry, 2016). There was a stark lack of EBP for specific marginalized groups (including Indigenous women and girls, LGBTQ2+ youth and adults, and women with disabilities). Furthermore, there were no EBPs for vulnerable youth in specific settings, such as youth justice. There is clearly a need to develop programs that meet the needs of these populations within their unique settings for service delivery.

Although some educators and practitioners choose to develop programs without drawing on available evidence, there are significant advantages to adapting an existing program that has strong research evidence. O'Connell et al. (2009) have identified numerous advantages and disadvantages to implementing evidence-based programs in a "one-size-fits-all" manner, versus implementing an adapted version and versus implementing a community-driven initiative. For example, adaptation of such programs increases the program's relevancy to characteristics of a population while also increasing the likelihood of achieving a positive impact based on previous findings with the program (O'Connell et al., 2009). The comparison of three approaches is shown in Fig. 17.1 (O'Connell et al., 2009).

There is an emerging emphasis on hybrid prevention programs that include adaptation to enhance the fit for particular groups while maximizing fidelity of implementation (Barrera, Berkel, & Castro, 2017; Castro, Barrera, & Martinez, 2004; Castro & Yasui, 2017). In this approach, adapted programs borrow from the strengths of the evidence of evaluation research conducted with the original prevention program (Aarons, Sklar, Mustanski, Benbow, & Brown, 2017), but these adaptations need to occur carefully and be evaluated in their own right.

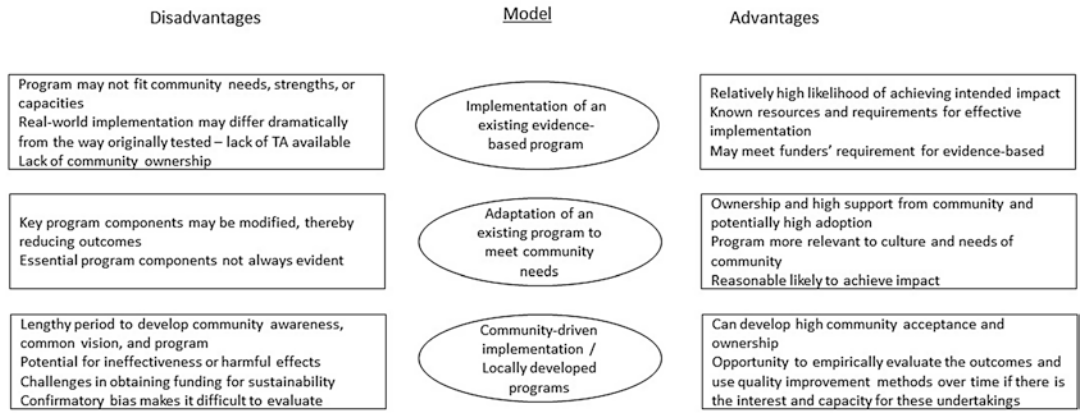

Fig. 17.1 Comparison of implementing evidence-based programs, adapted evidence-based programs, and locally developed programs. (Adapted from O'Connell et al. (2009))

Expansions and Adaptations for Diverse Youth and Settings

Over recent years, our *Fourth R* team has focused on developing new expansions by working closely with partners to adapt programming for particular settings and groups. Specifically, we have developed a range of program options for Indigenous youth, a small group version of the *Fourth R* with an enhanced mental health focus, and a small group version specifically for LGBTQ2+ youth. We have also piloted our classroom-based and small group-based programs with youth in corrections and have developed versions of our programming that have a more trauma-informed lens for that group (known as the HRP-Enhanced). All of these programs share core *Fourth R* components but have additional programming considerations based on the specific needs of the group or setting (see Table 17.1). The top panel of Table 17.1 identifies core components of *Fourth R* programming on the left and enhancements for different groups in the other columns. The bottom panel compares implementation details for the original *Fourth R* classroom-based programs to those in the enhanced versions. We turn now to a brief description of our programming for diverse youth, highlighting the need for adaptation, the adaptation process, and corresponding evaluation findings.

Programming for Indigenous Youth

Collectively, Indigenous[1] youth in Canada experience disproportionate health challenges and threats to well-being as compared to non-Indigenous peers. Indigenous youth are at greater risk for poor mental health, suicidality, substance use, violence and victimization, and these issues are exacerbated by an increased likelihood of experiencing food, water, and housing instability and poverty (First Nations Information Governance Centre, 2012; Health Canada, 2014; Ning & Wilson, 2012). The health disparities and systemic inequity that burden many Indigenous youth in Canada reflects the enduring impacts of more than 100 years of colonial policies and practices enacted by the Canadian government. These systematic attempts at extinguishing Indigenous culture contribute to the deleterious outcomes experienced by Indigenous peoples in

[1]The program described in this chapter was developed in Canada, and as such, references to Indigenous peoples are reflective of the Canadian context. We use the term Indigenous to refer to the First Peoples of Canada, specifically, peoples who identify as First Nations, Métis, and Inuit (FNMI). We use these terms (Indigenous and FNMI) interchangeably, as the term FNMI has recently been used in the educational policy context where the program was developed. We acknowledge that these are umbrella terms that denote overarching commonalities among Indigenous peoples, but that do not reflect the diversity of Indigenous individuals or their communities.

Table 17.1 Common elements and program-specific features across Fourth R programs

	Common components of all Fourth R programs	Program specific content and structure			
		Uniting our Nations	Healthy Relationships Plus	HRP for LGBTQ2+ Youth	HRP- Enhanced
Program content	Emphasis on healthy relationships	Cultural identity as an underlying framework	Stronger focus on mental health	Queer and trans-informed approach	Increased attention to high-risk scenarios
	Focus on skills development (particularly SEL competencies)	Use of culturally appropriate teaching methods	Lower demands for reading and writing in activities	Affirms gender, sexual, and romantic diversity	Trauma-informed lens
	Positive youth development framework	Greater focus on mentorship		Focuses on managing minority stress	
		Greater focus on youth voice		Greater focus on youth voice	
Implementation structure	Matches curriculum expectations	Community inclusion	Can be delivered in schools or community settings	Can be delivered in schools (through gender and sexuality alliances (GSAs) or community settings	Can be implemented in academic or program components in youth justice settings
	Delivered by teachers	Some components match curriculum expectations and others do not	Flexibility around delivery		
	Manualized components		Accommodates a range of ages in one group		

Canada to this day and, as a result, were deemed "cultural genocide" by the *Truth and Reconciliation Commission of Canada* in 2015 (TRC, 2015).

To address these disparities, researchers and community members have directed considerable attention to the development and evaluation of culturally appropriate programming for Indigenous youth. Protective factors including cultural identity and connectedness, and engagement in traditional cultural activities, have been associated with more positive mental health outcomes and well-being among Indigenous youth and have been recognized as an essential focus of prevention and intervention efforts developed for this population (Kenyon & Hansen, 2012; Kirmayer, Simpson, & Cargo, 2003; MacDonald, Ford, Wilcox, & Ross, 2013; Snowshoe, Crooks, Tremblay, & Hinson, 2017). In recent years, numerous initiatives have been developed to promote well-being among Indigenous youth by operationalizing these protective factors and incorporating culturally relevant content (including local and/or tribal specific beliefs, traditions, and practices). *The Fourth R: Uniting Our Nations* is one such program. Over the past decade, the *Fourth R* team has worked with youth, the local school board, and three local First Nations communities to develop and evaluate school-based, culturally relevant, relationship-focused programming for Indigenous youth in grades 7 through 12 (Crooks & Dunlop, 2017).

The Fourth R: Uniting Our Nations program comprises multiple components developed specifically for Indigenous youth (with the exception of the Indigenous Perspectives[2] *Fourth R*, which was

[2]This program was originally known as the Aboriginal Perspectives Fourth R, but the names of our program have evolved as preferred terminology has evolved. Indigenous is all-encompassing of first peoples in the same way that Aboriginal was intended to be but has emerged as the preferred term.

adapted from the original *Fourth R* program). These programs share the *Fourth R*'s strength-based, positive youth development framework and focus on healthy relationships and social-emotional skill development yet differ from the original *Fourth R* program in their emphasis on cultural identity development and mentoring, utilization of culturally appropriate teaching methods, and inclusion of Indigenous community members and locally relevant teachings. Over the past decade, the *Fourth R* team has worked in close, ongoing partnership with local community partners to co-develop, implement, and evaluate multiple initiatives and program components comprising *The Fourth R: Uniting Our Nations* program for Indigenous youth, including (1) Elementary Mentoring Program, (2) Peer Mentoring for Secondary Students, (3) Cultural Leadership Course, (4) Cultural Leadership Camp, (5) FNMI Student Leadership Committee, and (6) Indigenous Perspectives *Fourth R* (Crooks & Dunlop, 2017). Research to date has demonstrated that the programs are engaging (Crooks, Chiodo, Thomas, & Hughes, 2009) and are perceived to provide a wide range of benefits for youth (Crooks, Burleigh, Snowshoe, et al., 2015). A longitudinal mixed-methods evaluation demonstrated significant gains in positive mental health and cultural connectedness for youth involved in 2 years of mentoring (Crooks, Exner-Cortens, Burm, Lapointe, & Chiodo, 2017). Program participants also achieved higher credit accumulation compared to peers involved in 1 or no years of mentoring.

Programming for Small Groups with an Enhanced Mental Health Focus

The *Fourth R Healthy Relationships Plus* (*HRP*) is an evidence-informed small group program that aims to equip students with the skills they need to build healthy relationships and help themselves and their peers reduce risky behaviors. The *HRP* consists of 14 1-h sessions covering topics such as peer pressure, help-seeking, media literacy, healthy and unhealthy peer and dating relationships, healthy communication, mental health and well-being, suicide prevention, and the impacts of substance use and abuse. We developed this small group program in response to a significant need to target the prevention of violence through the promotion of positive, healthy relationships in settings outside of the classroom, with more flexibility around program delivery and group composition.

The *HRP* is best considered evidence-informed in that it applies the evidence-based *Fourth R* strategies and has preliminary evidence of effectiveness, but does not have the same evidence base as the *Fourth R*. Results from our national implementation study (described below) suggest that teachers view the program favorably and describe positive impacts in their students. In this study, 96% of facilitators rated the program as beneficial for youth. Overall, almost all program facilitators had a positive experience delivering the program to youth, would recommend the program to their colleagues, and believed that the program was beneficial to youth. Furthermore, facilitators described seeing changes in the students and the way they relate to each other and adults in their lives:

> I have observed my students discussing healthy and unhealthy relationships, and they are also able to identify 'red flags' in a relationship. I have also overheard students apologizing to friends, and the students who I delivered the *HRP* to will ask the other person to make eye contact, talk to them in a private locations, etc. To me, this translates as students not only becoming aware of what constitutes a proper apology, but also becoming self-advocates. They are aware to voice their emotional needs. Students are also much more knowledgeable about mental illness and mental health. They are practicing some of the strategies they have learned to reduce their on stress and anxiety.
> (Facilitator response, implementation survey)

The *HRP* was more formally evaluated in a small RCT that followed youth longitudinally for 18 months after intervention (Exner-Cortens, Wolfe, Crooks, & Chiodo, 2017). Although this study was hampered by a small sample size and relatively low-risk youth participants, there was a decrease in bullying victimization among intervention youth at 12 months post-intervention that appeared to be mediated by increased help-seeking immediately following intervention.

There were no benefits in depression or substance use, which may, in part, be due to low base rates of these outcomes in both intervention and control youth.

Finally, between 2014 and 2017, Health Canada's Drug Strategy Community Initiatives Fund supported the implementation, evaluation, and scale-up of the *HRP* in three provinces and one territory. This initiative was a field trial that sought to explore implementation of the *HRP* in real-world settings in diverse contexts. Pre- and post-intervention data were collected from youth (although there were no comparison groups); facilitators provided implementation data and feedback. Analysis of pre- and post-intervention scores on depression showed a main effect for time, indicating that depression decreased overall (Lapshina, Crooks, & Kerry, 2018). Furthermore, latent class growth analysis was used to identify patterns of pre-post change and indicated that it was the youth who were most depressed at pre-test that had the most benefit. Without a control group, these results must be considered preliminary, but they suggest that the program is promising and requires further evaluation.

Table 17.2 Key concepts in understanding discrimination faced by LGBTQ2+ youth

Homophobia	Refers to anti-gay bias (Walton, 2006). Involves prejudice and discrimination directed toward people who are or are perceived to be queer (Taylor et al., 2011)
Heterosexism	"…the institutionalized belief that heterosexual attraction and relationships are considered valid and natural, whereas same-[gender] attraction and relationships are not" (Serano, 2013, p. 114)
Heteronormativity	The naturalization and normalization of heterosexuality in society (Britzman, 1995)
Transphobia	"The irrational fear or hatred of all individuals who transgress or blur the dominant gender categories in a given society" (Airton & Meyer, 2014, p.)
Cissexism	"…the double standard that leads people to view, interpret, and treat trans people differently (and less legitimately) than…cis counterparts" (Serano, 2007/2016, p. xviii)
Cisnormativity	The normalization and naturalization of cisgender identities and gender conforming expressions

Programming for LGBTQ2+ Youth

The *Healthy Relationships Program (HRP) for Lesbian, Gay, Bisexual, Trans, Queer/Questioning, and Two-Spirit Youth (LGBTQ2+)* was adapted from the *Fourth R*'s *Healthy Relationships Program (HRP)*. LGBTQ2+ youth generally experience mental health disparities to a greater extent than their straight and/or cisgender peers as a result of social and systemic homophobia, heterosexism, heteronormativity, transphobia, cissexism, and cisnormativity, as defined in Table 17.2 (Grace & Wells, 2015; Russell & Fish, 2016). The *HRP for LGBTQ2+ Youth* is an 18-session program that promotes positive mental health and well-being and healthy relationship development among LGBTQ2+ youth. The program was designed to affirm gender, sexual, and romantic minority identities and experiences and enhance youth's ability to cope with sexual- and gender-based oppression (Meyer, 2003; see also Rood et al., 2016). Since there is a dearth of evidence-informed positive mental health programming for LGBTQ2+ youth (Craig, Austin, & McInroy, 2013; Heck, 2015), the *HRP for LGBTQ2+ Youth* fills significant programmatic gaps.

The *HRP for LGBTQ2+ Youth* pilot was developed by an American dating violence researcher in 2013–2015 and was first implemented in 2015–2016 in one community group and eight Canadian public secular high school gay-straight alliances (GSAs) because schools have been found to be effective sites for offering mental health promotion programs for LGBTQ2+ youth (Heck, 2015). GSAs or clubs that go by other names, but have similar mandates (e.g., gender and sexuality alliances (GSA); queer-straight alliances (QSA); gender, sexuality, and trans alliances (GSTA); or other student-developed acronyms), are school-based groups whose roles fluctuate between safety, social/support, education, and activism (Griffin, Lee, Waugh, & Beyer, 2004).

Qualitative feedback was collected on the pilot and was utilized to revise the program during the summer of 2016 (see Lapointe, 2017; Lapointe, Dunlop, & Crooks, in press). GSA facilitators and youth participants were hired as consultants to guide significant changes to the program. The revised program was implemented at eight GSAs and one community organization from December 2016 to June 2017. Most sites that delivered the revised program were new, except two schools and the community organization. In both years, facilitators attended a 1-day training session where they developed their understanding of mental health and wellness and LGBTQ2+ topics and were introduced to the *HRP for LGBTQ2+ Youth*. Early qualitative evaluation of the revised program suggests that youth enjoyed participating in a structured program within their school-based clubs, partly because it enabled them to explore topics that they might otherwise overlook or fail to examine in-depth. They also appreciated the program's identity affirmative focus, and the skills were very applicable to their lives, particularly for those who were experiencing challenges associated with coming out (Lapointe & Crooks, 2018).

Programming for Youth in Correctional Settings

Juvenile offending has been linked to numerous negative outcomes for youth including psychological, emotional, health, social, academic, and employment challenges. In addition to individual impacts, youth delinquency is associated with significant societal costs, including a strain on finances and resources (de Vries, Hoeve, Assink, Stams, & Asscher, 2015). The prevalence of youth offending, as well as the individual and societal impacts of these behaviors, highlights the importance of supporting the needs of these youth. In order to reduce the likelihood of negative outcomes for youth and society as a whole, stakeholders must carefully choose appropriate prevention and intervention programs. Historically, programs have been risk-focused; however, preventing risk factors alone is not sufficient to address the challenges that these youth face (Krohn, Lizotte, Bushway, Schmidt, & Phillips, 2014). Current research suggests that effective prevention and intervention programs should aim to simultaneously prevent or reduce multiple risk factors while also promoting the development of protective factors (Knight et al., 2017).

A meta-analysis identifying empirically based ingredients of programs that reduce offending behaviors in youth recommended that programs aim to develop social skills (i.e., positive communication) and cognitive skills (i.e., problem solving and perspective taking). Programs should also be highly structured and include a manual, staff training and supervision, and a measure of program compliance (Latimer, Dowden, Morton-Bourgon, Edgar, & Bania, 2003). Consistent with these effective ingredients of programming, the *Fourth R* classroom curricula and the *HRP* are manualized programs that target multiple risk factors (i.e., substance use, risky sexual behavior) and promote protective factors through social and cognitive skill building (i.e., communication skills, help-seeking). Based on the needs of youth offenders, and the program objectives of the *Fourth R* curricula and the *HRP*, we believed that a clear and compelling rationale existed for implementing these programs in youth justice settings.

Currently, there are a limited number of programs for youth offenders that are deemed evidence-based (Guerra, Kim, & Boxer, 2008). Consequently, in 2015, we partnered with Manitoba Corrections to address this gap by examining the feasibility and fit of the *Fourth R* classroom-based program and *HRP* in youth correctional facilities. It was understood that the programs were not designed specifically for youth offenders and the existing programs would require adaptations to make the content more applicable to the youth justice population and the constraints of a correctional setting. During the first year, the original programs were piloted to examine feasibility and fit and subsequently make program adaptations based on facilitator and administrator feedback. Results of this pilot indicated that, although the content was a fairly good fit for the needs of the participants, the *HRP* was a better fit for the setting than the classroom-based version. Subsequent revisions to the program added higher-risk scenarios, increased

cognitive-behavioral restructuring activities, and added a trauma-informed lens. The revised program (i.e., th *HRP-Enhanced)* is currently being piloted in five correctional settings in Manitoba and Ontario.

Outside of the justice system, the *Fourth R* and *HRP* programs have been implemented with high-risk youth in diverse settings. Interestingly, two of the authors implemented the *HRP* with adolescent mothers who attended an alternative education program. Many of these young women are identified as high risk in terms of past or current mental health challenges, engagement in substance use, and experiences of family and relationship violence. In addition, many of these adolescent mothers were at risk of becoming or currently involved in the justice system. Although these implementations were not formally evaluated, according to facilitator, teacher, and student feedback, the program was well received. The authors observed that the young women were engaged by the content and activities and anecdotally reported that they had used the knowledge and skills they learned with each other to deal with difficult situations in their lives in a healthy way. Based on these experiences, and preliminary data from the youth justice pilot, we hypothesized that the *HRP-Enhanced* may also be a good fit for high-risk youth more generally, and we are currently piloting it in numerous community mental health settings. Moreover, we are in the process of piloting and further adapting the *HRP-Enhanced* to match the needs of groups of high-risk adolescent girls.

Implementation Considerations for Diverse Settings: Applying the Quality Improvement Framework

The last 15 years has seen a number of conceptual frameworks that have been developed to guide quality implementation (e.g., Aarons, Sommerfeld, Hecht, Silovsky, & Chaffin, 2009; DuBois, Holloway, Valentine, & Copper, 2002; Durlak & DuPre, 2008; Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005; Rogers, 2003; Wandersman et al., 2008). Most of these frameworks, however, do not focus on the specific actions or the "how to" that can be employed to foster high-quality implementation. One notable exception is the quality implementation framework (QIF; Meyers, Durlak, & Wandersman, 2012). The QIF was designed from an extensive synthesis and review of leading implementation frameworks in the literature and extends this work by allowing researchers and practitioners to think about the "how to" of implementation. The QIF delineates the critical factors deemed most important for implementation success and identifies 4 phases and 14 critical steps along with specific actions that can be considered during the implementation process to achieve quality implementation (Meyers, Durlak, & Wandersman, 2012). Several studies have provided support for each of the QIF critical steps (see Durlak & DuPre, 2008; Gottfredson & Gottfredson, 2002; Fixsen et al., 2005), and scholars have argued that more attention needs to be paid to factors that lead to high-quality implementation (Domitrovich et al., 2008; Payne & Eckert, 2010). Meyers, Katz, et al. (2012) also developed a tool called the quality implementation tool (QIT) to assist stakeholders in communities and organizations in their efforts to implement with quality. The content of this tool was developed from the QIF and was designed to be completed through a collaborative process among members of the implementation team to help enhance the likelihood that desired outcomes of programs or interventions are achieved (Meyers, Katz, et al., 2012).

In our work with prevention programs delivered in diverse contexts, using an effective implementation framework like the QIF has helped to maximize the full benefits of the programs and practices by considering strategies, attributes, and facilitators that helped to guide and execute our implementation efforts. Moreover, employing QIF has allowed us to identify factors that could threaten implementation quality and inhibit successful implementation and desired outcomes. A particular strength of the QIF is that it organizes actions into a temporal sequence of four phases. The framework describes describes the sequential and necessary phases for successful implementation, as well as the specific actions. The phases

include initial considerations regarding the host setting (Phase 1), creating a structure for implementation (Phase 2), ongoing structures once implementation begins (Phase 3), and improving future applications (Phase 4). In total, 14 steps are identified in the implementation process (Meyers, Durlak, & Wandersman, 2012). These phases and steps provide a useful framework for describing the implementation process of the various *Fourth R* initiatives that have been undertaken with diverse populations and in diverse contexts. The use of the QIF provides a conceptual guide to utilizing effective implementation practices (Meyers, Durlak, & Wandersman, 2012). In the section below, we describe each phase of the QIF and the implementation considerations for prevention programming in diverse contexts.

Phase 1: Initial Considerations Regarding the Host Setting and Specific Population

The first phase, *Initial Considerations Regarding the Host Setting*, focuses on activities related to the specific intervention host setting and identifies activities related to fit, adaptability, and readiness. Meyers, Durlak, & Wandersman (2012) describe this first phase of implementation primarily focusing on the ecological fit between the innovation and the host setting. Phase 1 includes eight critical steps: conducting a needs and resources assessment, conducting a fit assessment, conducting a capacity/readiness assessment, possibility for adaptation, obtaining explicit buy-in from critical stakeholders and fostering a supportive climate, building general/organizational capacity, staff recruitment/maintenance, and effective pre-innovation staff training (Meyers, Durlak, & Wandersman, 2012). Our implementation manual offers a number of checklists and tools for addressing these issues with our general curriculum-based health education *Fourth R* programs (Crooks, Zwarych, Burns, & Hughes, 2015), but there are numerous additional considerations when implementing in diverse contexts. We discuss three of these here – the process of obtaining buy-in, establishing fit and alignment, and considering the possibility for adaptation. Specific recommendations for the adaptation process are included in Textbox 17.1.

Textbox 17.1. Recommendations for Initial Considerations Regarding the Host Setting and Target Population

1. Program adaptation and implementation are best undertaken in the context of authentic, reciprocal relationships with the community or setting for whom the adaptation is being made. These partners provide critical guidance on both content and implementation structure.
2. Ensuring that programs or interventions are compatible with the existing values, experiences, and needs of the host setting, community, and individuals and implementing the intervention are critical factors in the adoption of programs for that particular setting or target group and are also pivotal in maximizing implementation success.
3. Adaptation is an iterative process that requires patience. It is essential to build feedback loops into this process so that successive iterations better meet the needs of the youth and settings.
4. Youth who have been marginalized (and their adult allies) are better engaged in strength-focused approaches that affirm a range of identities and expressions. They are less engaged in problem-focused approaches that reinforce stereotypes.

Obtaining Explicit Buy-In from Critical Stakeholders and Fostering a Supportive Climate

Although the QIF identifies the importance of obtaining "buy-in" from key stakeholders, our experience has been that the importance of authentic and enduring partnerships goes far

beyond obtaining buy-in. Authentic partnerships are about co-creating programming and also co-creating areas of inquiry for research projects (Janzen, Ochocka, & Stobbe, 2016). In addition, it is critical to engage different stakeholders in this process; administrators provide important input about context and, in many cases, have final decision-making authority, educators work closely with youth and are responsible for program implementation, and youth are the ultimate experts of their experience and what fits for them. It is important to create opportunities for youth voice, because their input has historically been lacking from program development (Edwards, Jones, Mitchell, Hagler, & Roberts, 2016). We have been successful in creating opportunities for youth to help shape program adaptation in different ways, sometimes as volunteers and sometimes as paid consultants. For example, youth developed the skill-based video resources that support our Indigenous programming materials. Youth consultants also engaged in a workshop-facilitated process to provide feedback and direction on an earlier version of the LGBTQ2+ manual (see Lapointe, 2017). Their contributions played a critical role in establishing fit for specific groups.

Fit and alignment There is significant research to support the importance of creating an environment that enhances implementation success, which includes ensuring that the program or intervention aligns with the existing values, experiences, and needs of the adopting organization as well as the individuals implementing the intervention. Rogers (2003) in his seminal work on the *Diffusion of Innovations Model* describes the degree of fit between the innovation (e.g., program, intervention, or policy) and the setting and target population as *compatibility*. Compatibility implies that the more in line the innovation is with the current value system and way of life of possible adopters, the more acceptable and accommodating are the adopters. Many studies support the degree of fit between the innovation and the setting and target population. Durlak and DuPre (2008) reviewed 542 quantitative implementation studies in the field of prevention and promotion targeting children and adolescents across a diverse set of programs, providers, and settings. In their review, they found that providers (e.g., individuals implementing the program and/or the implementing organization) who recognized a specific need for the innovation were more likely to implement a program at higher levels of dosage or fidelity than providers who did not see an immediate need for the innovation. Moreover, Durlak and DuPre also found that providers and organizations implement new programs more effectively when they fit with the organization's current mission, priorities, and existing practices. Research with the *Fourth R* has also supported the finding that when an innovative program is perceived as fitting the culture of the school and practices of individual teachers, it was perceived as more compatible and acceptable by teachers and school administrators. For example, Chiodo, Exner-Cortens, Hughes, and Crooks (2015) identified the integration of the *Fourth R* within existing school frameworks and priorities as a key factor in the implementation success and scale-up of the program across Canada. Teachers that were able to align the *Fourth R* with other safe school and health education priorities did not view the program as competing for time with other academic priorities (Chiodo et al., 2015). In other works, Chiodo (2017) found that teachers were more likely to implement the *Fourth R* program with high quality when they perceived the content of the program as aligning with what adolescents should be learning about and how they should be learning.

The Adaptation Process

Alignment and fit of *Fourth R* programs with the values, beliefs, and priorities of the district, school, organization, community, or individual teacher have not only been critical factors in the adoption of the program for that particular setting or target group but also pivotal in maximizing implementation success. For example, our *Uniting Our Nations* programming was developed to align with culturally appropriate teaching methods, as well as protective factors noted to improve the well-being of Indigenous youth,

such as a program focused on cultural identity development and mentoring.

Moreover, in addition to culturally relevant content, research suggests that locally relevant cultural content is an important component of programming efforts with Indigenous youth (Moran & Reaman, 2002). The *Uniting Our Nations* program was developed and adapted in close partnership with neighboring First Nations communities to reflect local knowledge and traditions. This shift in ownership to the local community in which the program has been adapted and designed to fit the local context may help to sustain our programs long-term. Maximizing the contextual fit between the *Uniting Our Nations* programming and the needs of both the school and community has helped to enhance implementation.

It is important to note that these adaptions are often only applicable and relevant for the context in which they were developed. Significant problems have been associated with attempts to create content that is "pan-Aboriginal" or applies to all Indigenous peoples (Proulx, 2006). In light of these challenges, the *Fourth R* team has worked with partners to develop materials adapted for additional contexts (including an Anishinabe-informed version, a Cree-informed version, and a Dene-informed version of the *Indigenous Perspectives Fourth R* curriculum) and has developed a template and set of guidelines to assist other nations in further adapting the materials for their own local contexts (Crooks, Hughes, & Sisco, 2015). Because of the importance of local context, the scale-up process is slow and relationship-based. It is not feasible to develop a program that can be readily disseminated across Indigenous contexts in the same manner as our programming for non-Indigenous youth nor should that be the goal.

Another lesson for us with respect to working with historically marginalized populations is that youth and their adult allies prefer strength-based approaches versus a deficit-based approach or focusing solely on preventing negative outcomes. This has been true in all three of our areas. Our programming for Indigenous youth employs a holistic model of well-being that explicitly emphasizes cultural pride, cultural connectedness, and cultural identity development as a means of promoting positive mental health and resilience (Crooks, Burleigh & Sisco, 2015). Program content is delivered using culturally appropriate teaching methods and is connected to the medicine wheel, which is a locally relevant teaching related to health promotion. In the elementary and secondary mentoring programs, for example, beginning in the fall, which includes the west/spiritual quadrant, sessions address student interests, the creation story which reflects the locally relevant understanding of how a particular nation came to be, and creating positive attitudes and atmospheres. In the winter which represents the north/physical quadrant, sessions address bullying, healthy eating, and First Nations' representations in media. In the spring, the east/emotional quadrant, sessions address sharing and listening, goal setting, and positive decision-making skills. In the summer, the south/mental quadrant, sessions address communication skills, peer pressure, personal strengths, and handling peer conflicts. Thus, the key components of mental health promotion and violence prevention are still present, but they are embedded in a cultural framework. As one educator shared, this strength-based approach, which allows Indigenous youth to explore and develop their cultural identities, is a key factor in engaging youth and promoting positing outcomes:

> *Unfortunately, our Aboriginal youth are feeling left out and excluded and are not knowing who they are. So having a program specifically to teach the pride and power is something we need to build on in order to increase their graduation rates and show them that school is a good thing. School will empower them and being proud of who they are is what the Fourth R is helping to teach the kids.* (Crooks et al., 2015, p. 108)

Similarly, there is a clear need for strength-based and affirming approaches with LGBT2Q+ youth because queer sexualities are commonly positioned as abnormal, unnatural, and immoral (Britzman, 1995), and trans and gender diverse identities and expressions are largely erased (Namaste, 2000). The *HRP for LGBT2Q+ Youth* fills important gaps in validating and affirming

LGBTQ2+ youth's identities and experiences. When working with youth, including vulnerable youth and those involved in the justice system, it is important to remember that in most cases, youth are coping the best way they know how, based on the available resources. To a well-adjusted adult, it may appear that delinquent youth have made bad choices and engaged in maladaptive behaviors. In many cases, youth are making decisions within the confines of their environment. While they are accountable for their actions, it is critical to recognize the resilience and strength that is often hidden beneath their behaviors (Ungar, 2004). The *HRP Enhanced*addresses the risk and protective factors among this population and highlights their resilience, which is too often overlooked.

Phase 2: Creating a Structure for Implementation

Meyers, Durlak, & Wandersman (2012) describe the second phase of quality implementation as ensuring that there is an organized structure developed to oversee the implementation process. This includes establishing a clear plan and timeline for implementation. This second phase also includes the importance of a team of committed and qualified individuals who will take responsibility for issues that may arise during implementation as well as individuals responsible for delivering the intervention. For this phase, we discuss the importance of establishing a clear plan and timeline for implementation, the structural challenges that impact implementation in schools, and the importance of implementation teams in enhancing implementation quality.

Establishing a clear plan and timeline for implementation Purposeful attention to implementation requires an organized structure developed to oversee the implementation process, which includes establishing a clear plan and timeline for implementation. An implementation plan for school-based prevention programs reflects a breakdown for each implementation activity into identifiable steps and assigns steps within a timeline to one or more implementation team members. An implementation plan should also clearly articulate what success looks like and identify any implementation challenges that may arise. To illustrate, during initial implementation when a program is being used for the first time in a school, an implementation plan might include the steps needed to accommodate and support teachers as they "try out" the new program. This could include regular check-ins by implementation team members or other school or district staff who have some involvement with implementation to discuss challenges or share success stories. The plan at this stage may also reflect a timeline around additional training sessions that may be required or ensuring access to materials or other resources are available to facilitate implementation. While implementation plans are effective in supporting the delivery of programs in schools, creating them is challenging. A useful implementation plan requires that implementation teams know each step required to facilitate implementation, have an understanding of how long each step may take to be realized, and also have a vision for what successful implementation looks like, none of which are easy tasks in school-based implementation of prevention programs.

Fourth R programs are predominantly funded through provincial or national granting agencies or service contracts through the local school board. Typically, implementation plans and timelines are established within the submission of grants or service contracts and are revised and updated frequently to reflect the realities of implementation stages throughout the project. Implementation plans for our work with marginalized populations have, in some ways, been more critical in supporting quality implementation than it has been for our universal classroom-based programming. For example, our programming for specific populations has been more resource-intensive than our classroom-based *Fourth R* programs, requiring us to draft highly specific plans that focus on what tasks will be accomplished, who will accomplish them, and when. With respect to our programming for Indigenous youth, identifying areas for improv-

ing program implementation as well as prioritizing tasks for our team was important. Remaining flexible and adaptable to timelines and stages of implementation has not only been important for successful implementation but has also been an important component of our school board partnerships.

Structural challenges associated with implementation in schools or organizations The complexity necessary to achieve strong implementation fidelity in schools is well documented. Many initiatives are implemented well on a small scale or when programs are externally driven by outside researchers with external funding to support the implementation. However, the majority of these falter under real-world conditions, in part due to common implementation challenges. Some examples of the barriers to high-quality implementation in schools include a mismatch between class time and the delivery of the program, administrative priorities, teacher skills and beliefs about the perceived need for the intervention, organizational capacity, and acceptability of the program or intervention (e.g., Durlak & DuPre, 2008; Gottfredson & Gottfredson, 2002; Han & Weiss, 2005). The complexity involved in implementation of school-based prevention is also why there are significant variations in fidelity observed across programs, components, schools, and teachers. Identifying and understanding the barriers to implementation can highlight potential points of entry for addressing problems and drivers for improvement.

For our school-based programming, understanding the complexity of prevention program implementation in school settings has required us to be creative in knowing when and how programs are delivered, taking advantage of implementing programs within pre-existing formal structures and groups (e.g., GSAs), and advocating for the prioritization of prevention programming for specific groups within school timetables and calendars. Implementing *Fourth R* programs in settings outside of school, such as youth justice, has also required implementation flexibility and adaptability. For example, in the youth justice system, the transient nature of youth entering and leaving custody facilities at different times makes *Fourth R* program implementation uniquely difficult as knowledge and skill development in each lesson builds upon the content from preceding lessons. The pilot implementation of the *HRP* in youth justice was a good fit for the target group and setting because the program is short (14 lessons), and with youth entering and being released at different times, the likelihood of youth completing the program was higher with *HRP* than it was for the longer *Fourth R* curriculum-based program (27 lessons). Additionally, the *Fourth R* curriculum-based program was not compatible with the youth justice setting because youth attending school in custody typically complete independent work and they found partner/group work a challenge. Finally, in youth custody education programs, youth are working toward earning different credits (i.e., some youth may be completing grade 8 curriculum, while others are working on grade 10), and the *Fourth R* curriculum-based program did not allow for all youth who participated to earn their required credits.

Our *Uniting Our Nations* peer mentoring program for high school students has always been offered during the lunch hour at schools which has been both an advantage and disadvantage. School administrators and school staff are often reluctant to allow high school students to miss class time for participation in non-curriculum-based programming, making the lunch hour the only viable option for the mentoring program. In some program years, there have times where high school students have been less willing to sacrifice their lunch hour to attend programming. Providing lunch for students during the program has sometimes helped with program attendance. At times, the balance of wanting to spend lunch hour with other friends has interfered with the desire to attend the mentoring program. Lunch hour programming is also hampered by students who may not arrive on time as they travel through the busy halls to attend programming. On the other hand, with the increasing pressure for students to not lose instructional time for extracurricular programming, offering the program

during the lunch hour has been a necessary alternative. Scheduling has been the bane of many prevention program implementation efforts, and experimenting with alternative models to implement new programs could be beneficial.

Implementation teams Implementation teams are responsible for the purposeful, active, and effective implementation work – the "making it happen" phase when it comes to program implementation (Fixsen et al., 2005). Typically, members of implementation teams have special skills and expertise regarding programs and often understand the program very well, reflecting both formal and practice knowledge. Implementation team members also have at least some practice in implementing programs or interventions with fidelity and often have a vested interest, ensuring that the program's intended outcomes are achieved. Individuals who are part of implementation teams are accountable for assuring that the interventions and effective implementation methods are in use by the implementers. An implementation team should not be mistaken for an advisory committee or group that meets periodically and receives updates and provides inputs on decisions. In contrast, an implementation team is actively involved on a daily basis with the implementation, addresses challenges that may arise, is committed to ensuring the full use of the innovation, and communicates successes and challenges of the implementation effort (Blasé, Fixsen, Sims, & Ward, 2015). Several scholars have argued that implementation efforts are more likely to be successful with the active engagement and accountability of implementation teams (e.g., Fixsen, Blasé, Duda, Naoom, & Van Dyke, 2010; Sugai & Horner, 2006).

In settings that have delivered *Fourth R* programming for specific populations, we have somewhat better success with implementation team setups than we have experienced in our universal classroom-based programming. For example, for the local implementation of the *Uniting Our Nations* programming, implementation team members have included *Fourth R* staff members, *Fourth R* researchers, *Fourth R* educators, the local superintendent responsible for FNMI programs and services, and another school board staff member responsible for FNMI programming and services. While the day-to-day challenges that arise during implementation are typically resolved with internal *Fourth R* staff, having external school board staff as part of the implementation team has helped with the prioritization of the program at the school level, has provided some internal accountability to school administrators who are implementing the program in their schools, and helps the program connect to additional programs and services that are offered at a district level that may help youth succeed. We have identified recommendations for creating implementation structure in Textbox 17.2 below.

Textbox 17.2. Recommendations for Creating the Structure of Implementation

1. Establish a clear plan for implementation with timelines, but be flexible and adaptable in the steps that are required for successful implementation, with the understanding that delays and setbacks are a normal part of the process.
2. Be creative in knowing when and how programs can best be delivered, and take advantage of implementing programs within formal structures and groups that exist in settings.
3. Advocate for the prioritization of prevention programming implementation for specific groups within school timetables and calendars.
4. Establish an implementation team that can be actively involved on a daily basis with implementation and are able to address challenges that may arise during implementation.
5. Select implementation team members who have accountability and a genuine interest in the success of a program.

Phase 3: Ongoing Structure Once Implementation Begins

Meyers, Durlak, & Wandersman (2012) describe Phase 3 of their model as the stage where implementation begins. This phase includes providing ongoing technical assistance to those implementing the intervention, ongoing monitoring of implementation quality, and the importance of establishing feedback mechanisms so that all stakeholders involved can understand how implementation is progressing. During Phase 3, Meyers, Durlak, & Wandersman (2012) suggest that implementation teams have a clear plan in place for the needed technical assistance, coaching, and training that is necessary for delivering the intervention with fidelity. Moreover, the development of a feedback system is critical and must be accurate and specific enough for successes and challenges to be recognized easily and changes put in place to improve implementation. While technical assistance and coaching is one way to bridge the gap between research and practice, across a wide variety of evidence-based interventions, technical assistance is not typically delivered systematically, and the tasks performed by technical assistant providers vary widely across studies (see Katz & Wandersman, 2016, for a review).

There is significant research support for the activities in Phase 3 that lead to better implementation (e.g., Durlak & DuPre, 2008; Fixsen et al., 2005). Even when individuals receive intervention training, a manualized program, and/or organizational support for implementation, these factors alone are often not sufficient to maximize implementation efforts. It is useful to include ongoing supervision and coaching and provide a high level of technical assistance to ensure fidelity of implementation and staff retention. In their randomized control study of SafeCare, an evidence-based program to reduce child neglect, Aarons et al. (2009) found that implementing a supportive/coaching model as part of their fidelity monitoring to supervisors who were providing a high standard of care for children and families leads to higher staff retention over a 29-month period compared to conditions in which the coaching model was not present. Providing technical assistance will also allow for the ongoing assessment and progress of implementation and provide suggestions for future improvement. Wandersman, Chien, and Katz (2012) argue for proactive technical assistance as an approach that is both anticipatory and responsive to recipient needs and provides specific knowledge and skills to recipients but also helps them to adopt and use the information and skills effectively.

Providing training, ongoing support, coaching, and technical assistance has been widely practiced with *Fourth R* programming in general but has been particularly critical in our work in diverse contexts. An essential ingredient of coaching and technical assistance is relationships (Wandersman et al., 2012). Collaborating with our partners, building trust, being strength-based, and prioritizing our attention to our partnership relationships has been particularly relevant when providing programming to youth in diverse settings. For example, when implementing the *HRP for LGBTQ2+ Youth*, our team engaged in frequent opportunities for interaction and feedback with staff implementing the program, usually via email, to hear about the challenges and strengths with implementation and to address some of these changes as the program went along. Because the process of implementation was very collaborative among staff implementing the program, youth participants, and the *Fourth R* team, everyone involved was learning and growing, and staff and youth were an invaluable resource to others in future implementation and training sessions.

Finally, our work with marginalized populations has been more resource-intensive than our universal classroom-based programming. With our programming for Indigenous youth, for example, we initially developed and implemented the programming for the local school district. After several years of this arrangement, the program stabilized, and the indication was that our support was no longer needed to implement the programming. The district hired their first Indigenous coordinator at this time and envisioned the implementation of the mentoring programs as part of the new internal role. Within months the local board contracted us to do the programming, which we now do on an ongoing basis. The reason for the change in plan was that the logistics were too time-intensive for the coordinator, in part, because the coordinator has a much larger portfolio than implementing the

program. Some of the logistical challenges associated with this type of programming were highlighted in the early study of the feasibility and fit of the *Uniting Our Nations* mentoring program (Crooks et al., 2009). Challenges associated with successful implementation of the mentoring program included coordinating appropriate staffing and supervision for programming, provision of space, supplies and resources, and organization of student participants (ensuring sufficient numbers to run programs, facilitating return of consent forms, tracking attendance, arranging transportation, and appropriately matching participants). Although all programs have these requirements, our experience has been that there are additional challenges in this case. For example, facilitating the return of consent forms can require more attempts to contact guardians and even driving to someone's home to obtain consent. Additionally, challenges were noted in finding Indigenous adult role models and elders to commit time to the program, as these individuals were often quite busy in their own organizational or community roles. It has been a full-time job for one of our team to facilitate mentoring in four elementary schools and three secondary schools and to coordinate the student leadership committee, where another school district employee might be expected to facilitate mentoring across 60 elementary schools.

Textbox 17.3. Recommendations for Ongoing Structure Once Implementation Begins

1. Establish a clear plan and organizing framework for technical assistance and coaching.
2. Provide frequent opportunities for interaction and engagement with staff implementing a program to hear successes and challenges with implementation.
3. Relationships are an essential part of technical assistance and coaching. Having a trusting relationship can expand the ways in which support can be helpful.
4. Logistics may be more resource-intensive for programming with diverse populations, and these supports need to be built into the implementation plan.

Phase 4: Improving Future Applications

The final phase of the QIF addresses the question of what can be learned about quality implementation from a particular program effort (Meyers, Durlak, & Wandersman, 2012). Being able to learn from an experience requires ongoing data collection and feedback loops; throughout this chapter, we have highlighted different lessons that we have learned from collecting these data. In this section, we reflect on the process of building in evaluation from the outset and three potential pitfalls.

First and foremost, it is critical to build in evaluation from the outset of developing new program components. Although program adaptations for specific populations can borrow strengths from existing evidence-based programs (Aarons et al., 2017), there is still a very real possibility that an initial attempt at adaptation will not be successful. For example, in our first iteration of our *HRP for LGBTQ2+ Youth*, facilitators and participants identified significant issues with its content. Rather than exploring LGBTQ2+-based stereotypes and reiterating how LGBTQ2+ youth are marginalized in school and society, youth suggested that the program should focus on LGBTQ2+ validation and affirmation, be trauma-informed, include a wider range of relationships (i.e., family and non-romantic relationships), and adopt a youth-led approach (Lapointe, Dunlop, & Crooks, in press). Without these feedback mechanisms, we could have relied overly on the assumption that core components from one program were being framed adequately for a different context.

A related potential pitfall is the demand that can arise for a new program expansion when the program and research team has developed a strong track record for quality programming. In all of our expansions discussed in this chapter – those for Indigenous youth, those for LGBTQ2+ youth, and those for youth in the justice system – as soon as organizations heard about our new endeavors, we were approached with requests for materials to implement the new versions, irrespective of any evaluation being completed. We have chosen to navigate these by offering pilot versions only to organizations who have the capacity and interest to partner with us on the evaluation component. For those organizations who simply want to implement the new and untested programs, we view it as an ethical responsibility to delay dissemination until the most basic process evaluation has been completed. Furthermore, we maintain clarity about the state of the evidence for each program component such that when new programs are offered, there is an understanding that educators and service providers only apply core components from an evidence-based intervention while indicating that they themselves have not been thoroughly evaluated.

Finally, establishing accurate and timely feedback mechanisms to highlight successes and address implementation challenges has been an important part of *Fourth R* implementation. Internally, our team meets often to discuss program implementation at various sites, and we discuss and systematically review the feedback that has been received from youth receiving the program or staff implementing the program. We provide our schools or districts with summary reports typically once or twice a year. These summaries are visually appealing and easy to read to share findings related to the process of implementation, program feedback, and program outcomes. Where possible, we also find opportunities to share feedback on implementation with our partners face-to-face so that real-time conversations around progress and challenges can be addressed quickly and openly with each other.

Textbox 17.4. Recommendations for Improving Future Applications

1. It is important to build in process feedback measures from the outset of adapting an evidence-based program for a new population or setting.
2. It is critical to not let demand for a new program component create pressure for dissemination prior to evaluation.
3. Providing summaries in an ongoing manner to partners in accessible language contributes to a shared understanding of the project successes and challenges and promotes continued investment from partners.

Summary

There is a strong movement toward the funding and use of evidence-based programs for promoting mental health and preventing violence among youth. Unfortunately, our evidence about what works for vulnerable populations in real-world settings remains scarce. As noted by O'Connell et al. (2009), "Despite multiple dissemination venues, evidence-based interventions have not been implemented on a wide-scale basis. Where interventions have been implemented, they are often not implemented with fidelity, with cultural sensitivity, or in settings that have the capacity to sustain the effort" (p. 335). Indeed, youth who are at the highest risk for negative mental health outcomes are often members of specific groups for whom evidence-based school mental health promotion approaches are not readily available. In this chapter, we have described our efforts to expand one such evidence-based program, the *Fourth R*, to other groups and settings. By undertaking this work within an implementation framework from the outset, we have been better able to identify real-world challenges and successes associated with the programming. Furthermore, working closely with key stakeholders has ensured that fit and feasibility considerations are

built into these program efforts from the start, which in turn provides a more effective basis for sustainability of these interventions.

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18 Mindfulness-Based Programs in School Settings: Current State of the Research

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Abstract

Mental health issues among children and youth have been identified as a major concern locally and internationally, which has urged professionals to respond to the high prevalence rates and mitigate the effects of mental health problems on development. School is an important context to address mental health, as children and adolescents spend a significant amount of time in schools nearly every day. Drawing from the PYD perspective and dual-factor systems model, school administrators have begun to incorporate mental health intervention programs into their curriculums in order to facilitate youth to develop cognitive, social, and emotional skills, as well as promote their well-being. Mindfulness as a construct has been described in the literature in four separate conceptual forms: as a way of being, as a characteristic, as a practice, and as a therapeutic intervention.

Introduction

Mental illness can present as significant and ongoing challenges in the lives of children, youth, and their families. Approximately 10–20% of young people are affected by mental health issues worldwide (Erskine et al., 2015; Kieling et al., 2011). Similarly, in Canada, 14% of children and youth experience significant mental health disorders that require professional treatment and support (Waddell, Offord, Shepherd, Hua, & McEwan, 2002). Mental illness is strongly related to adverse developmental outcomes, such as low academic performance, poor social adjustment, substance misuse, negative social relationships, and violent behaviors (Patel, Fisher, Hetrick, & McGorry, 2007; Dick & Ferguson, 2015). Further, untreated mental health issues may persist into adulthood and add significant burden to individuals, their families, and their communities (Barry, Clarke, Jenkins, & Patel, 2013; Kessler et al., 2005). In sum, mental health issues among children and youth have been identified as a major concern locally and internationally, which has urged professionals to respond to the high prevalence rates and mitigate the effects of mental health problems on development (Barry et al., 2013; Erskine et al., 2015).

Recently, mental health prevention has become an integral component of global public health policies targeting young people. In 1995, the World Health Organization (WHO) launched

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the *Global School Health Initiatives* to increase the number of health-promoting schools. These schools strive to provide a positive environment to foster healthy development and student success. One of the core features of this initiative is to promote mental health and well-being among children, staff, parents, and communities (World Health Organization, 1998).

In Canada, one of the top priorities in the *Changing Directions, Changing Lives: The Mental Health Strategy of Canada* is to increase the capacities of schools, families, and communities to promote mental health for all children and youth (Mental Health Commission of Canada, 2012). Moreover, given that many mental health issues begin in early development, mental health prevention programs are recognized as key strategies in promoting optimal development among children of all ages (Barry et al., 2013). Early intervention can also reduce young people's risk of developing mental health disorders later in life and provide them with the means to build resiliency and overcome adversities (Barry et al., 2013). In order to describe mental health interventions for children and youth, it is first important to understand current theoretical conceptualizations of child and youth mental health.

Mental Health and Developmental Theories

According to traditional medical disease models, mental health has been defined as the absence of mental illness (World Health Organization, 2004). In recent decades, challenges to this traditional model emerged alongside increased recognition of the role of positive well-being in mental health. Greenspoon and Saklofske (2001) coined the term *dual-factor system of mental health* and showed that mental health in adolescence can be conceptualized on two distinct continuums: subjective well-being and psychopathology (Antaramian, Huebner, Hills, & Valois, 2010; Suldo & Shaffer, 2008). Positive mental health can exist along with psychopathology, such that young people with mental health issues can flourish. Similarly, youth can report minimal psychopathology but can have low subjective well-being and experience difficulties in coping with life's challenges (Suldo, Thalji-Raitano, Kiefer, & Ferron, 2016). In response to this shift in understanding, WHO published a definition of mental health: "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to contribute to his or her community" (World Health Organization). This definition highlights the notion that mental health is an integral part of overall functioning.

Similar to the *dual-factor system model* and the WHO's new definition of mental health, the emergence of positive youth development (PYD) in the 1990s transformed our perceptions of children and adolescents. The PYD approach conceptualizes development as a process for youth to achieve their potential, rather than solely focusing on overcoming adversities and preventing problems from arising (Damon, 2004). Benson (1997) indicated that children and youth are innately equipped with resources termed "development assets," which include *internal assets* such as personal skills and traits that are valued by society and *external assets*, such as family and schools that act as building blocks for positive development. Lerner, Fisher, and Weinberg (2000) and Lerner et al. (2005) emphasized the mutually beneficial, bidirectional interaction between youth and their social context. They highlighted the significant role of the youth's environment, such as their families, schools, and communities, in providing youth with the means to acquire the relevant skills for optimal functioning (Lerner et al., 2000, 2005). As youth develop and achieve their potential, they become resources to society and make contributions to their families and communities (Damon, 2004; Lerner et al., 2005). Overall, the PYD approach contrasts with historical deficit-based models that focus solely on young people's problems and acknowledge the true capacities of young people, in that they all have strengths that can be cultivated (Cheon, 2008; Norrish & Vella-Brodrick, 2009).

This radical shift in the perception of the developmental capacities of youth and how mental health is defined highlights the importance of

engaging children and adolescents in meaningful activities and the critical role of youth's social context in their development (Benson, 1997; Lerner et al., 2000, 2013). Furthermore, this has led to a variety of mental health promotion and prevention programs that aim to equip young people with developmental assets to build resiliency and improve daily functioning (Antaramian et al., 2010; Bradshaw, Brown, & Hamilton, 2008). Researchers and practitioners have also started to explore the specific contexts of child development, such as schools, as unique platforms to promote mental well-being (Stewart, Sun, Patterson, Lemerle, & Hardie, 2004).

School-Based Mental Health Interventions

School is an important context to address mental health, as children and adolescents spend a significant amount of time in schools nearly every day (Stewart et al., 2004). Drawing from the PYD perspective and dual-factor systems model, school administrators have begun to incorporate mental health intervention programs into their curriculums in order to facilitate youth to develop cognitive, social, and emotional skills, as well as promote their well-being (Catalano, 2004; Wells, Barlow, & Stewart-Brown, 2003). School-based programs can be effective in reaching the majority of students, as programs can be implemented in a school-wide approach via various facets that include classroom curriculum, staff training, extracurricular activities, and after-school programs (Fazel, Hoagwood, Stephan, & Ford, 2014). Indeed, current research has identified a link between academic achievement and mental health, leading to the further expansion of school-based mental health programs (Fazel et al., 2014).

Globally, there are a variety of school-based mental health interventions based on different theoretical approaches and target populations (Wells et al., 2003). For example, MindMatters is a comprehensive mental health promotion program in Australia influenced by the *health-promoting schools* initiative by the WHO. The MindMatters program enables high school students to develop a set of strategies aimed at improving mental health and well-being (Wyn, Cahill, Holdsworth, Rowling, & Carson, 2000). The Penn Resilience Program (PRP) has been implemented in the United States, the United Kingdom, Australia, China, and Portugal for students aged 8–15, with a specific focus on increasing students' optimism and reducing mood disorder symptoms (Brunwasser, Gillham, & Kim, 2009; Waters, 2011). There are also cognitive-behavioral school-based interventions for clinical populations to reduce anxiety and depressive symptoms (Mychailyszyn, Brodman, Read, & Kendall, 2012).

More recently, interventions incorporating mindfulness strategies in targeting child and youth mental health have grown exponentially, including mindfulness meditations (MMs) and mindfulness-based interventions (MBIs; Felver, Doerner, Jones, Kaye, & Merrell, 2013). School-based mindfulness interventions are relatively new and, as such, have relatively fewer published studies compared to the adult mindfulness intervention literature. The next section will present important first steps to describe and evaluate mindfulness-based programs, including the essential question of "what is mindfulness?"

Mindfulness-Based Programs

Mindfulness: An Abstract Construct

Today, there is a general consensus that "mindfulness" is a "quality of consciousness" (Brown, Ryan, & Creswell, 2007). However, past our agreement on this simple and nonspecific definition, there is sizable divergence on what "mindfulness" is (Hanley, Abell, Osborn, Roehrig, & Canto, 2016). Mindfulness as a construct has been described in the literature in four separate conceptual forms: as a way of being, as a characteristic, as a practice, and as a therapeutic intervention. Despite varying definitions of the underlying concepts of "mindfulness," there has been a recent proliferation of mental health interventions that target improving an individual's mindfulness (Renshaw & Cook, 2017). However, these interventions either do not specify the definition of

mindfulness the program adheres to, or at an even more basic level, evaluate which mindfulness concept is most applicable to the developmental needs of children and young. To help clarify the concept of mindfulness, it is essential to share a brief history on mindfulness, the different types of mindfulness-based programs, and how mindfulness has been applied globally thus far.

Brief History and Definition of Mindfulness

Mindfulness originates from Buddhist scriptures as one of the principal fundamentals of non-goal-directed Buddhist philosophy (Chiesa, 2013). Buddhist tradition views suffering as fundamental to the human condition, though it also asserts that suffering can be overcome, and psychological well-being can be attained through Four Noble Truths and the Eightfold Path (Hanh, 1998). One of the eight principles of the Eightfold Path is "right mindfulness" (Chiesa, 2013). With historical roots stemming from India and the classical languages of Sanskrit and Pali, the word *mindfulness* is a best attempt at an English translation of the Sanskrit word *smriti* or the Pali word *sati* (Hanley et al., 2016). This translation identifies a quality of consciousness that, when applied to internal and external experiences, results in clear and unbiased perceptions of these experiences (Hanley et al., 2016). Of note, this translation of the terms *smriti* and *sati* is imperfect, as the terms are also related to a cultural Buddhist worldview of cognition and is not reflected in the English *mindfulness* translation (Brazier, 2013).

Modern Mindfulness-Based Interventions and Mindfulness Meditations

Health practitioners and researchers, such as Jon Kabat-Zinn, popularized and conceptualized a secular definition and clinical application of mindfulness to improve psychological well-being that did not integrate the Buddhist worldview portion of *smriti* and *sati* and is uncoupled from the eight principles of the Eightfold Path. Instead, Kabat-Zinn focused on consciousness and perception and defined mindfulness as "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (Kabat-Zinn, 2003). This definition has been criticized by theorists who contend that stripping mindfulness of its Buddhist roots is innately problematic as it does not reflect the entirety of the traditional mindfulness principle. Thus, in the eyes of practicing Buddhists, the term mindfulness should not be used to describe these types of programs. Instead, in an attempt to keep truthful to the Buddhist roots, theorists such as Dreyfus (2011) have attempted to create definitions that maintain the historical sentiment of the original term and cognitive foundations.

With the historical and subsequent interpretational division on the correct operational definition of mindfulness, Hanley et al. (2016) suggest a middle pathway around this disagreement. He suggests that researchers preferring to avoid Buddhism-specific cultural aspects apply the terminology and definition provided by Kabat-Zinn – currently associated with mindfulness-based interventions (MBIs), while those preferring to incorporate Buddhism-specific cultural aspects apply the terminology and definition provided by Dreyfus – currently associated with mindfulness meditations (MMs). Considering mindfulness-based programs into either MBIs (Rapgay & Bystrisky, 2009) or MM practices (Lutz, Slagter, Dunne, & Davidson, 2008) can help differentiate spiritual mindfulness practices versus secular mindfulness interventions. MBIs, including mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy (MBCT), focus on emotional processing, awareness of thoughts, and acceptance and do not typically consider focused attention (Rapgay & Bystrisky, 2009), whereas MM practices, including yoga and Zen Buddhism often focus on attentional training (Vago & Silbersweig, 2012).

Mindfulness as an Adult Mental Health Intervention

Since the emergence of the empirically supported MBSR program as a therapeutic option for adults experiencing chronic pain (in the late 1970s) and MBCT (in the early 2000s) for depression relapse prevention in adults, MBIs have continued to

develop and gain empirical support (Grossman, Niemann, Schmidt, & Walach, 2004; Hofmann, Sawyer, Witt, & Oh, 2010; Smith et al., 2008). This has led to well-established MBIs being overgeneralized to other populations (e.g., MBCT for anxiety), possibly without sufficient evidence to support its use in other groups. Empirical evidence for the positive effect of mindfulness interventions on mental health and psychological well-being in healthy (Chiesa & Serretti, 2009) and clinical adult populations has also led to an interest in application and research of mindfulness for children and youth.

Mindfulness as a School-Based Mental Health Intervention

From a PYD perspective, mindfulness interventions, which focus on acceptance-based and adaptive approaches, might be better suited to the realities of many children and youth than change-based approaches, such as cognitive-behavioral therapy (CBT). Instead of focusing on overcoming adversity and preventing problems from arising, school-based mindfulness programming aims to provide students with a collective community activity and tool that has the potential to promote relatability, a sense of safety, positive experiences, academic success, psychological well-being, and mental health. PYD theory also highlights the significant role of young people's environment reflected in family, school, and community, in providing individuals with the means to acquire the best skills needed for optimal functioning. Unlike other potential school-based interventions that focus mainly on problems (e.g., CBT), the acceptance-based approach within mindfulness may have the potential to help young people to better know themselves, realize their true capacities, cultivate positive behavioral/internal processes, and build resiliency.

Other developmental perspectives also suggest that mindfulness practices may help support the development of prefrontal brain structures associated with enhanced executive function and emotional regulation (Sanger & Dorjee, 2015; Schonert-Reichl et al., 2015). Similarly, mindfulness and similar interventions could improve young people's psychological well-being and academic performance (Kaplan, Liu, & Kaplan, 2005). By providing children and youth with these mindfulness tools – for example, being able to respond to experiences, rather than react reflexively to them (Baer, 2003; Shapiro, Carlson, Astin, & Freedman, 2006; Williams, Russell, & Russell, 2008) – they may be better able to manage negative emotions (e.g., anxiety and depression) that disrupt executive functioning processes (Shackman, Maxwell, McMenamin, Greischar, & Davidson, 2011; Shackman, McMenamin, Maxwell, Greischar, & Davidson, 2009). Also, with heightened plasticity among children and youth, brain development, psychosocial identity, and overt behaviors are malleable and responsive to positive or negative experiences. Indeed, fostering mindfulness during these developmental periods in particular has the potential to promote positive development (Dahl, 2004).

School-based mindfulness interventions generally fall into three categories: (i) replications of an adult intervention for a child and youth population, (ii) an existing mental health intervention for normative or nonnormative child and youth population that incorporates mindfulness, or (iii) the creation of a new program for children and youth. Compared to the widespread use and evaluation of MMs and MBIs among adult populations, there is limited research on the effectiveness of these various types of interventions on the mental health and well-being of school-aged children and youth. Despite these gaps in the research literature, school boards have begun to implement board-wide mindfulness-based programs often with a large amount of school resources (Schonert-Reichl & Lawlor, 2010). Also, it is unclear if adaptations of MBIs for use in schools for children and youth have incorporated age-related developmental needs (attention span, cognitive capacities, language, physical accessibility and endurance, and relevant content; Chadwick & Gelbar, 2016). Finally, there are limited published descriptions of specific programs and their measures of evaluation. Thus, these are some of the reasons that contribute to the need to undertake a review of the current state of the literature on school-based mindfulness programs.

Current Review

In this chapter, we will summarize and critically review the existing literature on the effects of mindfulness-based interventions in school settings on children and youth developmental outcomes, including executive functioning, emotional development, clinical mental health, and psychological well-being. Specifically, we will review evidence on school-based mindfulness interventions across five developmental stages (i.e., preschool, primary school, middle school, high school, and postsecondary institutions). This chapter aims to present the current status of school-based mindfulness research; highlight programs, outcomes, measures, and designs that have begun to show promise in specific developmental stages; and provide recommendations to inform future studies and programs.

Methods

A comprehensive search of the PsycINFO database was performed in July 2017. Search parameters were as follows: (mindful *or* mindfulness *or* meditation) *and* (school) *and* (train *or* intervention) *and/or* (parent *or* caregiver). Advanced parameters were set prior to initial search and included age group (*not* Infancy *and* adult 18+ *and* Thirties *and* Middle Age *and* Aged *and* Very Old), Population (*not* Animal), Methodology (*not* Mathematical Model *and* Experimental Replication *and* Scientific Simulation) and Language (English).

One author screened all 2749 articles independently by reviewing the title and abstract, and when sufficient information for inclusion/exclusion was not available from these sources, reviewed article text. Duplicate articles were removed. Articles were eligible for inclusion if (i) an MBI or MM program had a psychological (e.g., executive functioning, emotion regulation), clinical mental health symptoms and/or well-being outcomes; (ii) considered children, adolescents, or youth between the ages of 4 and 29; (iii) the article was peer-reviewed; and (iv) the article included quantitative outcome measures and statistical analyses of these measures. Studies were excluded if (i) mindfulness was used as the sole outcome measure, without investigation of an MBI or MM program feasibility or efficacy, (ii) the article was not written in English, (iii) the study focused exclusively on the psychometric properties of a mindfulness scale, (iv) the study was not an original empirical investigation (e.g., review or guideline), and/or (v) the study did not have a focus on psychological, clinical mental health symptoms, and/or well-being outcomes.

Following article retrieval, one reviewer (research volunteer) and one author independently reviewed and categorized articles for inclusion. All authors subsequently reviewed those articles indicated by either reviewer for inclusion and were discussed until a unanimous decision was reached. A total of 67 articles met these criteria and were included in the current chapter. Two authors reviewed and extracted data from all 67 articles, focusing on sample demographics, descriptions of mindfulness-based programs, measures, intervention results, and outcomes (separated into six domains: executive functioning, emotional development, psychological well-being, clinical mental health symptoms, academic performance, and mindfulness). The results of the review are presented in characterizing mindfulness-based program outcomes in a developmental progression relevant for preschool, primary elementary, middle school, high school, and postsecondary students. Of note, a few studies were referenced across more than one developmental section below because the age ranges of participants in these studies encompassed more than one developmental period.

Results

Preschool (3–5 Years of Age)

Sample Characteristics

Three studies considering preschool populations were included in this review. The preschool study participants ranged from 3 to 5 years of age. All studies were conducted in the United States. Studies included 29–68 participants with equal

gender representation (about 50% female) in two of the three studies, and the remaining study had a majority of female participants (Razza, Bergen-Cico, & Raymond, 2013). All studies reported the ethnic background of participants. Two of the three studies were comprised of over 50% Caucasian participants, with the remainder of ethnic groups including Hispanic, Black, Asian, and/or other, with each group comprising between 7% and 34% of the total sample size (Flook, Goldberg, Pinger, & Davidson, 2015; Razza et al., 2013). The other study was composed of a majority of ethnically diverse participants with over 70% of the study participants reported as non-Caucasian (Poehlmann-Tynan et al., 2016). All studies reported on socioeconomic status (SES), with one study mentioning that all participants were economically disadvantaged.

No significant between-group differences on baseline measures and demographic factors were noted in one of the three studies (Flook et al., 2015). For the other two studies, some group variations were reported. For example, one study found significant group differences in parental education (Razza et al., 2013), while the other study found significant differences in child self-regulation and empathy-based variables, as well as reduced compassion measurement scores for those who did and did not complete third time-point assessments (Flook et al., 2015).

Mindfulness-Based Programs

Peer-reviewed articles included descriptions of a mindfulness-based Yoga intervention modified from the YogaKids program (Wenig 2015) and a mindfulness-based kindness curriculum (KC; Rice, 2013). The KC program duration is 12-weeks, with one 20–30 min lesson per week while YogaKids includes over 1.5 h of yoga programming per week for 25 weeks. Instructors included college mentors (Poehlmann-Tynan et al., 2016), a homeroom teacher (Razza et al., 2013), and an instructor external from the school (Flook et al., 2015). The qualifications for instructors varied; the modified YogaKids instructors were required to complete a 200-h certificate through YogaKids, and KC instructors were required to be "experienced mindfulness instructors" with 5–10 years of daily personal practice and MBSR training. The YogaKids program did not include a specific curriculum; the teacher determined the level of integration into the classroom.

Study designs ranged in rigor, from a pre-post quasi-experimental (non-randomized) design (Razza et al., 2013) to a pilot randomized controlled trial (Poehlmann-Tynan et al., 2016) and to a randomized waitlist-controlled design (Flook et al., 2015). Intervention and control groups were relatively balanced with a minimum of 13 and maximum of 38 participants within each group. The randomized controlled trials included a mindfulness vs. active (dialogue reading) treatment as usual group and an active vs. waitlist control design (Flook et al., 2015). All study assessments included mixed measures of parent and/or teacher report, as well as direct assessments. One study also included observational and exit interview data (Poehlmann-Tynan et al., 2016).

Measures

Preschooler executive functioning was an outcome considered in all studies. Specific facets considered included self-regulation, effortful control, delay of gratification, inhibitory control, cognitive flexibility, and attention. Other study-specific outcomes considered were academic performance and psychological well-being, including social competence, empathy, and compassion. The only measure that was used in multiple studies included the head, shoulders, knees and toes (HSKT), a measure of self-regulation (Poehlmann-Tynan et al., 2016; Razza et al., 2013). Otherwise, the measures used were unique to each study, with the majority of studies being psychometrically established, but a number of the measures being created specifically for the study (Poehlmann-Tynan et al., 2016; Razza et al., 2013).

Intervention Results

Pre-post testing of the YogaKids program suggested significant effects of the intervention on the outcomes of executive functioning and attention. Of note, groups initially differed on effortful control at pre-test, and no significant differences

were found in parent-rated effortful control after the intervention. This was the first known study to consider the YogaKids influence on specific executive function factors in preschool-aged students (Razza et al., 2013).

The first KC study findings suggest an intervention effect of improved academic performance and significantly greater psychological well-being scores in socio-emotional learning and teacher-reported prosocial behaviors. In comparison, the active and waitlist groups were rated as more selfish over time. While the study concluded that the intervention demonstrated effects on cognitive flexibility (effect sizes were moderate to large), there were no significant differences between the control and intervention groups. Both studies found partial support for a moderating effect of initial executive functioning and prosocial levels on intervention effectiveness, such that children with lower baseline scores benefitted most from the intervention (Flook et al., 2015).

The second KC study finding suggested that it may be an effective method of improving executive functioning (a small effect size of self-regulation was reported, including at follow-up) in lower SES preschool populations; however, no differences were found between the mindfulness practice and the control groups overtime for inhibitory control, empathy, and compassion. Qualitative findings indicated that teachers were better able to implement the program more successful when children had been physically active prior to the intervention, and the program incorporated physical activity (Poehlmann-Tynan et al., 2016). While these studies concluded that their programs were feasible for the preschool populations studied, particularly when physical activity was included, further research rigor is required to replicate and expand these program evaluation findings.

Primary School (7–11 Years of Age)

Sample Characteristics

Ten studies considering primary school populations were included in this review. The participants ranged from 7 to 13 years of age. The majority of the studies were conducted in North America (e.g., Bakosh, Snow, Tobias, Houlihan, & Barbosa-Leiker, 2015; Black & Fernando, 2014; Liehr & Diaz, 2010), with a handful of studies from Europe (Crescentini, Capurso, Furlan, & Fabbro, 2016; Thomas & Atkinson, 2016; Vickery & Dorjee, 2016), and one from South America (de Carvalho, Pinto, & Marôco, 2017). The majority of studies included 100–199 participants, with a participant study total numbers ranging from under 20 (Liehr & Diaz, 2010) to over 450 participants (de Carvalho et al., 2017). Gender representation was usually reported and balanced, with 45–55% female representation included in most studies (e.g., Bakosh et al., 2015; Crescentini et al., 2016; Thomas & Atkinson, 2016), while three studies included greater male than female (Liehr & Diaz, 2010), greater female than male (Klatt, Harpster, Browne, White, & Case-Smith, 2013), or all-female representation (White, 2012). One study did not report on gender (Black & Fernando, 2014). Regarding ethnic diversity, four studies did not report on ethnicity (e.g., de Carvalho et al., 2017; Thomas & Atkinson, 2016; Vickery & Dorjee, 2016). Three studies were made up of a majority of Caucasian students (Crescentini et al., 2016; Flook et al., 2010; White, 2012), and three studies focused on ethnically diverse populations, predominantly Hispanic and Black students from low-SES backgrounds (Black & Fernando, 2014; Klatt et al., 2013; Liehr & Diaz, 2010).

Mindfulness-Based Programs

There were a small number of varied types of mindfulness-based school interventions that have been researched in primary school settings. All studies but one (Crescentini et al., 2016) were based on a manualized program and evaluated treatment fidelity (e.g., Klatt et al., 2013; White, 2012). Most programs had only one peer-reviewed published study on intervention efficacy with the exception of Mindful Schools (Black & Fernando, 2014; Liehr & Diaz, 2010) and Paws .b (Thomas & Atkinson, 2016; Vickery & Dorjee, 2016), each with two studies conducted on intervention efficacy. Programs could be categorized into three broad categories: executive functioning specific programs (concentration, working memory, inhibition, social

awareness; e.g., Bakosh et al., 2015; de Carvalho et al., 2017), clinical mental health symptoms specific programs (internalizing/externalizing behaviors), and psychological well-being specific programs (stress and well-being; e.g., Crescentini et al., 2016; Klatt et al., 2013; Vickery & Dorjee, 2016). MBSR (White, 2012) and Mindful Schools (Liehr & Diaz, 2010) were the only mindfulness-based programs applied to clinical populations.

Program durations varied, with the most popular program design being 8 weeks (e.g., Bakosh et al., 2015; Vickery & Dorjee, 2016), and other programs spanning from under 3 weeks (Liehr & Diaz, 2010) to 5–12 weeks (Black & Fernando, 2014; Thomas & Atkinson, 2016). Some program sessions were less than 15 min per session (e.g., Bakosh et al., 2015; Black & Fernando, 2014), while others were 30 min to over 1 h and a half (e.g., de Carvalho et al., 2017; Klatt et al., 2013). Different study programs include less than 5 (Bakosh et al., 2015), 5–12 (e.g., Vickery & Dorjee, 2016; White, 2012), 15–20 (de Carvalho et al., 2017; Flook et al., 2010), and over 20 sessions (e.g., Black & Fernando, 2014; Crescentini et al., 2016). Session frequency differed from one session per week (e.g., de Carvalho et al., 2017; White, 2012) to two to five sessions per week (e.g., Bakosh et al., 2015; Black & Fernando, 2014; Crescentini et al., 2016). Most of these programs were adapted to specific environments (e.g., varying session outlines based on the length of the session; session time and duration was often unique to the instructor). Similarly, over half of the studies did not include home practice (e.g., de Carvalho et al., 2017; Flook et al., 2010; Klatt et al., 2013), and only two studies encouraged home practice (Black & Fernando, 2014; White, 2012).

Instructors were mainly classroom teachers (Bakosh et al., 2015; Vickery & Dorjee, 2016) or external instructors from the program organization (e.g., Black & Fernando, 2014; Liehr & Diaz, 2010). In addition, one instructor was a graduate student (Klatt et al., 2013) and one study did not report on the instructors' status (Flook et al., 2010). The qualifications for instructors also varied with some programs requiring 1 h/day training by the program developers (but no formal personal practice or teaching experience) (Bakosh et al., 2015; Klatt et al., 2013), and other studies requiring 3–20 years of personal practice with mindfulness (Black & Fernando, 2014; Crescentini et al., 2016). However, close to half of the studies did not clearly specify training (e.g., de Carvalho et al., 2017; Thomas & Atkinson, 2016; White, 2012). Study designs ranged in rigor. Three of the ten studies were randomized controlled trials (e.g., Flook et al., 2010; Liehr & Diaz, 2010). The remaining seven studies varied from pre-post designs with no control groups (e.g., Black & Fernando, 2014) to quasi-experimental designs (e.g., Bakosh et al., 2015; Crescentini et al., 2016; de Carvalho et al., 2017). The majority of study assessments included mixed-methods (i.e., qualitative and quantitative) teacher reports (e.g., Bakosh et al., 2015; Black & Fernando, 2014).

Measures

Primary school students were assessed on a wide array of outcomes. Five studies considered emotional development and executive functioning outcomes (e.g., Black & Fernando, 2014; Flook et al., 2010; Thomas & Atkinson, 2016), with studies examining parent and teacher ratings of emotion dysregulation (e.g., de Carvalho et al., 2017), self-control (e.g., Black & Fernando, 2014), and attention (Black & Fernando, 2014; Thomas & Atkinson, 2016; Carboni, Roach, & Fredrick, 2013). Psychological well-being was the most commonly measured outcome. Of note, the Positive and Negative Affect Scale (PANAS) was used in two studies, whereas the remaining outcome measures were unique to each study (de Carvalho et al., 2017; Vickery & Dorjee, 2016). Related outcome measures focused on concepts such as self-compassion, self-esteem, well-being, and perceived stress. Academic performance (Bakosh et al., 2015) and mindfulness-based outcomes (de Carvalho et al., 2017; Vickery & Dorjee, 2016; White, 2012) were the least commonly measured outcomes with only one study considering academic performance and one considering three different measures of mindfulness (i.e., Mindful Attention Awareness Scale adapted for children, MAAS-C; Child and Adolescent and Mindfulness Measure, CAMM; Mindful

Thinking and Action Scale for Adolescents, MTASA).

Clinical mental health outcomes were also measured, with a limited number of studies considering internalizing (e.g., anxiety; Crescentini et al., 2016) and externalizing symptoms (e.g., inattentive and behavioral difficulties; e.g., Klatt et al., 2013). Similar measures were used across multiple studies, including the PANAS (de Carvalho et al., 2017; Vickery & Dorjee, 2016), the Conners Teachers Rating Scales – Revised (Crescentini et al., 2016; Klatt et al., 2013), and the Behavior Rating Inventory of Executive Function (BRIEF) (Flook et al., 2010; Vickery & Dorjee, 2016).

Intervention Results

The majority of programs received an overall positive evaluation from students, teachers, and school administration staff (e.g., Crescentini et al., 2016; de Carvalho et al., 2017). That said, three studies found mixed results (e.g., Black & Fernando, 2014; White, 2012), and a number of the study findings were preliminary in nature, relying solely on teacher reports and did not include child and parent reports (e.g., Black & Fernando, 2014). Overall, findings across the wide array of programs generally suggested preliminary evidence of program fidelity but were mixed in terms of significant outcome findings (e.g., Black & Fernando, 2014; de Carvalho et al., 2017; White, 2012). The only study that considered academic performance noted significant improvements in this area (e.g., Bakosh et al., 2015). Emotional development and executive function outcomes included significant improvements in emotional dysregulation and attention based on parent and teacher reports (e.g., Flook et al., 2010; Klatt et al., 2013; Thomas & Atkinson, 2016). Of note, only one study found parents and teachers reporting significant post program improvements for students who began with executive functioning deficits (Flook et al., 2010).

There were a few studies examining psychological well-being, and those that did showed conflicting findings. When considering emotional development factors, mindfulness-based programs showed preliminary efficacy in reducing negative affect (Liehr & Diaz, 2010; Vickery & Dorjee, 2016), though findings were based on small group sizes (e.g., Liehr & Diaz, 2010). Social relationships, prosocial behavior, and positive behavior outcomes (reported by both parents and children) generally showed significant improvement for the intervention groups (e.g., Black & Fernando, 2014; de Carvalho et al., 2017).

Regarding mindfulness outcome measures, there was no significant improvement for students in two studies (de Carvalho et al., 2017), even after seven extra weeks of practice (Black & Fernando, 2014). Another study found improvements in student's mindfulness at follow-up periods only (Thomas & Atkinson, 2016). The lack of psychometric support for current mindfulness outcome measures was noted as a potential area of concern (Vickery & Dorjee, 2016).

Middle School (11–14 Years of Age)

Sample Characteristics

Twenty-eight studies consisting of middle school children samples were included in this review. Participants ranged in age from 6 to 13 years old. Most studies were conducted in North America (Bergen-Cico, Razza, & Timmins, 2015; Mendelson et al., 2010; Sibinga et al., 2013), with a handful of studies from Australia (Bei et al., 2013; Joyce, Etty-Leal, Zazryn, Hamilton, & Hassed, 2010), Nordic countries (Terjestam, 2011; Terjestam, Bengtsson, & Jansson, 2016; van de Weijer-Bergsma, Langenberg, Brandsma, Oort, & Bögels, 2012), Europe (Bernay, Graham, Devcich, Rix, & Rubie-Davies, 2016; Wimmer, Bellingrath, & von Stockhausen, 2016), and one from South America (Waldemar et al., 2016). One hundred to 199 participants were included in the majority of studies (e.g., Bergen-Cico et al., 2015; Bernay et al., 2016; Quach, Gibler, & Mano, 2017), with group sample sizes ranging from under 20 total participants (Bei et al., 2013; Milligan et al., 2016) to over 600 (Schonert-Reichl et al., 2015). Gender representation was reported in all studies and was generally balanced

with 45–55% female representation (e.g., Fung, Guo, Jin, Bear, & Lau, 2016; Johnson, Burke, Brinkman, & Wade, 2016; Kuyken et al., 2013); however, a handful of programs included all-female (e.g., Bei et al., 2013; White, 2012) or all-male samples (e.g., Sibinga et al., 2013). Of those studies reporting ethnicity, a quarter had a majority of Caucasian students (e.g., Butzer, LoRusso, Shin, & Khalsa, 2017; Carsley, Heath, & Fajnerova, 2015; Waldemar et al., 2016), and some study samples were either ethnically diverse (Parker, Kupersmidt, Mathis, Scull, & Sims, 2014; Schonert-Reichl & Lawlor, 2010; Schonert-Reichl et al., 2015) or focused particularly on minority populations, predominantly Black/Hispanic/Asian students (e.g., Gould, Dariotis, Mendelson, & Greenberg, 2012; Mendelson et al., 2010; Quach, Mano, & Alexander, 2015; Ricard, Lerma, & Heard, 2013). A quarter of the studies did not report on diversity (e.g., Costello & Lawler, 2014; Joyce et al., 2010; Sibinga et al., 2013; Terjestam et al., 2016). All but five of the studies reported on SES (e.g., Bergen-Cico et al., 2015; Joyce et al., 2010; Schonert-Reichl et al., 2015), with six studies focusing on low-SES students from urban or rural communities (e.g., Costello & Lawler, 2014; Parker et al., 2014; Sibinga et al., 2013).

No significant initial group differences were noted for 12 studies (e.g., Britton et al., 2014; Johnson et al., 2016; Schonert-Reichl et al., 2015). The remaining studies identified significant group variation on factors, such as age (e.g., Fung et al., 2016; Mendelson et al., 2010; Schonert-Reichl & Lawlor, 2010), gender (e.g., Butzer et al., 2017; Quach et al., 2015), and baseline psychological well-being scores (e.g., Terjestam, 2011; Waldemar et al., 2016). Eight studies did not include comparison groups or did not report any initial between-group comparisons (e.g., Bei et al., 2013; Joyce et al., 2010; Wimmer et al., 2016).

Mindfulness-Based Programs

Close to half of the programs included in this age group are non-manualized (e.g., Quach et al., 2017; Ricarte, Ros, Latorre, & Beltrán, 2015; van de Weijer-Bergsma et al., 2012), with the remaining manualized programs including a program fidelity assessment component to the study (e.g., Kuyken et al., 2013; Milligan et al., 2016; Parker et al., 2014). Most program developers within this age group had only published one study involving their program. The only exceptions were Mindfulness Education (e.g., MindUp; Schonert-Reichl & Lawlor, 2010; Schonert-Reichl et al., 2015; Waldemar et al., 2016) and Holistic Life Foundation yoga-inspired school-based mindfulness (e.g., Gould et al., 2012; Mendelson et al., 2010), each with two or more publications per program. Programs were categorized into four broad categories: psychological well-being (positivity, goal setting, well-being, stress; e.g., Bernay et al., 2016; Britton et al., 2014; Butzer et al., 2017; Schonert-Reichl & Lawlor, 2010), executive functioning (concentration, working memory, inhibition; e.g., Gould et al., 2012; Mendelson et al., 2010; Milligan et al., 2016), emotional development (emotion regulation), and clinical mental health programs (internalizing/externalizing behaviors, attention difficulties; e.g., Costello & Lawler, 2014; Fung et al., 2016; Johnson et al., 2016). MBCT, MBSR, and Dialectical and Behavioral Therapy (DBT) were the only mindfulness-based interventions that targeted clinical populations (Quach et al., 2015, 2017; Ricard et al., 2013).

The program varied in duration, spanning from a 3-week (Carsley et al., 2015; Quach et al., 2017; Ricard et al., 2013) to 3-month program (Bergen-Cico et al., 2015; Milligan et al., 2016; Waldemar et al., 2016), with the majority of studies employing a 6–12-week program design (e.g., Joyce et al., 2010; Schonert-Reichl & Lawlor, 2010; White, 2012). While the average program session duration was 30–60 min in length (e.g., Gould et al., 2012; Quach et al., 2017; Schonert-Reichl & Lawlor, 2010), program sessions ranged from less than 15 min (e.g., Britton et al., 2014; Costello & Lawler, 2014) to over an hour and a half (e.g., Bei et al., 2013; Milligan et al., 2016). On average, the majority of study programs include 5–20 sessions (e.g., Milligan et al., 2016; Ricard et al., 2013; van de Weijer-Bergsma et al., 2012), one to five times a week. Though, a smaller number of studies included over 20 sessions (e.g., Butzer et al., 2017; Costello & Lawler,

2014) and frequencies of less than once a week (Carsley et al., 2015; Waldemar et al., 2016; Wimmer et al., 2016). The majority of these programs were adapted to specific environments (e.g., varying session outlines based on the length of the session; session time and duration was often unique to the instructor). Over half of the studies did not include home practice (e.g., Parker et al., 2014; Ricarte et al., 2015; Sibinga et al., 2013), and the other half varied in the importance of home practice; it was either encouraged, optional, or varied based on the instructor (e.g., Britton et al., 2014; Fung et al., 2016; Johnson et al., 2016).

Instructors were mainly classroom teachers (e.g., Joyce et al., 2010; Kuyken et al., 2013; Terjestam et al., 2016) or clinical researchers (often including the study author; e.g., Ricard et al., 2013; van de Weijer-Bergsma et al., 2012; Waldemar et al., 2016) but also included external instructors associated with the program's organization (e.g., Mendelson et al., 2010; Quach et al., 2015), clinicians (Bei et al., 2013), or the study did not mention the instructors' status (Terjestam, 2011). The qualifications for instructors varied with some studies requiring 1 h/day training by the program developer (but no formal personal practice or teaching experience; e.g., Fung et al., 2016; Milligan et al., 2016; Ricard et al., 2013), and other studies requiring 5 to over 10 years of personal practice with mindfulness (e.g., Johnson et al., 2016; Quach et al., 2015; Sibinga et al., 2013) along with 200 h of formal training (e.g., Bergen-Cico et al., 2015; Butzer et al., 2017; Quach et al., 2017). Close to half of the studies did not report on training (e.g., Mendelson et al., 2010; Parker et al., 2014; Terjestam, 2011).

Study designs ranged in rigor. The majority of studies were randomized controlled trials (e.g., Bergen-Cico et al., 2015; Ricarte et al., 2015; Schonert-Reichl et al., 2015), half of which included 1–3-month follow-ups (e.g., Fung et al., 2016; Johnson et al., 2016; Kuyken et al., 2013). The remaining studies varied from pre-post study designs with no control group (e.g., Bei et al., 2013; Bernay et al., 2016; Costello & Lawler, 2014; Joyce et al., 2010) to quasi-experimental designs (e.g., Carsley et al., 2015; Wimmer et al., 2016). The randomized controlled trials were comprised of intervention vs waitlist control (e.g., Kuyken et al., 2013; Waldemar et al., 2016) and intervention vs. active control (Didactic Academic Mindfulness, Asian History, Hatha Yoga; e.g., Butzer et al., 2017; Johnson et al., 2016; Sibinga et al., 2013). The majority of study assessments included mixed-method measures (qualitative and quantitative) of teacher, parent, and/or student report, as well as objective assessments (e.g., Bei et al., 2013; Gould et al., 2012; Quach et al., 2015).

Measures

Middle school students were assessed on a wide array of outcomes. A wide array of executive functioning outcome measures were utilized, with each study utilizing a unique measurement tool to consider different executive functioning factors, including self-regulation (e.g., Butzer et al., 2017; Ricarte et al., 2015; Schonert-Reichl et al., 2015), cognitive flexibility (e.g., Schonert-Reichl et al., 2015; Wimmer et al., 2016), effortful control/inhibition (e.g., Gould et al., 2012; Schonert-Reichl et al., 2015; Terjestam et al., 2016), attention, and working memory (e.g., Quach et al., 2015, 2017). Psychological well-being outcomes were also very commonly measured, with the majority of outcomes clustered into perceived stress (e.g., Butzer et al., 2017; Costello & Lawler, 2014; van de Weijer-Bergsma et al., 2012), coping (e.g., Sibinga et al., 2013; White, 2012), well-being (e.g., Kuyken et al., 2013; Schonert-Reichl & Lawlor, 2010; Waldemar et al., 2016), and social competence/prosocial behavior (e.g., Bergen-Cico et al., 2015; Joyce et al., 2010; Schonert-Reichl & Lawlor, 2010). Of note, the Perceived Stress Scale (PSS-10) was used by four of the studies (Costello & Lawler, 2014; Kuyken et al., 2013; Quach et al., 2015, 2017), whereas the remaining outcome measures were unique to each study. Clinical mental health outcomes were also assessed with studies evaluating internalizing symptoms (mood, anxiety; e.g., Bei et al., 2013; Carsley et al., 2015; Joyce et al., 2010), substance use (e.g., Britton et al., 2014; Butzer et al., 2017), and externalizing behaviors (attention difficul-

ties, behavior difficulties; e.g., Britton et al., 2014; Fung et al., 2016). Academic performance and mindfulness-based outcomes were the least commonly reported, with only two studies considering academic success in mathematics (Schonert-Reichl & Lawlor, 2010; Schonert-Reichl et al., 2015), and six considering three different mindfulness outcome measures (e.g., Bernay et al., 2016; Britton et al., 2014; Sibinga et al., 2013). While the CAMM was the most commonly used tool for mindfulness (e.g., Johnson et al., 2016; Quach et al., 2015, 2017), its reliability and validity are of concern. Finally, program fidelity qualitative assessment tools were extremely prevalent, with teachers and students being asked about acceptability and feasibility of the program in their school (e.g., Bei et al., 2013; Bergen-Cico et al., 2015; van de Weijer-Bergsma et al., 2012).

A narrow range of measures were used in multiple studies. The PSS (e.g., Butzer et al., 2017; Costello & Lawler, 2014; Quach et al., 2015), Responses to Stress Questionnaire (e.g., RSQ; Gould et al., 2012; Mendelson et al., 2010), Screen for Child Anxiety Related Disorders (SCARED; Quach et al., 2015; van de Weijer-Bergsma et al., 2012), State-Trait Anxiety Inventory for Children (STAI-C; Carsley et al., 2015; Ricarte et al., 2015; Spielberger, Edwards, Lushene, Montuori, & Platzek, 1973), Strengths and Difficulties Questionnaire (SDQ; Goodman, Meltzer, & Bailey, 1998; Schonert-Reichl et al., 2015; Waldemar et al., 2016), Warwick-Edinburgh Mental Well-being Scale (WEMWBS; e.g., Johnson et al., 2016; Kuyken et al., 2013), and the CAMM; Johnson et al., 2016; Quach et al., 2015, 2017) were the only outcome measures used in two or more studies. Otherwise, the measures used were unique to each study.

Intervention Results

A large number of programs reviewed for this age group had overall positive feedback from students, teachers, and school administration, particularly around ease of implementing these programs (e.g., Mendelson et al., 2010; Parker et al., 2014; Schonert-Reichl & Lawlor, 2010). That being said, a handful of studies presented inconsistent results (e.g., Butzer et al., 2017; Ricarte et al., 2015; Terjestam et al., 2016), and some studies cautioned against the overinterpretation of results (e.g., Carsley et al., 2015; Gould et al., 2012; Joyce et al., 2010), due to lack of study rigor, the preliminary nature of findings, or limitations of the program and implementation.

Significant study outcomes varied across programs. Generally, there were significant improvements for the intervention groups in social relationships and prosocial/positive behavior outcomes (e.g., Parker et al., 2014; Schonert-Reichl et al., 2015). Of note, improvements were only seen among female participants at follow-up in a few of the studies (e.g., Butzer et al., 2017; Parker et al., 2014).

Group differences in executive functioning outcomes showed mixed results. Those studies that showed significant differences included increased cognitive flexibility (e.g., Schonert-Reichl et al., 2015; Wimmer et al., 2016), inhibition (e.g., Butzer et al., 2017; Mendelson et al., 2010; Schonert-Reichl et al., 2015), and working memory (e.g., Quach et al., 2015; Schonert-Reichl et al., 2015). Program efficacy related to psychological well-being was also mixed, with a few studies finding significant reductions in perceived stress (e.g., Costello & Lawler, 2014; Quach et al., 2017) but more studies noting no significant difference group(s) on both self-report measures and measures of cortisol (e.g., Quach et al., 2015; Sibinga et al., 2013). Similarly, internalizing (anxiety, depression) and externalizing (behavior, attention) outcomes were mixed, with ten studies showing efficacy for anxious and depressive symptoms (e.g., Kuyken et al., 2013; van de Weijer-Bergsma et al., 2012), but at least five indicating no benefits for affective and internalizing/externalizing symptoms (e.g., Britton et al., 2014; Gould et al., 2012).

Other notable middle school study findings are presented below. One study investigating the effect of mindfulness on eating disorders found no improvements (Johnson et al., 2016). One study using mindfulness to prevent and reduce substance use found no effects (Parker et al., 2014), whereas the other did find an effect (Butzer et al., 2017). Moreover, one study found

significant decreases in suicidal ideation after program completion (Britton et al., 2014). Two studies examined the frequency of home practice completion, with one study concluding that increased home practice resulted in improved outcomes (Quach et al., 2017), whereas the other study found that home practice frequency had no significant effect on outcomes (White, 2012). There was also a noteworthy gender trend in this age group, with significant group differences on behavior and well-being outcomes for girls, but not boys (e.g., Carsley et al., 2015; Wimmer et al., 2016).

High School (14–18 Years of Age)

Sample Characteristics

Twenty-two articles were identified that examine MBIs and MMs in high school settings. Sample sizes ranged from 8 to 586 students. The majority of studies included 21–50 participants in total. The three most common study designs were pre-post study design (e.g., Wisner & Norton, 2013), quasi-experimental design (e.g., Metz et al., 2013), and randomized controlled trial (e.g., Van der Gucht et al., 2017). There were four studies with a mixed-method design (e.g., Bluth, Gaylord, Campo, Millarkey, & Hobbs, 2016; Le & Gobert, 2015; Tharaldsen, 2012). Of the 16 studies that utilized a control group (e.g., Atkinson & Wade, 2015; Bennett & Dorjee, 2016; Kuyken et al., 2013), the most common control group was treatment as usual or no intervention. Bluth, Campo et al. (2016) utilized an active control, in which the Learning to Breathe mindfulness program was compared to an evidence-based substance abuse class for at-risk adolescents.

The majority of the studies were conducted in the United States (e.g., Beauchemin, Hutchins, & Patterson, 2008; Bluth, Gaylord et al., 2016; Wendt et al., 2015). The remaining studies were conducted in Australia (Atkinson & Wade, 2015; Burckhardt, Manicavasagar, Batterham, Hadzi-Pavlovic, & Shand, 2017; Livheim et al., 2015), Norway (Tharaldsen, 2012), Belgium (Raes, Griffith, Van der Gucht, & Williams, 2014; Van der Gucht et al., 2017), England (Bach & Guse, 2015; Bennett & Dorjee, 2016; Kuyken et al., 2013), Spain (Franco, Amutio, López-González, Oriol, & Martínez-Taboada, 2016), Sweden (Livheim et al., 2015), South Korea (Kim, Kim, & Ki, 2014), and Canada (Milligan et al., 2016). Participants were generally grade 9–12 students, ranging in age from 12 to 21 years old. The proportion of male and female students were similar in three studies (e.g., Bach & Guse, 2015). There were more boys than girls in eight (e.g., Beauchemin et al., 2008; Le & Gobert, 2015) and more girls than boys in six studies (e.g., Bluth, Gaylord et al., 2016; Livheim et al., 2015). Kim et al. (2014) only recruited adolescent boys. Broderick and Metz (2009) and Atkinson & Wade, 2015 only recruited adolescent girls. Gender distribution was not reported in two studies; however, Bennett & Dorjee (2016) indicated uneven gender distribution. Of the 22 high school studies, 7 studies recruited students from specific populations, such as students with depression, anxiety, and/or other psychological problems; students with learning disability currently attending private residential school; students with behavioral challenges and ADHD, currently attending an alternative high school; and students currently attending a school for Indigenous youth (e.g., Le & Gobert, 2015; Milligan et al., 2016; Wisner & Norton 2013).

Mindfulness-Based Programs

Some studies utilized existing MBI programs, such as Making Friends with Yourself (Bluth, Gaylord et al., 2016) and Mindfulness In School Program (Kuyken et al., 2013). Some studies specifically designed a novel intervention (Burckhardt et al., 2017) or adapted an adult MBI program to adolescents (Livheim et al., 2015). The three most commonly studied mindfulness-based programs were acceptance and commitment therapy-based (ACT; Livheim et al., 2015), mindfulness meditation (MM; Wisner & Norton, 2013), and the learning to breathe (L2B; Bluth, Campo et al., 2016) programs. Two studies integrated mindfulness with other activities, such as the Integral Mindfulness Martial Arts program (Milligan et al., 2016) combining mindfulness and mixed martial arts and yoga training) and an intervention combining group art therapy with

breathing meditation (Kim et al., 2014). Most interventions involved adapting activities based on MBSR and MBCT components and teaching adolescents different types of meditation and/or mindfulness techniques. The focus of the MBIs included promoting mental health and reducing mental illness outcomes, facilitating the development of emotion regulation and attentional skills and increasing student's awareness of their mind and body (e.g., Bennett & Dorjee, 2016; Burckhardt et al., 2017; Metz et al., 2013).

Basic information regarding intervention length and session duration were reported in most studies. The length of a single session usually ranged from 30 to 90 min (e.g., Bluth, Roberson, Gaylord, 2015; Broderick and Metz (2009)), but some program sessions were less than 30 min (e.g., Franco et al., 2016) or over 1.5 h (e.g., Van der Gucht et al., 2017). Ten intervention programs (e.g., Kuyken et al., 2013) included five to ten sessions. However, some intervention programs had less than five sessions (e.g., Atkinson & Wade, 2015) or more than ten sessions (e.g., Bluth, Campo et al., 2016). Most sessions took place once per week, while programs with more than 20 sessions (e.g., Le & Gobert, 2015) implemented the intervention more frequently. The average intervention length was 6–10 weeks (e.g., Livheim et al., 2015). Other studies implemented the intervention for either 3–5 weeks (e.g., Atkinson & Wade, 2015) or more than 11 weeks (e.g., Metz et al., 2013). Home practices were encouraged in majority of the studies.

Instruction of the MBIs mainly included classroom teachers and clinical professionals, such as psychologists, medical doctors, social workers, counselors, etc. (e.g., Milligan et al., 2016; Raes et al., 2014). In many cases, instructors were given training on the MBIs being implemented and already had some personal experiences with mindfulness practices and/or working with the adolescent population (e.g., Atkinson & Wade, 2015; Kuyken et al., 2013; Van der Gucht et al., 2017). Study investigators were also actively involved as instructors in many of the studies (e.g., Atkinson & Wade, 2015; Luiselli, Worth, Carbonell, & Queen, 2017).

Measures

The two most commonly studied domains were psychological well-being and clinical symptoms of mental health. Under the domain of psychological well-being, perceived stress was generally measured by the PSS and the Depression Anxiety Stress Scales (DASS-21; Lovibond & Lovibond, 1995). Affect was measured generally by PANAS-C. Other outcomes in this domain included life satisfaction, well-being, coping, resilience, social connectedness, social skills, and self-compassion. For clinical symptoms, the majority of studies examined high school students' anxiety and depression symptoms with measures such as the DASS-21, Reynolds Adolescent Depression Scale-2 (RADS-2; Reynolds & Mazza, 1998), and State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). Other studies examined eating disorder-related outcomes, internalizing and externalizing symptoms, and suicidality. High school students' academic performance was less commonly studied, and these outcomes included students' grades, test scores, and attendance. Mindfulness-based outcomes were also commonly assessed across studies using a range of mindfulness measures, such as CAMM, MAAS, and the mindful coping scale. Raes et al. (2014) utilized the five-factor mindfulness questionnaire but obtained low internal consistency and, thus, did not report the analysis results. Executive functioning outcomes were uncommon and were clustered into impulsivity, cognitive flexibility, effortful control, and problematic behaviors. A wide array of measures, such as the Avoidance and Fusion Questionnaire for Youth (AFQ-Y; Greco, Baer, & Lambert, 2008), were used to measure the above outcomes. Finally, emotional developmental was also an uncommon outcome and was measured by the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004).

Feedback on the feasibility and acceptability of the interventions was also of particular interest within the high school-based studies. In most cases, using a mixed-methods design, students were asked to provide feedback through open-ended questions and interviews and complete questionnaires on their program experiences.

Intervention Results

Across the high school-based studies, the effects of school-based mindfulness interventions on different domains of development were largely mixed. In terms of school-related outcomes, studies reported positive impact of interventions on students' academic performance (e.g., test scores and teacher-rated academic achievement), general school functioning, and attendance (Beauchemin et al., 2008; Bennett & Dorjee, 2016; Wendt et al., 2015; Wisner & Norton, 2013). Studies also reported significant changes in executive functioning facets, such as improvements in self-regulation, and reductions in impulsivity, cognitive inflexibility, aggressive behaviors, and teacher's reported problem behaviors (e.g., Franco et al., 2016; Livheim et al., 2015; Metz et al., 2013). There were also improvements in emotion regulation. However, a few studies reported no significant change in impulse control, cognitive inflexibility, and self-control among students who had participated in mindfulness-based programs (e.g., Van der Gucht et al., 2017; Wendt et al., 2015).

For the psychological well-being domain, mixed results were reported across studies. In terms of affect, most studies reported significant decreases in negative affect for the intervention groups (e.g., Bach & Guse, 2015; Broderick and Metz (2009)). The results also indicated significant increases in self-compassion (Bluth, Gaylord et al., 2016), family involvement (Wisner & Norton, 2013), social connectedness (Bluth, Gaylord et al., 2016), teacher- and student-rated social skills (Beauchemin et al., 2008), perception of control (Milligan et al., 2016), and resilience (Wendt et al., 2015) among students in the intervention group. Results on perceived stress were equivocal, with only some studies (e.g., Livheim et al., 2015; Metz et al., 2013) supporting the influence of mindfulness-based program on stress reduction, and other studies (e.g., Bennett & Dorjee, 2016; Burckhardt et al., 2017) reporting no significant differences of stress level between intervention and control groups. The effect of mindfulness on well-being and life satisfaction was also unclear, with findings from Kim et al. (2014) and Bluth, Gaylord et al. (2016) reported greater increases in well-being and life satisfaction for the intervention groups compared to the control groups, while findings from Bach and colleagues (2015) and Burckhardt et al. (2017) found no significant group differences in well-being and life satisfaction. Study findings by Tharaldsen (2012) showed a decrease in life satisfaction among students following the intervention. Increases in mindfulness were only noted in a few studies (e.g., Bluth, Gaylord et al., 2016; Livheim et al., 2015).

In terms of mental health, most studies reported significantly lower depression and anxiety symptoms among students in the intervention groups compared to the control groups (e.g., Bennett & Dorjee, 2016; Bluth, Campo et al., 2016). Study findings by Atkinson and Wade (2015) illustrated the positive impact of a mindfulness-based intervention in significantly reducing eating disorder-related symptoms, such as weight and shape concern, dietary restraints, and the thin ideal. The number of Indigenous youth with frequent thoughts of suicide also decreased from 44% to 0% following a mindfulness-based intervention (Le & Gobert, 2015). In contrast, Van der Gucht et al. (2017) reported no significant improvement on any outcomes, including internalizing symptoms and externalizing behaviors in youth.

In terms of feasibility and acceptability of the intervention, most participants, instructors, and teachers provided positive feedback about the mindfulness-based programs implemented (e.g., Bennett & Dorjee, 2016; Le & Gobert 2015; Metz et al., 2013). Students reported enjoyment of the interventions and observed benefits, such as better management of stress, improved school climate, and increased focus in school, stronger connections with peers (e.g., Beauchemin et al., 2008; Wisner et al., 2014).

Postsecondary (18–29 Years)

Sample Characteristics

Six articles examined mindfulness-based interventions for students in postsecondary settings. The sample size ranged from 17 to 90 participants. In terms of study design, three studies utilized a randomized controlled design (Falsafi, 2016; Greeson, Juberg, Maytan, James, &

Rogers, 2014; Oman et al., 2007), and three studies utilized a quasi-experimental design (Hanstede, Gidron, & Nyklícek, 2008; Hindman, Glass, Arnkoff, & Maron, 2015; Yamada & Victor, 2012). The control groups across studies were either a waitlist control (Greeson et al., 2014; Hanstede et al., 2008; Hindman et al., 2015; Oman et al., 2007) or no-intervention control group (Falsafi, 2016; Yamada & Victor, 2012). All studies had at least two conditions, with three studies employing three conditions that compared an MBI to other interventions (e.g., hatha yoga, passage meditation, and MSM with informal medication practice) and a control group (Falsafi, 2016; Hindman et al., 2015; Oman et al., 2007).

The majority of participants were undergraduate students (Falsafi, 2016; Greeson et al., 2014; Hindman et al., 2015; Oman et al., 2007; Yamada & Victor, 2012). Graduate and/or professional students were also included in two studies (Greeson et al., 2014; Hindman et al., 2015). Although the participants' age ranged from 18 to 50 years, almost all of the studies involved participants with a mean age in the 20s (Falsafi, 2016; Greeson et al., 2014; Hanstede et al., 2008; Hindman et al., 2015; Yamada & Victor, 2012). Gender distribution was uneven, with more female than male students recruited across all studies. Four studies reported the ethnicity of students. The majority of participants were Caucasian, and the remaining participants included Black, Hispanic, Asian, Latino, mixed race, and other students (Falsafi, 2016; Greeson et al., 2014; Hindman et al., 2015; Oman et al., 2007; Yamada & Victor, 2012). Students' SES was not reported. Two studies recruited students with clinical symptoms; one study included participants diagnosed with depression and/or anxiety, half of which were taking psychiatric medication (Falsafi, 2016) and one study included participants with OCD symptoms (Hanstede et al., 2008).

Between-group differences on demographic and/or initial outcome variable levels were reported in five studies. Compared to the control groups, the intervention groups had significantly less non-Caucasian participants (Oman et al., 2007), longer history of OCD complaints (Hanstede et al., 2008), fewer graduate students and greater anxiety (Hindman et al., 2015), slept half an hour less per night (Greeson et al., 2014), and more male, younger, and junior students (Yamada & Victor, 2012).

Mindfulness-Based Programs

The amount of information provided for each MBI varied across studies. The programs implemented in the studies included general mindfulness training (e.g., meditative breathing, body scan, sitting meditation), hatha yoga, MBSR, passage meditation (PM; i.e., reciting inspirational passage during sitting meditation), Mindfulness Stress Management (MSM; psychoeducational program on mindfulness and stress based on MBSR, MBCT, and ACT), Koru (e.g., teaching of mind-body skills and cultivating compassion and gratitude to reduce stress and improve psychological outcomes), and Mindful Awareness Practices (MAPs, i.e., guided sitting mediation practice based on MBSR). Two studies targeted students with clinical issues (i.e., mood and OCD symptoms). In addition, the MAPs program used by Yamada & Victor (2012) had a special focus on improving students' learning in classrooms.

The majority of the MBIs sessions occurred once per week and lasted for 60–90 min (Falsafi, 2016; Greeson et al., 2014; Hanstede et al., 2008; Hindman et al., 2015; Oman et al., 2007). One study implemented a brief, 10-min MBI sessions twice a week (Yamada & Victor, 2012). The total number of sessions ranged from 4 to 30 across a total of 4–15 weeks. Participants were encouraged to participate in home practice in four out of six studies.

In terms of implementation, four studies reported some details about the instructors who delivered the interventions (Falsafi, 2016; Hindman et al., 2015; Oman et al., 2007; Yamada & Victor, 2012). Interventions were implemented by clinical professionals (e.g., psychiatric clinical nurse specialist and clinical psychology PhD students), teachers (e.g., instructor of upper-level psychology course), and instructors who personally practiced the modalities implemented (e.g., instructor who practices passage/mindfulness meditation).

Measures

Academic performance and executive functioning were each only measured in one study. Yamada and Victor (2012) included an objective outcome measure of learning and examined the impact of the MAPs intervention on student-rated capacity for learning in the classroom using a novel questionnaire (i.e., Evaluation of Mindful Awareness Practices) designed for the study. Facets of executive functioning such as cognitive flexibility and de-centering were only examined in Hindman et al. (2015). In terms of psychological well-being, perceived stress (as measured by the PSS, DASS, and student life stress inventory) and self-compassion (measured across studies by the Self-Compassion Scale) were included in four studies as an outcome (Falsafi, 2016; Greeson et al., 2014; Hindman et al., 2015; Yamada & Victor, 2012). Other psychological well-being measures included coping, happiness, sleep, gratitude, and life satisfaction. In relation to clinical outcomes, three studies examined the impact of these interventions on symptoms of anxiety and depression (Falsafi, 2016; Hindman et al., 2015; Yamada & Victor, 2012). Only Hanstede et al. (2008) included symptoms of OCD as an outcome measure. Mindfulness as an outcome was measured in five out of six studies with a range of popular mindfulness scales (e.g., CAMS-R, MQ, FFMQ, MAAS) (Falsafi, 2016; Greeson et al., 2014; Hanstede et al., 2008; Hindman et al., 2015; Yamada & Victor, 2012).

Intervention Results

Overall, the six postsecondary-based studies illustrate the positive impacts of MBIs on various aspects of student outcomes. The only exception was academic performance, in which students in a study by Yamada and Victor (2012) did not find significant improvement in learning outcomes (e.g., exam scores). However, 80% of students who received the mindfulness training reported positive gains from the intervention on their learning and everyday life. In terms of executive functioning, students in the MSM group reported significantly higher treatment effects than students in the control group (Hindman et al., 2015). Compared to students who received the informal mindfulness-based program, students in the formal intervention group reported significantly lower cognitive inflexibility.

The mindfulness-based intervention programs were found to influence a range of psychological well-being outcomes. For example, students in a study by Oman et al. (2007) reported improved religious coping compared to control groups in two types of mindfulness-based spiritual interventions (e.g., mindfulness meditation and passage meditation) groups. In addition, participants in the study by Falsafi (2016) who received the mindfulness training showed significant increases in self-compassion scores compared to participants in both the yoga intervention and control group. Students in the Koru program, but not in the control group, showed significant improvement in sleep quality, self-compassion, and reduction in perceived stress, with medium to large effect sizes (Greeson et al., 2014). Students in studies by Falsafi (2016) and Hindman et al. (2015) also reported a reduction in stress following the mindfulness-based program.

For clinical mental health outcomes, students in the mindfulness groups generally reported fewer depressive, anxiety, rumination, and worry symptoms (Falsafi, 2016; Hindman et al. 2015; Yamada &Victor, 2012) than those in control groups, in both clinical and nonclinical populations, at post-intervention follow-up. In a study by Hanstede et al. (2008), the mindfulness-based program targeting OCD symptoms had a significant and large effects on reducing participants' OCD symptoms and increasing their mindfulness. Participants in the intervention group also reported increased levels of letting go and decreased levels of thought-action fusion, which are both aspects of OCD. Furthermore, all studies reported a significant increase in mindfulness among participants in the intervention groups.

Regarding students' feedback on the program, qualitative data from a randomized controlled trial (Falsafi, 2016) indicated positive changes in students' daily lives in both the mindfulness and yoga intervention groups. Students in another mindfulness-based program also reported overall positive feedback (Hindman et al., 2015). Specifically, students who received the formal mindfulness meditations indicated the meditation component was the most useful aspect of the workshop.

Conclusions

Over the past 20 years, the number of mindfulness programs has grown considerably, although the empirical evaluation of these programs across early development has lagged. The current trend has been to deliver novel mindfulness-based programs to young people without full consideration of what "mindfulness" is, whether mindfulness principles that are effective with adults are applicable to children and youth, which unique aspects of mindfulness are relevant to early development, and how best to deliver and evaluate these programs (e.g., choice of measures, outcomes, instructor characteristics). Moreover, there is a natural appeal of implementing mindfulness-based programs in schools to improve the health and well-being of school-aged children. This is a critical development period in setting the stage for optimal health and well-being across the lifespan; thus, it is timely to critically evaluate the current empirical evidence on mindfulness-based programs in early development. Moreover, this need is compounded by the apparent ease of practicing mindfulness (e.g., using a mindfulness YouTube video). This may lead to novice instructors who may not be competent, and the use of existing programs may not be appropriate for all normative and clinical populations. Thus, the current review aimed to illuminate the current state of school-based mindfulness research and to guide future applied and research directions.

Our review identified 67 studies that provided evidence on the efficacy, feasibility, and fidelity of school-based mindfulness-based programs for students across five developmental stages (i.e., preschool, primary school, middle school, high school, and postsecondary), with a focus on programs that considered child and youth well-being outcomes (i.e., academic attainment, executive functioning, psychological well-being, clinical mental health symptoms, and mindfulness). The following section outlines the key conclusions across developmental groups, identifying noteworthy programs, outcomes, populations, and study designs. Following this, strengths and limitations of the reviewed studies will be discussed in order to better understand the current state of research on school-based mindfulness-based programs.

Overall Findings Across Developmental Groups

The programs that were evaluated by one or more peer-reviewed articles and are recommended for future research based on study findings include (across developmental stage) mindfulness-based KC (preschool), Mindful Schools and Paws. b (primary school), Mindfulness Education/MindUp and Holistic Life (middle school), ACT, L2B, and MM (high school) and MAPs (postsecondary). While there was no specific minimum or maximum dosage that was deemed effective for any specific developmental group across the lifespan (Rempel, 2012), a moderate number of the studies included the use of manualized programs with weekly sessions. The majority of programs were MBIs that employed a wide variety of instructors with mindfulness facilitation experience ranging from no reported training to a personal practice of 10 years and 200 h of formal training.

Various outcomes were investigated, and many unique measures were used, with a major focus on psychological well-being (preschool, primary school, middle school, high school, postsecondary), clinical symptoms of mental health (middle school, high school, postsecondary) executive function (preschool, primary school), and mindfulness (postsecondary). In terms of measurement tools, the most common psychological well-being outcome measures were the Warwick-Edinburgh Mental Well-being Scale (middle school), Perceived Stress Scale-10 (middle school, high school), and Self-Compassion Scale (postsecondary). Clinical symptoms of mental health were commonly measured by The Positive and Negative Affect Schedule (primary school), Screen for Child Anxiety Related Disorders (middle school), Positive and Negative Affect Schedule for Children (high school), and the Depression Anxiety Stress Scale-21 (high school). Common executive function measures were the Conners Teachers Rating Scale – Revised and the Behavior Rating Inventory of Executive Function (primary school). Finally, common mindfulness outcome measures included the Child and Adolescent Mindfulness Measure (middle school, high school) and Mindful Attention Awareness Scale (high school).

Noteworthy findings for each developmental age are as follows: (i) preschool children experienced improved executive function and psychological well-being in both yoga and mindfulness-based programs; (ii) primary school children experienced improved academic performance and reduced negative affect, as well as improved executive function based on parent and teacher reports; (iii) most middle school children experienced improved psychological well-being (improved prosocial and positive behavior, reduced perceived stress), reduced clinical symptoms (improved anxious and depressive symptoms), although no significant improvements were found for measures of mindfulness; (iv) adolescents in high school experienced mixed results for psychological well-being (e.g., perceived stress, life satisfaction) and reduction in depressive and anxious symptoms; and (v) postsecondary students experienced increased psychological well-being (e.g., self-compassion, perceived stress), reduced clinical symptoms (anxiety, depression, obsessions, and compulsions), and improved mindfulness scores. The vast majority of programs across developmental stages showed fidelity and/or acceptability from students and teachers.

Three studies which evaluated YogaKids, KC (preschool), and MAPs (primary school) programs found that participants with lower baseline scores experienced greater post-intervention improvements in executive functioning and psychological well-being. Considering the preliminary efficacy of these programs for lower-baseline participants, future studies should investigate the efficacy of the YogaKids, KC, and MAPs intervention for academic performance, clinical mental health, executive functioning, and psychological well-being outcomes in both neurodevelopmental and sociodemographic high-risk preschool and primary school children.

Mindfulness itself was measured with a number of different tools, and the results suggested mixed findings. That said, while there are a number of mindfulness measures that have been created for all ages, many of these measurements operationally define and measure mindfulness in different ways. Recent literature suggests there is widespread agreement that there is no psychometrically superior measure (Park, Reilly-Spong, & Gross, 2013).

In light of the different mindfulness constructs and the ways they have been measured, it is not surprising that there was inconclusive evidence for this outcome. Future studies should consider novel variables that may be stronger predictors of mental health and psychological well-being symptoms and integrate developmental theory in the selection of these measures. For example, the Self-Compassion Scale shows better predictive ability than the MAAS for symptom severity and quality of life in mixed anxiety and depression adults (Van Dam, Sheppard, Forsyth & Earleywine, 2011). It would be useful for future studies to examine whether a developmentally appropriate self-compassion measure has better predictive utility than mindfulness measures reviewed for children and youth, such as the CAMM.

One potentially useful measure to consider in future research is the newly developed Mindful Student Questionnaire (see Renshaw, 2017). This measure is still in its pilot phase, but it is intriguing because it frames mindfulness in terms of the school context (i.e., mindfulness at school). Renshaw (2017) created the measure to supplement other mindfulness measures that do not consider mindfulness in terms of its specific expression at school. It is a 15-item multidimensional scale that has three subscales tapping mindful attention, mindful acceptance, and approach and persistence behavior. The measure was developed with an initial convenience sample of 278 students in grades 6–8. Initial psychometric results attest to the internal consistency of the subscales. All three subscales were associated positively with measures of school connectedness, perceived academic efficacy, and experienced joy at learning, while two subscales (mindful acceptance and approach and persistence behavior) were associated with student reports of academic achievement.

Strengths and Limitations of the Current Literature

Experimental Design

A moderate number of studies did not employ control groups (i.e., groups of participants with the same characteristics as the intervention group, but whom do not receive the study intervention)

or randomization (i.e., participant assignment to any one of the listed groups by chance). Lack of control groups and randomization substantially decreased the power and scientific rigor of the research studies (Felver et al., 2016). In addition, many studies did not have an active control group (i.e., group that receives an intervention that is nearly identical to the study intervention but lacks the critical components that would influence participant outcomes). Participants in the control condition generally received treatment as usual or no intervention, which further prevents researchers from exploring the mechanisms of mindfulness practices on students' outcomes and examining potential confounding factors (e.g., more attention from adults in the mindfulness intervention group) that may contribution to the intervention effects (Langer et al., 2015). The small number of analyses that were done suggests the differential impact of several demographic characteristics, such as gender, SES, and ethnic background on student outcomes (Tan, 2016). The wide array of experimental designs, ranging from pre-post designs with no control group studies to randomized controlled trials with control groups and follow-up evaluations, may have also contributed to the mixed findings that while true in an uncontrolled study, do not yield similar results in a randomized study or outcome improvements that are not maintained in a follow-up period.

In sum, the current literature reflects an assumption that mindfulness programming can be beneficial to student development. It is noteworthy that almost none of the specific mindfulness-based programs have been replicated – a necessity of scientific rigor to ensure reliable and generalizable results. At this point, we are unable to recommend a specific mindfulness-based program for children and youth that will result in beneficial outcomes, as more rigorous methodology is needed. It is also salient that most of the studies on mindfulness programs for students have been developed, implemented, and evaluated by program developers and instructors – this may result in potential biases in study outcomes.

Measures

The reviewed literature utilized a wide range of standardized outcome measures to evaluate the effect of mindfulness-based programs on a broad array of student outcomes, which allowed researchers to better understand the comprehensive role of mindfulness-based programs on student development (Rempel, 2012). This also highlights a shift and growth in the field, such that mindfulness-based interventions were not only limited to mainstream populations and narrow aspects of development but have been tailored to increasingly diverse groups and a variety of developmental facets. The differences between outcomes may be based on the intervention type and length, with MMs being more focused on attentional training and MBIs focused on emotion development. While the majority of mindfulness-based programs in the current review were MBIs, the different goals of MM and MBI are important when considering the appropriateness and potential efficacy of a mindfulness-based program for a targeted outcome.

A limited number of self-report measures with strong psychometric properties were included in the reviewed literature. Measures such as the Emotion Regulation Questionnaire for Children and Adolescents (Gullone & Taffe, 2012) and the BRIEF (Ferrari et al., 2010) are examples of both developmentally appropriate and psychometrically sound measures. However, the majority of outcome measures reviewed were created for individual studies, were extended to a different developmental stage than the measure was originally intended for, or had not been psychometrically tested with the target population. For example, while the PANAS-C, a tool intended on measuring anxious and depressive symptoms, is developmentally appropriate for children, it may be sensitive to the targeted outcome (Hughes & Kendall, 2009). While the PSS-10 was one of the most common tools used in the reviewed studies, this measure is appropriate for use with adults, and none of the studies investigated the psychometric properties of this measure for children and youth. These issues imply that research findings

pertaining to these tools must be interpreted with caution.

In addition, a large number of the reviewed studies collected qualitative and follow-up data to further understand the experiences of students, teachers, parents, and instructors participating in the mindfulness-based programs. The narrative description of participant experiences led researchers to explore these individual differences and provided insight on the acceptability of the interventions. Short- and long-term follow-up evaluations allowed researchers to examine whether the benefits of mindfulness practices were sustained over time and further explore the role of mindfulness practices in promoting healthy development and preventing mental health issues across developmental stages (Zenner, Herrnleben-Kurz, & Walach, 2014). For instance, the benefits of participating in a mindfulness-based program in middle school may not be important or affect their behavior until they enter adolescence, whereby as a result of this earlier program, students are better equipped to manage adolescence. Qualitative feedback and follow-up data complement quantitative data from pre-post study designs on outcomes, offering a broad picture of the impact of mindfulness-based programs on students, teachers, and parents. Future studies should continue to use mixed-methods approaches and follow-up evaluations, as these approaches can strengthen evaluations to improve program efficiency, incorporate participant feedback, and result in have tailor-made programs for each developmental stage (Johnson & Onwuegbuzie, 2004).

The limitations of single-informant and single-method data collection in the reviewed literature are also important to address (Felver et al., 2016). Across intervention studies, student surveys were commonly used to assess outcomes, and while students are in the best position to comment on internal processes, other factors, such as social desirability and use of measures tested with adults only, may reduce the usefulness of these student measures. Teacher- or parent-report surveys were less commonly used to measure the impact of mindfulness practices on psychosocial and health outcomes, and increased use could provide global evaluations of student outcomes and program evaluations. Only a small number of studies employed objective measures, such as physiological measures, direct observation, and school collected data, to assess changes in students. Future studies on mindfulness-based programs in schools may benefit from measuring the effect of mindfulness practices by considering the perspectives of classroom teachers and parents with both quantitatively and qualitatively measures of perceived changes in their students or children's outcomes. The use of objective and developmentally appropriate self-report measures will allow researchers to measure different facets of psychosocial and academic outcomes among school-aged students and examine whether students or other informants' reports agree with the observed changes in students (Eklund, O'Malley, & Meyer, 2017).

Fidelity, Sustainability, and Instruction

A large number of studies included fidelity measures and manualized programs. Intervention fidelity measures help determine the degree to which interventions were delivered as intended. With the majority of mindfulness-based programs being novel and/or taught by individuals who are new instructors, the use of fidelity measures is imperative to examine study rigor (Horner, Rew, & Torres, 2006). A moderate number of the studies lack detailed information on who facilitated the mindfulness sessions, which hinders understanding of the feasibility of implementing such interventions in schools and the generalizability of the study findings. Future studies should include information on the instructor's level of training in the specific mindfulness programs, amount of personal mindfulness practice, and the amount of experience teaching and working with the target populations. The provi-

sion of this information will assist researchers in improving program fidelity, will allow other researchers to replicate these studies, and will promote a realistic consideration of the feasibility of implementing the interventions in schools.

Program sustainability was a strength of a large number of studies reviewed. While some programs utilized an external instructor, who came into the school to provide programming, other studies trained classroom teachers directly, providing regular supervision by an experienced clinician and/or research supervisor. Program sustainability is further strengthened by providing classroom teachers with free or subsidized instructor training. This training allows programming to continue after initial program implementation takes place. Equipping teachers with mindfulness practices may have the additional benefit of providing teachers with techniques to help reduce their personal psychological distress and improve mental health, which in turn may help to support a healthier classroom.

Effect Size

A large portion of the reviewed literature considers both statistical hypothesis testing and effect size. By reporting and interpreting the effect size – the degree of the difference between two groups, independent of sample size – studies can better estimate the effect of the intervention on specific outcome measures. In a moderate number of the studies reviewed that found no statistical significance, it is possible that the intervention would have shown statistical significance for outcomes if a larger sample was recruited. In these studies, effect size, which is not influenced by the number of participants in a study, gives us a tangible measure of the effectiveness of the program, independent of statistical significance. Outcomes with moderate to large effect sizes warrant future investigation. Such an example of this occurred in the study by Flook et al. (2015), where preschooler cognitive flexibility improved after program completion, reflected by a moderate to large effect size although no statistical significance was found). The continued reporting of effect sizes in intervention studies (Zenner et al., 2014) will equip interested educators with a better guidebook on which interventions to use for specific outcomes, contexts, and/or populations (Thompson, 2002).

Developmental Groups

Early studies of mindfulness-based programs have primarily focused on treating the adult population in both clinical and nonclinical settings (Grossman et al., 2004). The literature reviewed in this chapter highlights that research devoted to school-based mindfulness-based programs is expanding and accelerating our understanding of the potential of MBIs and MMs for mental health promotion and prevention in educational settings across the lifespan. The existing literature included many programs that were developed for children and youth across their developmental stages (i.e., age overlap of studies in the primary school, middle school, and high school groups). Other programs were developed and tailored for specific ages or grades. Still other programs were derived and modified from adult interventions. Future studies evaluating program efficacy across the lifespan (preschool to older adulthood) could help clarify which programs are more advantageous at a particular developmental stage or across developmental stages. Further evaluation of developmentally specific programs (e.g., MindUp/Mindfulness Education tailored for pre/early adolescence, or Mindfulness in School Programs tailored for secondary school students; Kuyken et al., 2013; Schonert-Reichl 2010) is recommended to determine if the programs are indeed efficacious for their developmental groups of focus. Finally, future investigation of programs derived from adult interventions and modified for child and youth populations is warranted to better understand whether this is appropriate given the different abilities and developmental goals inherent in childhood.

Vulnerable and At-Risk Populations

A strength of the existing literature was the moderate number of studies that considered programs targeting low SES, various ethnic groups, urban vs rural, and clinical (e.g., anxiety and depression) and neurodevelopmental populations (e.g., learning disabilities, attention difficulties). Specifically, Felver and colleagues (2016) found that students with mental health and/or neurodevelopmental issues are most in need of effective interventions to support their growth and development and that these interventions could assist at-risk populations. In light of these findings, we recommend continued research on specific populations, such as clinical and at-risk youth. This includes additional studies on the application of mindfulness-based programs to Indigenous populations, as the current review found limited studies with this population (e.g., Le & Gobert, 2015; Milligan et al., 2016; Wisner & Norton, 2013).

Tips for Clinicians and Educators

After reading this chapter, grasping a background on the origins of mindfulness, reviewing studies in this nascent research field, and being provided with a comprehensive list of strengths and limitations of school-based mindfulness-based programs, you may now be contemplating if and how to implement a program and evaluation study into your classroom or educational system. The recommendations below highlight important areas of practical considerations when working toward implementing empirically based, feasible, and efficacious school-based mindfulness programs:

Program Selection

- When selecting a school-based program, be familiar with its empirical support and select a program based on its effectiveness with your target population(s). For instance, if your focus is programming for preschoolers, consider a program that has strong evaluation results with preschool populations.
- Conduct an internal review to determine whether there is interest in or other similar programs currently being implemented at your school. Collaboration and modifications that arise from the joining of program goals and evaluation efforts may help streamline your systems' health and wellness initiatives.
- Select a manualized program that has been supported by the research literature and has a duration that is realistic for integrating into your educational setting. For instance, implementing programs that align with the beginning and end of terms or semesters may support students throughout their expected ebbs and flows (e.g., midterm and final exams).
- When implementing a program, ensure it is done with strong program fidelity (e.g., follow the curriculum, train the instructors, monitor instructor and participant progress), which can strengthen the efficacy of the program.
- From the onset, incorporate factors and processes that will ensure that the program you choose will be sustainable in your educational setting. Align program development and implementation into staff roles and responsibilities. Identify a champion for the program who can engage with stakeholders, particularly those who are already committed to improving student mental health, well-being, and academic success.
- High quality instructor training is a must, and initially and overtime, institutions should prioritize teaching effective mindfulness techniques to their target population (e.g., empirically supported, weeklong, standardized didactic and experiential training in mindfulness broadly, and the program, specifically), with bi-weekly or monthly supervision, and fidelity measures incorporated into program evaluation.
- Caution is necessary if you are considering applying a mindfulness program to a population for which empirical evidence is not yet available. Consider if there is a strong theoretical rationale for why a mindfulness-based program is appropriate for the needs of your population, and why a mindfulness-based

intervention may be better suited to this population, compared to other empirically supported mental health programs for your setting.

Outcome Measure Selection

- It is beneficial to select outcome measures a priori (before the program or research study begins), with hypotheses and/or program goals in mind.
- When deciding which measures to select, consider your selected program's target population and outcomes.
- Once your research questions have been developed, identify population-appropriate, psychometrically sound measures that measure a variety of outcomes that can be used to evaluate your program objectives.
- Consider a mixed-methods design that has both quantitative and qualitative measures for multiple informants (e.g., student, parent, teacher).
- Ensure measures are developmentally and setting appropriate. For example, if you are working with primary school students, make sure that the language of items is at a primary level.

Program Evaluation

- Given the novelty of programs in the field, program implementation should be accompanied by an evaluation study.
- Prepare and acquire approval from your research ethics board(s) (e.g., school ethics board, community ethics board, institutional ethics board) before implementing studies with any child, youth, or adult population.
- Use rigorous experimental designs with ethical control groups (e.g., waitlist, active controls), so that results are generalizable to other individuals.
- Conduct a pilot study before any large-scale implementations at your institution (e.g., implementing a school-wide approach). This would ensure feasibility and effectiveness of the mindfulness-based program before devoting large amounts of resources to a full implementation. This pilot work can inform whether future studies at your institution are warranted, what populations it is appropriate for, and what outcomes it targets.

Final Thoughts

When considering together the concerning mental health issues commonly faced by young people and related developmental theories (e.g., PYD) that emphasize strengthening the competencies of children and youth to improve their functioning, mindfulness-based programs hold promise for improving psychological well-being and mental health among children and youth. Several studies on school-based mindfulness-based programs found positive outcomes in one or all of the outcome domains of academic achievement, executive functioning (e.g., attention), emotional development (e.g., emotion regulation), psychological well-being (e.g., perceived stress, well-being), clinical mental health symptoms (e.g., anxious symptoms), and mindfulness skills. While some of these outcomes were met with mixed findings, initial support for mindfulness-based programs is promising. Overall, the results from our review are supported by recent meta-analytic findings suggesting generally small effect sizes related to the effect of mindfulness-based interventions on young people's mental health and well-being outcomes (Carsley, Koury, & Heath, 2017; Klingbeil et al., 2017a, 2017b). Interestedly, moderate effect sizes were found in meta-analytic findings related to single-case research examining mindfulness-based interventions for disruptive behaviors (Klingbeil et al., 2017a) and mindfulness-based interventions that consisted of a variety of mindfulness activities targeting late adolescence (Carsley et al., 2017). The effects of mindfulness-based interventions also appear to improve during maintenance and follow-up periods (e.g., Klingbeil et al., 2017a, 2017a).

Clinical psychologist, director at the Oxford Mindfulness Centre, and author of one of the studies reviewed, Dr. Willem Kuyken in refer-

encing school-based mindfulness-based programs, recently stated, "There's a lot of enthusiasm [about] mindfulness and we think that the enthusiasm may be ahead of the research" (Amass, 2017). Echoing Kurken's sentiments, it is important to continue empirical work in this field in order to help clarify which programs are beneficial for specific developmental periods and sociodemographic populations. A moderate number of studies showed evidence that school-based mindfulness-based programs are efficacious across diverse populations. The majority of studies reported high feasibility (e.g., facilitation sustainability, limited resources required, easy to implement) and acceptability (e.g., students enjoy it, teachers find it useful and possible to implement), while a moderate number of studies showed efficacy in at least one outcome domain.

The evidence to date suggests that mindfulness-based programs should continue to be evaluated as viable intervention and prevention programs that can improve well-being and reduce mental health difficulties among children and youth. It is unclear if mindfulness should be at the forefront of these interventions – additional research is needed to ascertain which programs, what aspects of mindfulness, and which populations mindfulness is most effective for improving health and wellness. While there are many benefits to children and youth being more mindful in their lives, too often mindfulness-based programs are implemented in place of a comprehensive mental health program for students. It is likely that mindfulness is one piece of a larger puzzle in improving the mental health and well-being of young people. Other important pieces include student and family engagement, school programs that include mental health prevention across the life of a student (primary school to postsecondary education), addressing social determinants of health, and training peer leaders to develop and implement mindfulness programing. A multifaceted approach is needed in recognition of the fact that there is an incredible amount of heterogeneity among students, and some students will have vulnerabilities and life situations that require a complex approach that reflects the complexities of their individual circumstances. To cite one example, the student who is highly perfectionistic is someone who is driven by extreme ambitions fueled by a fear of failure. A focus on mindfulness is not in keeping with the nature of this student to relentlessly strive. The notion of slowing down and shifting from a "doing mode" to a "being and experiencing mode" will likely meet with strong resistance, especially if this student is being pressured to be perfect. This student could benefit from mindfulness training, but she or he is also likely in need of other strategies and techniques to help address the anxiety and stress being experienced.

This chapter provides useful information on the current state of school-based mindfulness programs. It has been our goal to provide guidance on the selection and implementation of school-based mindfulness programs and to contribute to the growing literature that still needs to answer the question: what are the short- and long-term benefits of mindfulness programming for students?

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19 Children and Adolescents "Flying Under the Radar": Understanding, Assessing, and Addressing Hidden Distress Among Students

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Abstract

This chapter is about two interconnected main premises that follow from acknowledging the presence of young people who suffer in silence. First, the prevalence of anxiety and depression and other mental health problems among adolescents is not only large and growing, but it is also very much underestimated; that is, we are facing a much bigger problem than most people realize. Second, many young people are hiding their problems behind a façade, and they never seek help or even confide in friends or family members. In essence, they are "flying under the radar," and the people in their lives are largely unaware of this hidden psychological pain. This chapter examines this hidden psychological pain and the reasons for it. While our focus is primarily on depression and anxiety, it is acknowledged that secret mental health issues can take many forms, including secret acts of intentional self-harm and eating behavior (e.g., bulimia). It is also likely that some of the experiences that potentiate the false self are kept hidden due to the anticipated reactions of other people (e.g., the feelings of loneliness that often accompany depression and social anxiety).

The John Hughes movie *The Breakfast Club* from 1985 is acclaimed, in part, because of its accurate portrayals of high school students and the nature of the high school experience. Collectively, the five high school students who comprise the Breakfast Club are detained at Shermer High School on a Saturday because of things that happened during the school week. Collectively, and individually, their situations represent exceptionally insightful depictions of the issues, problems, and stressors facing adolescents. One of the salient messages from this movie is that being able to truly understand what life is like for teenagers requires going beyond their surface characteristics and tendencies and tapping into their inner worlds and feelings about themselves and their relationships with other people.

This chapter is essentially about the lives of two students in this classic movie. Both adolescents display a public exterior designed to hide internal pain and turmoil. Allison Reynolds (also known as "The Basket Case") is portrayed by Ally Sheedy. She is silent throughout much of the movie and often hides under her coat while in the school library. Allison reveals eventually that her life at home is very bad because her parents ignore her; in fact, she is at the school on Saturday

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because she did nothing wrong and she really didn't have anything better to do. She represents students who seem invisible and feel like they are unimportant and they don't matter to the key people in her life. Allison hides her emotional pain and the reasons for it under an eccentric and quirky exterior.

Brian Johnson (also known as "The Brain") becomes the spokesperson for the group of students in the Breakfast Club. He writes the letter they are assigned to produce as part of their detention. Anthony Michael Hall portrays Brian Johnson. Brian discloses toward the end of the movie that he is actually at the school on Saturday because a flare gun was found in his locker. He had attempted to use the flare gun to take his own life. As an exceptionally high achiever, Brian was confronted with the pressure of failing to live up to perfectionistic expectations because he got a grade of F in shop class. He could not live with this grade, and according to Brian, neither could his parents.

While these two students shown in *The Breakfast Club* are fictional characters, they represent real students with real issues. Here we are focused on the fact that unless something dramatic were to happen such as a flare gun going off in a school, these students and their levels of psychological pain would likely not be detected by anyone at their school or elsewhere. Unfortunately, silent distress is often recognized after it is too late to do something about it. We know from our work on perfectionism that not only is perfectionism a risk factor for suicide (for a meta-analysis, see Smith et al., in press), but it is often implicated in suicides that occur without warning (see Flett, Hewitt, & Heisel, 2014). It is far too easy to scan the news and the Internet or the published literature in psychology or psychiatry and find accounts of the deaths without apparent warning of young people due to suicide. For instance, in the fall of 2017, we learned of the losses of 15-year-old Simon Dufour from Quebec, who took his life without warning after experiencing unrelenting bullying at school (Canadian Broadcasting Corporation News, 2017), as well as the death in Florida of 14-year-old Connor Bartlett (nwfdailynews, 2017). The account provided by Connor's father indicated that there were no warning signs or expressed symptoms of depression, while in the case of Simon, he had been experiencing the stress and distress of being bullied, but his death occurred at a time when he seemed to be doing better and several family activities had been planned.

Another tragic case account was extensively documented by Creighton, Oliffe, Lohan, and Ogrodniczuk (2017) as part of their photovoice investigation of suicide among males from rural areas. This research funded by the Movember Foundation included input from seven family members following the death of a 17-year-old adolescent male named Thomas. Thomas took his own life after being accused of being part of a group of students who were alleged to have cheated by texting during a school exam. Thomas was someone who was very popular and accomplished, and his death was not only a shock, but it seemingly was beyond comprehension given his apparent level of functioning. He revealed in his suicide note that he had experienced depression and a lack of joy for a long time but had hid this from everyone and never revealed it despite some clear opportunities to do so. We will return to Thomas and the factors implicated in his suicide in a later segment of this chapter focused on young people who project a flawless public image.

The current chapter is about two interconnected main premises that follow from acknowledging the presence of young people who suffer in silence. First, the prevalence of anxiety and depression and other mental health problems among adolescents is not only large and growing, but it is also very much underestimated; that is, we are facing a much bigger problem than most people realize. Second, many young people are hiding their problems behind a façade, and they never seek help or even confide in friends or family members. In essence, they are "flying under the radar," and the people in their lives are largely unaware of this hidden psychological pain.

This chapter examines this hidden psychological pain and the reasons for it. While our focus is primarily on depression and anxiety, it is acknowledged that secret mental health issues

can take many forms, including secret acts of intentional self-harm (see Chandler, in press) and eating behavior (e.g., bulimia). It is also likely that some of the experiences that potentiate the false self are kept hidden due to the anticipated reactions of other people (e.g., the feelings of loneliness that often accompany depression and social anxiety).

In the current chapter, we initially examine this issue from a conceptual perspective by reviewing what classic theorists have said about the nature of the hidden self and the tendency to display a false self. We then describe our research on individual differences in the tendency to present the self as perfect as a way of covering up the inner turmoil found among young people struggling with the pressure to be perfect. We also describe related research on those students who more generally hide behind a "front" or a mask as well as related research on self-concealment. We will describe research findings obtained with samples of adolescents and emerging adults. The chapter concludes with a discussion of some ways to identify students who are hiding their psychological pain and some preventive steps that can be taken to encourage students to get the help they need. First, however, we briefly consider what is known at present about the prevalence and levels of distress among adolescents.

The Prevalence of Distress Among Adolescents

Survey results indicate that educators are eager for additional mental health training in order to be able to respond effectively and assist students with mental health difficulties. Some of their eagerness is driven by the sheer volume of students who are finding it difficult to cope with anxiety and depression or related difficulties. For instance, an interview study conducted over two decades ago in Canada involved telephone assessments of 800 adolescents who were randomly sampled and ranged in age from 13 to 18 years old, and it was concluded that at least one in five participants had a diagnosable mental health condition (see Davidson & Manion, 1996). The overall picture that emerged was one of considerable stress and distress. It was found that about half of these adolescents reported feeling really stressed at least once a month or all of the time, with this proportion rising to 66% among older high school students (i.e., two out of three). Also, one in three adolescents reported feeling depressed at least once a month, with girls being much more likely to experience depression than boys (43% versus 23%). Adolescents in special education classes or who had left home were more likely to report being depressed somewhere between a few times per week to all of the time. Finally, in terms of suicidality, about one in five had suicidal thoughts, and older girls (three out of ten) were most likely to report suicide ideation (see Davidson & Manion, 1996).

More recent data gathered in the United States also paint a troubling picture. Merikangas and associates conducted a detailed analysis of the results of the National Comorbidity Survey-Adolescent Supplement (NCS-A). Data were obtained from an in-person survey of over 10,000 adolescents between the ages of 13 and 18 years old. Decisions about diagnoses were derived from a modification of a diagnostic interview developed by the World Health Organization. Overall, about two out of nine adolescents (22.2%) had a disorder with severe impairment and/or distress. Anxiety was especially prevalent; overall, almost one in three adolescents had a diagnosable anxiety disorder of varying levels of impairment. Girls were much more likely to have anxiety disorders. The median age of onset for disorder classes was 6 years for anxiety. It was 13 years for mood disorders and 15 years for substance use disorders (Merikangas et al., 2010).

An analysis of data from the annual US National Survey on Drug Use and Health suggests that rates of depression are on the rise. This study by Mojtabai, Olfson, and Han (2016) found that the rate of major depressive episode went from 8.7% in 2005 to 11.5% in 2014 (i.e., a 37% increase). An editorial published in *Pediatrics* concluded on the basis of these findings that "Depression is a deadly growing threat to our adolescents" and that "it is time to rally" to address this situation (see Glowinski &

D'Amelio, 2016). The results of recent meta-analyses suggest that mental health problems among young people are significantly on the rise. Twenge et al. (2010) documented significant increases in levels of psychopathology based on the MMPI-A responses of over 10,000 high school students between 1937 and 2002. A more recent investigation showed that levels of adolescents' depression, suicide-related outcomes, and suicide rates increased significantly between 2010 and 2015, and this was especially the case for adolescent girls (Twenge, Joiner, Rogers, & Martin, 2018). The authors linked these increases in increased time spent on new media and less time spent in in-person social interactions and exercise and sports.

Some unpublished data from a school climate survey conducted 3 years ago in a school board in Ontario, Canada, confirm that there is a substantial problem related to levels of depression and anxiety. This survey was conducted with well over 20,000 high school students, and the questionnaire items reflected input from the first author. It was found that 24% of the respondents indicated that they often or all of the time felt sad or depressed, while 43% indicated that they were nervous or anxious often or all of the time. The levels of distress were clearly more evident among adolescent girls. The responses of adolescent girls indicated that 28% reported depression and 52% reported being nervous or anxious. There were also clear indications of an unwillingness to let other people know about anxiety and depression. More than two out of five adolescents (43%) agreed or strongly agreed that they would feel like a weak person if they had to get help as a result of how they were feeling. Also, when asked whether they would hide their feelings of anxiety and depression, almost two out of three students (64%) agreed or strongly agreed that they would keep their anxiety and depression hidden from other people. Thus, the predominant and modal tendency among these young people is to hide feelings of depression and anxiety.

Other data from unpublished work we have conducted with a pilot sample of middle school and high school students attest not only to the frequency with which students hide distress, but they also attest to the burden that this can pose for young people. We collected pilot data on the nature of stress in young people prior to implementing the first phase of a resilience promotion program. Students completed a 47-item stress survey that consisted of items that were suggested by the items measured on other scales (e.g., the Inventory of High School Students' Recent Life Experiences; see Kohn & Milrose, 1993) as well as interviews conducted for this project and qualitative accounts of stressors found in the published literature. Students made four-point ratings of the extent to which each stressor was experienced over the past month. Item responses ranged from "0" (never or not usually part of my life), "1" (sometimes part of my life), 2 (very much part of my life), and 3 (always or almost always part of my life). The participants were 155 elementary students in middle school grades 7 and 8 and 193 high school students with a mean age of 14.7 years. The responses were assessed in two ways. First, we examined the top stressors based on mean score of the student responses to each stress item. In addition, we counted the number of students who rated the life stress experience as either a "2" or a "3" (i.e., very much part of my life or always or almost always part of my life).

Our analyses yielded several revealing findings. First, and foremost, levels of stress were much higher overall among the group of high school students relative to elementary school students. Second, many students experience stress due to the constant burden of hiding their emotions. Overall, 47% of the high school students reported that they had to keep their feelings hidden, and 32% of the middle school students reported that they had to keep their feelings hidden. Our other analyses established that keeping feelings hidden was among the top stressors for both groups.

The top stressors are shown in Table 19.1 for middle school and high school students. Themes that are represented include time pressures and having too many things to do at once. High school students have academic stressors such as school subjects that are too demanding and lower grades than hoped for along with a pressure to be perfect.

Table 19.1 Top stressful experiences for middle school and high school students

Middle school students
1. Having too many things to do at once
2. Not having enough time to get things done
3. Not having enough time for sleep
4. Being unhappy with how school is going
5. Being worried or uncertain about your future
6. Having to keep your feelings inside and hidden from other people
7. Having trouble speaking in front of others
8. Having lower grades than you hoped for
9. Having people who don't listen to you
10. Finding subjects at school too demanding
High school students
1. Having too many things to do at once
2. Being worried or uncertain about your future
3. Not having enough time to get things done
4. Not having enough time for sleep
5. Having to keep your feelings inside and hidden from other people
6. Having trouble doing math
7. Finding subjects at school too demanding
8. Having lower grades than you hoped for
9. Feeling like you have to be perfect
10. Being unhappy with how school is going

Note: Based on the responses of 155 middle school students and 193 high school students

As for our focus on hidden distress, it can be seen that from among the 47 items, having to hide distress was the sixth most frequent stressor for elementary school students, and it was the fifth most frequent stressor for high school students. Our results suggest that a substantial proportion of students tend to be quite preoccupied with keeping their emotions bottled up inside and hidden from other people. The self-report data suggest that this occurs among high school students at a level that is almost normative.

Given these findings and this information, perhaps the key theme for educators and mental health professionals to convey when speaking with today's youth about these statistics is that if a young person feels depressed or anxious, they are actually quite typical because it is normal to feel this way. There is great comfort that can come from normalizing these feelings and associated life experiences. We have found that there is a strong tendency for people of various ages who have signs and symptoms of anxiety or depression to believe that they are very much alone and others cannot understand what they are going through. However, the reality is actually quite different because feelings of distress are quite common and likely shared with a significant number of friends and classmates. Clearly, it is important to emphasize that anxiety and depression does not reflect a personal defect or other aspects of the self that are responsible.

Previously, in an article that emphasized the theme that many young people are "flying under the radar," Flett and Hewitt (2013) advanced the argument that the estimated prevalence rates for anxiety and depression among young people are actually underestimates. Why is this the case? Many young people have significant distress and psychological pain, but they keep this hidden from other people. As noted earlier, too often this hidden pain only becomes a focus when we learn of the death by suicide of a young person that seemingly took place without warning. A common response that people have when they hear of specific situations such as the ones outlined earlier is to perceive that subtle warning signs must have been on display but parents and teachers were inattentive, perhaps due to burnout or because they are wrapped up in their own lives and their own problems. This tendency to be judgmental (and perhaps be unforgiving of oneself for not detecting psychological pain) does not take into account that there is a subset of young people who are "perfect chameleons" in the sense that they are exceptionally good in their self-presentations and they never waver in terms of their efforts to never display or provide a sign or indication of their inner turmoil. The goal for these young people is to never be detected or discovered because being detected would only be further evidence to themselves of their inadequacies.

This chapter examines research and theory that applies to students with these self-presentational characteristics and capabilities. Our analysis in this chapter reflects several interrelated goals. Most notably, we hope to increase understanding and awareness of these students so that the themes that resonate with them can be

incorporated into preventive interventions designed to alleviate their distress and limit destructive acts directed at the self or at other people.

Conceptual Views Relevant to Hiding Distress Behind a Front

Below we consider some conceptual viewpoints of the tendency to hide problems and distress behind a façade. First, however, we describe some evidence that attests to the presence of students who are at risk yet invisible and the stress and distress that can accompany their tendency to hide stress and psychological pain.

An insightful descriptive account of these students was provided over a decade ago by one of the largest school boards in Canada. A report from the York Region District School Board was centered around their conclusion that there are three distinguishable types of students at risk (see Sangster, 2005). The three types of students were described as (1) the double jeopardy profile, (2) the invisible middle profile, and (3) the overachiever profile. The double jeopardy students are quite visible for the most part. They have a double jeopardy situation in that they have both overt academic problems and also overt behavioral problems, so they are visible to those around them. This visibility, of course, does not preclude the possibility that the degree of psychological pain experienced by these young people may be hidden to some degree. These students were described as being low in resilience and as having multiple obstacles to their success. These students were portrayed as most likely to succumb to negative peer group influence. Social approval from peers represents a form of positive reinforcement that runs counter to the negative responses and reactions they might receive from parents and educators.

The invisible middle students were described as the largest group of at-risk students. These students will include many young people who are undoubtedly "flying under the radar." These are students who were likely successful in elementary school, but they eventually develop a higher level of risk in terms of their subsequent academic challenges and behaviors, but their struggles are often not obvious and may be covert rather than overt. These students were depicted as continuing in high school but with "diminished academic expectations, future prospects, and, in some cases, self-esteem" (Sangster, 2005, p. 10). But what most defines them is a tendency to remain silent about their troubles and struggles. It was suggested in the school board report that a proportion of these students may actually experience failures and respond to these failures in ways that more closely resemble students with the double jeopardy profile but in ways that maintain their low visibility.

The third group of students with the overachiever profile are those keen students who do very well and can also take on active roles at the school and in the community. But the pressures to achieve and meet expectations combined with an excessive workload can lead to exhaustion, burnout, and distress. Clearly, these students have a very different path, but it is still a path that puts them at risk. Because these students have established a reputation for being effective and being able to handle what comes their way, it is not surprising that the school board report emphasizes that these students will also struggle in silence when they are experiencing emotional problems and other types of problems. As we will see below, when these students project an image of being flawless, this may extend to portraying a form of effortless perfection that is perhaps best reflected by the well-known phrase "never let them see you sweat." The outward appearance in these situations is designed to hide an abject sense of self.

Other illustrations of the presence of individual differences in hiding the self go beyond mere description and show through empirical research that there are significant consequences associated with this personal style. The widely known self-esteem theorist Morris Rosenberg was particularly influential in drawing attention to the tendency for some young people to put on a false front. The notion of adolescents putting on a front was introduced by Rosenberg in his seminal book *Society and the Adolescent Self-Image*. Rosenberg

(1965) described data obtained from over 5000 respondents. Individual differences in putting on a front were assessed by having adolescents respond to two questions: (1) I often find myself putting on an act to impress people; and (2) I tend to put up a front to people. Rosenberg (1965) noted that in a sample of thousands of adolescents from New York, 34% agreed with both statements, so at least one in three adolescents put on a front over 50 years ago. This percentage would likely be considerably higher today given the increases over the years in the prevalence of distress and psychological problems that have been documented.

Rosenberg (1965) noted further that if respondents agreed with both statements, they were six times more likely than adolescents who did not agree to both statements to have low self-esteem. Rosenberg observed further that it is anxiety-provoking to present this front for two reasons. First, there is tension inherent in always needing to monitor and present the self to others. Second, there is constant stress due to the possibility of messing up and letting the façade down so that the inconsistency is now on display.

Rosenberg reported additional data in a subsequent chapter on the adolescent self-image (see Rosenberg, 1985). He included a measure of putting on a false front as part of a large investigation conducted on adolescents from New York State. Rosenberg (1985) described this measure as reflecting "… the adolescent's sense of a fundamental discrepancy between the self that is set forth to others (*the presenting self*) and the self that actually exists (*the extant self*)" (p. 237). The results shown in Table 6.9 of Rosenberg's (1985) chapter showed that a greater self-reported tendency to put on a false front was associated significantly with lower levels of global self-esteem and higher levels of depressive affect and anxiety.

Rosenberg's work inspired related work by Gregory Elliott, who was one of his students. Elliott (1982) described data obtained from 2.625 children and adolescents from the Baltimore Longitudinal Study, which was conducted originally by Rosenberg and Simmons (1972). These participants were from grades 3 to 12. They completed a battery of self-report measures that included a measure of putting up a front. This measure was referred to by Elliott (1982) as a measure of "fabrication." It consisted of five items. Most of the items that tapped present a false self in general (e.g., acting nice to people you don't like, pretending to have a good time), but there were also item content focused on hiding emotion (e.g., smiling despite not really being happy). Other measures in the test battery included scales tapping self-esteem, private self-consciousness, fantasy about the self, social anxiety, and vulnerability to criticism. Statistical analyses showed that there were modest but significant associations between putting on a front and low self-esteem, fantasy, private self-consciousness, and social anxiety. Elliott (1982) showed further that the link between putting on a front and low self-esteem still remained after controlling for fantasy, self-consciousness, and social anxiety. The main focus of this work was on possible age and sex differences in levels of fabrication. Overall, age and sex differences were not found in putting on a front, but there were differences by age and sex in terms of the association between lower self-esteem and putting on a front. The general pattern was for the link between low self-esteem and putting on a front to diminish in adolescence – that is, the link between low self-esteem and false self-presentations lost its statistical significance. However, the pattern was different for boys versus girls. It was found for boys that low self-esteem and putting on a front were evident in preadolescence (8–11 year olds) but not in middle adolescence (12–14 year olds) or later adolescence (15–19 year olds). In contrast, it was found for girls that the link was evident throughout preadolescence and middle adolescence, but not later adolescence. Because the tendency to put on a front was still evident for many male and female late adolescents, the implication is that other factors play a greater role in the tendency for older adolescents to hide behind false self-presentations. Subsequent research by Elliott, Rosenberg, and Wagner (1984) linked false self-presentations with transient depersonalization, which was defined as a momentary tendency to experience a loss of

identity. Other analyses confirmed that putting on a front is associated with diminished self-consistency in both adolescent boys and girls, though the association was much stronger in adolescent boys (Elliott, 1988).

Research on various aspects of the self-consciousness construct also attests to the tendency for adolescents to hide elements of the self behind a front. Mallet and Rodriguez-Tome (1999) examined social anxiety and self-consciousness in a sample of 508 French students in grades 4–9. They completed an extended measure of self-consciousness that examined self-focused attention not only in terms of private self-consciousness focused inward and public self-consciousness focused outward but also in terms of a type "secret self-consciousness" that involves hiding aspects of the self. This dimension was assessed with items such as "I attempt to behave in a way that does not display my feelings" and "There are things about me that nobody knows except me." Examination of this subscale showed that scores on secret self-consciousness were lower on average among students in grades 8 and 9 relative to the scores for younger participants. Correlational analyses confirmed that secret self-consciousness was associated with private and public self-consciousness and with various indices of social anxiety, including measures of fear of negative evaluation and social avoidance and distress in new situations.

Self-monitoring is another personality construct that points to a difference between the real self and the self that is displayed to others. Mark Snyder conducted extensive work on self-monitoring in adults (see Snyder, 1974, 1987). High self-monitors are people who closely monitor the environment for cues and alter their behaviors to match social expectations and dictates. Low self-monitors are people who act according to their wishes and values and don't change their self-presentations to fit expectations. This work was extended by Graziano, Leone, Musser, and Lautenschlager (1987) by creating a version of the Self-Monitoring Scale for young people in middle childhood. Research with this measure has established the presence of high self-monitors among children and adolescents and suggested that there are young people who outwardly express tendencies that fit expectations rather than the private or actual self (e.g., Musser & Browne, 1991).

More recently, a new self-report measure created to assess self-stigma among children and adolescents also reflects the tendency for some children to hide aspects of themselves and for this tendency to be associated with vulnerability. This measure by Kauskik et al. (2017) includes a subscale that assesses secrecy along with other measures that directly assess self-stigma. The results from 156 children and early adolescents ranging from 8 to 12 years old who were undergoing mental health treatment showed that higher scores on the secrecy subscale were associated with self-reports of lower self-worth and greater impairment, as well as parental reports of greater impairment among their children.

Finally, the survey of 800 Canadian adolescents that was described earlier also included information about the degree to which distress and life problems were disclosed to other people. Davidson and Manion (1996) reported that of those students who experienced suicidal thoughts, about one-third of these adolescents did not report it to anyone. This tendency was especially evident in Atlantic Canada; 59% of the suicidal adolescents from this region of Canada kept their suicidal thoughts to themselves. This unwillingness to disclose extended to the experience of personal problems. Overall, about one-third of the respondents in the sample as a whole did not tell anyone about their problems. Boys were much more likely than girls to keep their problems to themselves (42% versus 22%). A tendency to keep silent about problems was also more evident among adolescents who were not born in Canada (43%).

Clearly, these converging lines of investigation demonstrate that life is not what it seems for those children and adolescents who are hiding key aspects of themselves, including their true emotions. How and why does this happen? What factors and processes contribute to this phenomenon? The next segment of our chapter seeks to address these questions through an overview of conceptual accounts that help explain why it

should be the case that many young people hide their distress behind a front. We consider theoretical accounts that focus generally on the false self or more specifically on the hidden self. Both emphasize a lack of authenticity, but we are focused primarily on those young people who are actively hiding their distress and psychological problems rather than simply not acting in a manner consistent with personal wishes or the "true self" or "real self." It is worth noting in advance that most of the theorists considered below tend to examine the nature of the self-concept and self-identity among people who are publicly misrepresenting themselves within the context of mental health and adjustment problems.

The Hidden Self and the False Self

Much of our work over the years has been informed by the sage insights of Karen Horney. Her views on hidden emotions suggest that anger and resentment contribute to the tendency to conceal distress. Horney (1945) described the neurotic tendencies experienced by many people and suggested that from an early age, children feel a sense of basic anxiety that may be accompanied by basic hostility. She suggested that neurotic tendencies can be reflected by interpersonal tendencies to move toward, move away from, and move against others, and high neuroticism involves a tendency to simultaneously seek to move toward, away from, and against others. Basic hostility reflects resentment due to a desire to direct feelings of anger toward parents but not being allowed to do so. Horney (1945) suggested that basic hostility is experienced after being mistreated by parents who are punitive or unresponsive, but this hostility often cannot be openly expressed.

Other insights are provided by accounts that focus more generally on the distinction between the false self and the real or actual self. The theme of not being true to oneself is central to conceptual accounts that seek to account for personality disorder and dysfunction. Winnicott (1960) emphasized the distinction between the true self and its role in psychological health versus the false self and its role in maladjustment. The true self reflects a focus on authenticity and not being swayed by the wishes and needs of others. Unfortunately, however, many people act according to a false self which is in place as a defensive façade. Masterson (1985, 1988) expanded on this approach by equating psychological health with a separated and individuated real self that can acknowledge the feelings and wishes of others but still maintains a sense of continuity and stability that is comfortably expressed and experienced both when alone and in the presence of other people. Masterson (1988) referred to the false self as "the internal saboteur" because it helps people cope with stress and conflict and avoid feelings of depression, but in the long run, it potentiates self-destructive behavior that limits the person's ability to live her or his life, and it results in a lack of self-esteem. In contrast, people operating according to the real self are able to handle periods of self-doubt and cope with challenges. Klein (1989) compared the views of Winnicott on the true self and Masterson on the real self and suggested that Masterson's perspective on the real self was more extensive in that it led to an integrated theory that included stipulated developmental milestones. Klein (1989) went on to illustrate through conceptual analysis and case accounts how a failure to operate according to the real self is implicated in disorders of the self involving borderline and narcissistic personality dysfunction.

Laing (1959) described the false self in his book *The Divided Self*. Laing distinguished the false self from the real self (sometimes referred to as "the secret self"). He suggested that the self that is displayed reflects a desire or a need to conform to the expectations to others. He further acknowledged that this false self could be an overly positive portrayal of the self, but it could also be an overly negative portrayal if others expect the person to conform to a socially undesirable image. Laing (1959) suggested that the overly positive portrayal could become very stereotypical and highly rigid over time. He further suggested that the person who is operating according to a false self is likely someone who is anxious and it is fear that motivates the reliance on the false self, but it is also possible that this person is angry and resentful because of a

sense of being forced to conform to others' expectations.

Hilde Bruch also emphasized the need to distinguish between the façade presented by adolescent girls with an eating disorder and their true selves. Her book *Conversations with Anorexics*, which was published posthumously, outlines her views on the nature of eating disorder within the context of some of the many young people she saw in treatment. Bruch (1988) suggested that the goal of much displayed behavior is to hide the highly negative self-view of anorexic girls behind a façade. She said that the goal of their outwardly expressed behavior is to conceal at all costs their defective self-concept, and they are very good at this concealment due to a tendency to be overcompliant to the wishes and demands of other people. For instance, she suggested that perfectionistic behavior is designed to conceal the self and is motivated by the praise and recognition that is received from parents and teachers.

Dana Jack emphasized similar themes in her classic work on silencing the self, though this work was focused on adult women rather than girls and adolescents. However, self-silencing among adults is clearly rooted in early experiences and interpersonal interactions. Jack (1991) proposed that women have a need for connection and they strive for it strenuously, but they do this by engaging in self-defeating forms of connection that involve silencing the self in order to get approval and maintain relationships. Ironically, the end result is that instead of authenticity and true intimacy, women perpetuate behaviors that result in the loss of "an active, authentic self" (p. 126). Jack also linked these tendencies with striving for perfectionistic standards, which she saw as a self-defeating quest for illusory goals that promote seeing negative outcomes as reflections of personal inadequacy rather than shared limitations, and this has the ultimate impact of limiting the self-silencing woman's authentic sense of voice.

Harter's Work on the False Self

Susan Harter has contributed substantially, both conceptually and empirically, to our current understanding of the emergence of a false self in adolescence and the nature of the false self in young people. Harter (1990) emphasized the importance of understanding the developmental trajectory of self-representations. The shift from childhood to adolescence is marked by a change in the ability to be introspective and focus inwardly on their unobservable attributes. Although these are more advanced cognitive representations, they can be easily removed from concrete behavior making it more difficult to evaluate whether they belong to the true self or the false self.

Harter, Marold, Whitesell, and Cobbs (1996) investigated what adolescents meant when considering the distinction between the true self and the false self. When describing the true self, some of the example responses adolescents mention include "the real me inside," "what I really think and feel," and "expressing your true opinion" (Harter et al., 1996). When describing the false self, they mention "being phony," "putting on an act," "not saying what you think," "expressing things you don't really believe or feel," "saying what you think others want to hear," and "changing yourself to be something that someone else wants you to be" (Harter et al., 1996). From these descriptive responses, the distinction between the true and false selves is clearly salient for most adolescents.

Harter et al. (1996) also examined the prominent motives behind the emergence of the false self. The false self was seen to reflect three possible motives: (1) clinical, a lack of validation of the true self by others; (2) social, a desire to impress other and gain social acceptance; and (3) developmental, a normal byproduct of role experimentation. It was found in their sample of 380 middle school (students in grades 6, 7, and 8) that only about 10% endorsed the developmental motives while also reporting the lowest level of false-self behavior and more knowledge of the true self and psychological health. Another 30% of the participants endorsed the clinical motives, while also reporting the highest level of false-self behavior, and less knowledge of the true self and psychological health. The remaining 60% of students endorsed socially oriented motives, and

they had an intermediate level of false-self behavior.

Harter and colleagues (1996) further examined the effects of the level of perceived support, the quality of perceived support (whether is conditional or unconditional), and the hope for future support on false-self behaviors. It was found in both a middle school sample and a high school student sample that levels of hope about future support played a key mediating role between level and quality of support from parents and peers and false-self behaviors. In other words, minimal support coupled with a conditional nature to it leads to higher levels of hopelessness for future support which, in turn, led to a devaluation and distortion of the true self. Equally, more unconditional support leads to higher levels of hopefulness for future support, which in turn leads to less false-self behaviors (Harter et al., 1996). These findings are in keeping with more recent results examining the motives underscoring false-self tendencies among adolescents from Israel. This investigation indicated that being exposed to psychological control and guilt-inducing parental behavior is associated with suppressing the true self with the father and with exhibitions of false-self behavior with both parents and peers (Goldner, Abir, & Sachar, 2017).

One of the ways that adolescents present the false self is through the selective use of verbal language. Harter and her colleagues (1998) found that three-quarters of adolescents identify a lack of voice in terms of the inability to express their opinions as one expression of the false self. A subsequent interview study with adolescents by Weir and Jose (2010) established that false-self behavior is equated with phoniness, and, according to reports, the predominant expression of the false self was a lack of voice. The adolescents also indicated that false-self behavior included hiding true emotions behind a mask or a front and there was substantial discomfort associated with negative internal experiences of emotions that were portrayed externally as positive emotions.

Harter and her colleagues (1998) explored adolescents' perceived level of voice in the different social interactions that they had in school with their teachers and peers, as well as the interactions with their parents and close friends. They sampled 307 high school boys and girls in grades 9, 10, and 11 and measured level of voice, level of support of voice, and their perceived relational self-worth in these different relational contexts.

Boys' and girls' level of voice followed the same trend where they experience the highest level of voice with their close friends, followed by same-gender classmates, and experience lowest levels of voice with peers of the opposite-gender classmates, teachers, and parents. Furthermore, Harter and her colleagues (1998) found that level of support for voice significantly predicts level of voice. Although there was no trajectory of perceived level of voice across the different grades or even between genders, analyses suggested that the more feminine the girls, the lower their perceived level of voice in interactions with their teachers and classmates compared with their parents and close friends. This clearly highlights the particular risk that adolescent girls have in the school setting as they tend to experience less opportunities to express their thoughts and opinions safely, especially because of the association between level of voice and relational self-worth (Harter et al., 1998).

Harter, Waters, and Whitesell (1997) analyzed some of the driving factors as well as the consequences associated with the lack of voice as a manifestation of false-self behavior. Some of the motivators for low level of voice that adolescents reported were a fear of embarrassment, a fear of tension of the relationships they hold, and a fear of looking too smart, as well as the perceived level of support for voice in the different social settings.

Harter, Waters, and Whitesell (1997) discussed some negative consequences of low levels of support of voice and low levels of voice such as experiences of social disconnect with others and their own self, not being able to academically perform to the best of their abilities, not developing satisfying peer relationships, or even developing self-destructive behaviors such as eating disorders. It is for this reason that teachers play a big role in facilitating opportunities for all types of students to be heard, supported, and encouraged and to grant adolescent students validation

rather than conducting the classroom in authoritarian ways where the information flow is only one way. They urged school systems to develop programs and strategies to encourage peer validation especially with the opposite gender during this tumultuous time in the adolescent life. They further suggested a few practices designed to help resolve the individual conflicts of multiple selves and aim for consolidation toward a unified self. These include engaging youth in developing autobiographies that help generate an integrated self-schema, practicing cognitive strategies that increase flexibility and adaptiveness, and spending more time in places where positive evaluations of the self are plenty and less time where negative self-evaluations are less frequent.

The initial work by Harter and colleague has set the stage for other key developments. We noted above that Weir and Jose (2010) explored the false self in adolescents by conducting interviews that yielded highly relevant themes (i.e., the lack of voice, hiding despair behind a mask). They conducted these interviews, in part, as part of the process of developing a measure called the Perception of False Self Scale (POFS) for adolescents. The POFS was explored in an initial sample of 267 adolescents from New Zealand. A subset of 195 adolescents participated in a follow-up session 10 weeks later. Analyses of scores on this measure indicated that there were no age or sex differences and levels of false-self behavior were highly consistent over time (r =.84). Other analyses showed that higher levels of false-self behavior were associated with greater anxiety and depression, both at time 1 and at the time 2 10-week follow-up. The need to consider the temporal sequence here was also underscored by results showing that both time 1 anxiety and depression predicted increases in POS scores at time 2.

A third subset of 46 adolescents from the initial sample completed Harter's measure of false-self behavior and the Silencing the Self Scale (Jack, 1991). The POS was associated robustly with lack of voice when with female and male classmates and with close friends. Strong links were also found between the POS and subscales assessing silencing the self (r's of .54 or greater). Thus, there is substantial evidence for the POS and the construct it measures in adolescents.

Collectively, the results from research on the false self in adolescents suggest that a tendency to portray a false self is quite relevant among adolescents and it is more likely among adolescents who feel a diminished sense of self-esteem and self-consistency. Levels of false-self behavior have temporal consistency and are associated with anxiety and depression, and experiences of anxiety and depression in adolescents can actually exacerbate the degree of false-self behavior. The main ways of expressing false-self behavior are through a lack of voice and self-silencing as well as by maintaining a façade that enables adolescents to hide their negative emotions.

It also seems apparent from existing case accounts and empirical investigations that when there is a discrepancy between the self that child or adolescent presents to others and their actual self or true self, the main source of the discrepancy and the reasons for it can be quite varied, so there is substantial heterogeneity among young people who are quite simply not being themselves. The differences that exist reflect distinctions among young people in terms of the nature and the content of the actual self.

We have outlined some of the various possibilities in Table 19.2. The first possibility is that false-self behavior such as hiding distress reflects an undesired negative self that they do not want other people to know about. That is, the young person is operating according to an undesired actual self that Ogilvie (1987) posited as having a

Table 19.2 Types of self in false-self behavior

Undesired self	(i.e., the negative, feared self as described by Ogilivie, 1987)
Unvalidated self	(i.e., unvalued or unrecognized self that seeks validation, according to the validation motive proposed in Dykman, 1998)
Unsupported, nonvolitional self	(i.e., the controlled self without unconditional positive regard and a lack of parental autonomy support for life decisions and goals)
Uncertain self	(i.e., an uncertain or unstable sense of self due to the lack of clear and persistent ego identity)

greater impact on well-being than an ideal self. Research has confirmed that being close to the undesired self has a greater impact on emotional experience than does the distance from the ideal self (Phillips, Silvia, & Paradise, 2007).

But for other young people, it may be the case that they have a positive identity but are conforming to the wishes and expectations of other people (e.g., parents, friends, peers) in order to gain approval and avoid shame and disapproval. They could be acting according to expectations and external demands because their actual self has not been validated by others; that is, in their experience, their true self has not been valued or perhaps even recognized by people who are self-consumed or oblivious. These individuals have unmet needs, and false-self behavior is guided by the validation-seeking motive described by Dykman (1998).

In other instances, the true self has been unsupported by significant others who instead have prescribed or dictated a self that does not reflect the adolescent's true nature. The adolescent has not been provided with the autonomy support and sense of volitional autonomy that is known to foster life satisfaction and happiness (see Deci & Ryan, 2000; Grolnick, 2002; Soenens et al., 2007). When an adolescent has "volitional autonomy," she or he is able to make decisions and choices that accord with personal desires, goals, and values. Unfortunately, many adolescents are forced or feel they are forced to make choices that reflect their sense of being controlled by other people.

However, the other type of self in Table 19.2 is quite different for other young people. When these young people operate according to a false self and hide their distress, it is a reflection of not having firmly established a clear sense of the actual self or personal identity and being highly uncertain. These young people adopt a role and portray a type of self due to having an unknown self and the identity confusion that was described so eloquently by Erikson (1968).

The above discussion describes discrete types of self in individual children and adolescents. It is important to note that multiple types of self may be underscoring the false-self behavior of many young people. That is, the young person who has a nonvolitional and uncertain self will be outwardly expressing behavior that reflects multiple issues and complex needs.

With these distinctions in mind, the next segment of this chapter extends our focus by showing that some adolescents engage in a particular form of false-self behavior that is quite extreme because it involves trying to portray the self as perfect when in public. We will see that the need to portray an image of flawlessness is often in response to a need to hide a very negative sense of self, in keeping with Bruch's (1988) observations about striving for perfection as a façade for those adolescent girls who are prone to eating disorders. This chapter then concludes with a discussion of the implications of our analysis and our recommendations.

Perfectionistic Self-Presentation

While initial research and theory on perfectionism stretching back over 25 years focused on stable individual differences in trait perfectionism, it is also important to consider how perfectionistic tendencies are expressed. Some people respond to the pressure to be perfect by not only trying to be perfect, but they also need to outwardly seem perfect by portraying the type of life that is coveted by many people. Perfectionistic self-presentation can be construed as being similar to the highly idealized self presented to others that was described by Erving Goffman (1959) in his classic work *The Presentation of Self in Everyday Life*. While trait perfectionism indicates one's disposition, perfectionistic self-presentation represents the defensive process of needing to appear perfect or to not appear imperfect to others. As conceptualized by Hewitt and associates (2003), perfectionistic self-presentation is correlated with though not redundant with trait perfectionism dimensions proposed by Hewitt and Flett (1991) such as socially prescribed perfectionism. It is possible, for instance, to distinguish two types of socially prescribed perfectionists. Some people respond to social pressures to be perfect by reacting negatively and refusing to play along. These people would have pressures to be perfect that perhaps

they resent, but they are relatively low in perfectionistic self-presentation. However, another subset of individuals are highly invested in gaining approval and maintaining their public image, so they respond to the pressure to be perfect by doing their utmost to seem as perfect as possible in public situations and, in all likelihood, avoiding situations that will put their imperfections on display. These individuals are prone to experiencing intense shame and humiliation in situations that may expose their deficiencies and mistakes.

The tendency to present oneself as perfect is motivated largely by a desire for self-protection and avoiding the anticipated negative reactions of others, but unfortunately, this strategy has many potential costs and consequences associated with it. We have focused on the tendency for perfectionistic self-presentation to be associated with objective indicators and subjective feelings of isolation and loneliness. The perfectionism social disconnection model emphasizes the tendency for people who engage in perfectionism to have unmet needs for affiliation and an increasing sense of alienation and isolation from others (see Hewitt, Flett, & Mikail, 2017; Hewitt, Flett, Sherry, & Caelian, 2006). The tenets of this model are in keeping with research with adolescents showing that low levels of self-disclosure are associated with loneliness among adolescents and a tendency to be socially rejected and perhaps even socially neglected (see Davis & Franzoi, 1986; Franzoi & Davis, 1985; Franzoi, Davis, & Vasquez-Suson, 1994).

The initial work on perfectionistic self-presentation focused on this perfectionistic style in university student and clinical samples. Hewitt et al. (2003) created the 27-item Perfectionistic Self-Presentation Scale (PSPS) to assess three facets. The three subscales are perfectionistic self-promotion (i.e., the need to appear perfect to others, ten items), the nondisplay of imperfection (i.e., the need to avoid appearing imperfect to others, ten items), and the nondisclosure of imperfection (i.e., the need to avoid disclosing imperfections to others, seven items). That is, people can try to seem perfect by highlighting and drawing attention to their perfect tendencies and outcomes, but they can also be highly defensive and try to cover up their flaws and inadequacies, and this extends to not disclosing flaws, mistakes, and imperfections to other people. This failure to disclose imperfections has profound implications in therapy and counseling contexts because a failure to disclose will undermine the positive working alliance that promotes recovery (for an extended discussion, see Hewitt et al., 2017).

This perfectionistic self-presentation can take many different forms and be relevant to various contexts. Some students may project an image of invulnerability and act as if mistakes simply don't apply to them. Others may be more debilitated in public performance situations; they may suffer from speech anxiety and will be highly avoidant and distressed when they must speak in class, and they are anticipating that their imperfections and flaws will be revealed.

There are many possible reasons why young people fall into a pattern of trying to seem perfect and avoiding the appearance of being imperfect or flawed in some way. In some instances, children and adolescents will come from a family that emphasizes the need to seem perfect, and/or they come from a culture that emphasizes the nondisclosure of negative emotions and life problems. Unfortunately, some young people may have experienced a history of emotional, sexual, or physical abuse, and perfectionistic self-presentation is driven by a sense of shame that they are experiencing despite not being responsible for the abuse they have experienced. Or in general it could be the case that a young person feels deficient, alone, and uniquely different in an undesirable way, and he or she feels the need to project an image to pretend that they have lives that are as good or better than the lives portrayed by their peers. But for others it may simply be the case that not being themselves has been rewarded, perhaps with positive attention, over the years, while for other young people, they have responded to implicit and explicit social messages that their degree of worth is conditional on being "a certain way." Given that there can be substantial differences in the factors and life experiences that can fuel perfectionistic self-presentation, it is important to remain mindful of

the heterogeneity that can exist among a group of adolescents who all seem to be perfect on the outside.

It is also important to conduct an assessment of the level of perfectionistic self-presentation that exists. Accordingly, Hewitt et al. (2011) sought to assess individual differences in this self-presentational style by creating a version of this measure that is suitable for use with children and adolescents. The Perfectionistic Self-Presentation Scale-Junior Form (PSPS-Jr) is an 18-item inventory with 3 subscales. It has eight items that tap perfectionistic self-promotion. Another six items tap the nondisplay of imperfections facet. Finally, four items assess the nondisclosure of imperfections' facet. The PSPS-Jr was administered to three samples: (1) a clinical sample of 244 adolescents with a variety of clinical diagnoses, (2) 292 high school students, and (3) 65 posttreatment adolescent cancer survivors. Analyses of the data from a subset of 121 adolescents in the clinical sample showed that all three facets of perfectionistic self-presentation were associated with depression and perfectionistic self-presentation predicted significant unique variance in depression beyond the variance attributable to trait perfectionism.

The second sample of high school students completed a multidimensional measure of psychopathy. Here it is worth noting that the perfectionistic self-promotion factor was associated with indices tapping disarming charm and grandiosity, but all three facets were linked with a reported lack of emotionality. Finally, it was shown in the sample of adolescent cancer survivors that perfectionistic self-presentation predicted unique variance in anxiety and worry/oversensitivity beyond the variance accounted for by trait perfectionism and a measure tapping the five-factor personality model. Collectively, these data suggest that perfectionistic self-presentation is detectable among adolescents in school samples and clinical samples and this personality style is associated uniquely with key indices of psychological distress.

The PSPS-Jr is being used in a growing number of investigations, and, as a result, we are getting a clearer picture of the nature of perfectionistic self-presentation, including the correlates and antecedents of this perfectionistic style. Greater perfectionistic self-presentation is associated with an insecure attachment style among adolescents (Boone, 2013; Chen et al., 2012). It has also been linked with greater parental alienation, and levels of perfectionistic self-presentation do not seem to vary according to gender or socioeconomic status (see Lyman & Luther, 2014). Those high in perfectionistic self-presentation tend to feel a sense of being an impostor. This style is the sense that not only is the person feeling self-deficient in key ways, but self-consciousness and shame are common because other people are currently aware or are about to become aware of these deficiencies. We have also found that while perfectionistic self-presenters may seem calm and invulnerable on the outside in terms of their public persona, they are more than likely suffering from chronic ruminative thoughts and brooding on the inside. Some of these thoughts are automatic ruminations about needing to be perfect (see Flett, Hewitt, Blankstein, & Gray, 1998). The cognitive aspects of perfectionistic self-presentation merit extensive consideration. In fact, our work is indicating that the association that is found between trait perfectionism and rumination in early adolescents, among others (see Flett, Coulter, Hewitt, & Nepon, 2011), is not as strong as the link between perfectionistic self-presentation and rumination.

Not surprisingly, recent research has continued to show that there are emotional consequences for those children and adolescents who are preoccupied with projecting an image of perfectionism and avoiding being seen as imperfect. Empirical work has shown that facets of perfectionistic self-presentation are associated with social anxiety in early adolescents (Flett, Coulter, & Hewitt, 2012). We used the PSPS-Jr to investigate the association between perfectionistic self-presentation and social anxiety in 88 students in grades 7 and 8. Participants completed a battery of measures that also included measures of trait perfectionism, dysfunctional attitudes about the need to be perfect, and a multifaceted measure of social anxiety that taps fear of negative evaluations (e.g., "I worry about being teased."), social

avoidance and distress in new situations (e.g., "I feel shy around kids I don't know."), and general social avoidance and distress (e.g., "I am quiet when I'm with a group of kids."). Correlational analyses confirmed that all three perfectionistic self-presentation dimensions were related to all of the social anxiety dimensions. The most revealing finding from this study was that both perfectionistic self-presentation and dysfunctional attitudes predicted a large portion of the variability in early adolescents' social anxiety when considered along with trait perfectionism (Flett, Coulter, & Hewitt, 2012; Flett, Stainton, Hewitt, Sherry, & Lacey, 2012). This suggests that school programs and interventions should focus on those attitudes and beliefs that reflect the importance of social approval in order to reduce social anxiety of students in the school setting.

More recently, Arce and Polo (2017) examined how interpersonal problems and social disconnection in adolescents mediate the relationship between perfectionistic self-presentation and depressive symptoms as posited by the perfectionism social disconnection model. In this study, social anxiety was measured as an indicator of interpersonal sensitivity at play (e.g., "I'm afraid other people will think I'm stupid." using the Multidimensional Anxiety Scale for Children (MASC) social anxiety subscale), while loneliness was measured as an indicator of social disconnection (e.g., "I feel alone." using the Loneliness and Social Dissatisfaction Questionnaire Loneliness Subscale). A sample of 289 adolescents 10–14 years of age participated in the study, including subsamples of 180 Latino youth and 48 African-American youth. Analyses established that social anxiety mediated the association between perfectionism self-presentation and loneliness, and both loneliness and social anxiety mediated the association between perfectionism self-presentation and depression (Arce & Polo, 2017). These findings suggest that the stronger the need to be perceived as perfect (perfectionistic self-presentation) enhances the fear of actions being negatively evaluated (social anxiety), which, in turn, leads to a disengagement and social isolation (loneliness) and finally results in more depressive symptoms. These results were replicated in the Latino adolescent subsample but not in the considerably smaller African-American subsample.

Other research implicates perfectionistic self-presentation in suicide potential, and this accords with case accounts of suicides without warning among young people who had been portraying themselves as high functioning and seemingly well individuals. Here it is worth revisiting the case account of Thomas that was introduced at the beginning of this chapter (see Creighton et al., 2017). One of the themes that emerged from his death was that Thomas, in part due to his success and popularity, had to live up to a public image that saw him as "the golden boy" and this image was accompanied by a great deal of pressure to conform to it. Of course, the experience of feeling sadness and no joy is very much at odds with this image, and it could foster the belief that revealing depression is simply not an option.

Empirical research has confirmed the association between perfectionistic self-presentation and suicidal tendencies. Roxborough et al. (2012) assessed levels of trait perfectionism and perfectionistic self-presentation in a clinical psychiatric outpatient sample of 158 children and adolescents. They completed the Child-Adolescent Perfectionism Scale, the PSPS-Jr, the Child-Adolescent Suicidal Potential Index, and one-item social disconnection indicator questions about bullying experiences (i.e., "Have you ever been bullied or teased by other kids?") and social hopelessness (i.e., "How often do you feel hopeless about your relationships?"). Both perfectionistic self-presentation and socially prescribed perfectionism were associated significantly with a measure of suicide potential. Roxborough et al. (2012) also reported that the association between suicide potential and the need to avoid seeming imperfect was mediated by a history of being bullied and elevated levels of interpersonal hopelessness. These data suggest that suicidal adolescents who seem perfect on the outside may have a level of psychological pain that reflects a history of adverse interpersonal experiences and a tendency to see their future interpersonal worlds as both negative and inevitable.

Perfectionistic Self-Presentation and Hiding Emotions

An unpublished study with data from early adolescents points to the association between perfectionistic self-presentation and hiding emotions. These participants completed the PSPS-Jr and a 30-item multidimensional measure of emotional awareness. Specifically, they completed the revised Emotion Awareness Questionnaire for children (EAQ-R; Rieffe, Oosterveld, Miers, Terwogt, & Ly, 2008). This inventory had six subscales in total, including two subscales that tap not hiding emotions and verbally sharing emotions. A representative reverse-coded item for not hiding emotions is "When I am upset, I try not to show it." A representative item for verbally sharing emotions is "I can easily explain to a friend how I feel inside." Other subscales on the EAQ-R are differentiating emotions (e.g., I am often confused or puzzled about what I am feeling; reverse-keyed item), bodily awareness (e.g., My body feels different when I am upset about something; reverse-coded), attending to others' emotions (e.g., It is important to know how my friends are feeling), and analyses of emotions (e.g., When I am angry or upset, I try to understand why).

The correlations between the facets of perfectionistic self-presentation and the six subscales that comprise this measure are shown in Table 19.3. Here it can be seen that the nondisclosure of imperfections facet was associated significantly with hiding emotions, $r = -.42$, and with not sharing emotions and feelings, $r = -.34$. There was also a small but significant link between nondisplay of imperfections and hiding emotions. Thus, early adolescents with a need to avoid seeming imperfect tend to hide their emotions and not share them with others.

It can also been seen in Table 19.3 that early adolescents who need to seem perfect have difficulties in identifying emotions and reduced bodily awareness of emotional arousal. Perhaps this is in part a reflection of the inherent confusion associated with trying to suppress actual emotions while projecting a lack of emotion or false positive emotions.

Below we describe how perfectionistic self-presentation relates to help-seeking. It should be noted that the characteristics and motives associated with perfectionistic self-presentation and acting in accordance with a false sense of self should in all likelihood contribute to avoidance and nondisclosure in the therapeutic setting. Indeed, clinical research has established that perfectionistic self-presentation undermines the therapeutic alliance and includes a pattern of defensiveness that undermines therapeutic progress (for an extended discussion, see Hewitt et al., 2017). While this research on the therapy process has been conducted with adults, the same associations and tendencies should be evident when young people are receiving treatment and counseling.

Negative Help-Seeking Orientation

Another significant concern is that people with a need to outwardly seem perfect should have a reduced tendency to engage in help-seeking.

Table 19.3 Correlations between perfectionistic self-presentation and emotion awareness subscales

PSPS-Jr measures			
Measures	Promote	Nondisplay	Nondisclosure
EAQ-R subscales			
Differentiating emotions	−.39***	−.36***	−.37***
Verbal sharing of emotions	−.06	−.14	−.34***
Not hiding emotions	−.10	−.23*	−.42***
Bodily awareness	−.28**	−.42***	−.32**
Attending to emotions	−.09	.06	−.04
Analyses of emotions	−.20	−.28**	−.14

*p <.05; **p <.01; *** p <.001

Students who are preoccupied with needing to seem perfect may be very unwilling to seek help when it is required because the act of seeking help could be regarded as an open admission of failure, and in extreme instances, seeking help can be seen as a public admission of being imperfect to the point of need assistance for mental health issues (for a related discussion, see Nadler, 1983). Thus, teachers and counselors who are in a position to provide help may never realize that help is needed when students are good at maintaining the façade.

Unpublished research based on the doctoral work of Tessa DeRosa has examined the association that perfectionistic self-presentation has with help-seeking orientations in 132 high school students (DeRosa, Flett, & Hewitt, 2018). This study had senior high school students' complete measures of trait perfectionism and perfectionistic self-presentation. Trait perfectionism was assessed with the Child-Adolescent Perfectionism Scale (Flett et al., 2016), while perfectionistic self-presentation was assessed with the original version of the PSPS (Hewitt et al., 2003). In addition, participants complete the Adolescent Depressive Experiences Questionnaire (Fichman et al., 1994), the Self-Concealment Scale (Larson & Chastain, 1990), the CES-D depression scale (Radloff, 1977), and a measure of help-seeking orientation designed to address the willingness of children and adolescents to seek help for psychological problems from adults in the school setting (see Garland & Zigler, 1994). The initial research with this measure showed that students with elevated depression had a more negative help-seeking orientation. One of the main findings that emerged from our investigation is that the component of perfectionistic self-presentation that taps nondisclosure was associated with a more negative help-seeking orientation among males and females. As expected, a tendency to engage in self-concealment was associated with perfectionistic self-presentation. Self-criticism was also linked with self-concealment. Regression analyses showed that the nondisclosure facet predicted unique variance in self-concealment after taking into account the variance attributable to trait perfectionism, dependency, and self-criticism. It can be inferred from these data that perfectionistic students who are invested in not revealing their imperfections will be particularly unwilling and unlikely to disclose their distress to people in school settings who are in a position to help them.

Implications and Recommendations for Prevention and Intervention

Our overview of conceptual views and available empirical evidence leads to some clear conclusions. First, mental health problems among young people are widespread and quite likely underestimated due to the mental health problems that are kept hidden. Second, while there are some identifiable factors that help us to predict who is most likely to hide depression and other forms of distress from other people (e.g., being perfectionistic, fearing negative evaluation, being characterized by self-stigma), some young people are exceptional at hiding distress, and it is unlikely that they will seek help even when it is readily available and easily accessed. Third, there is a very substantial proportion of young people who hide their distress; thus, when in a classroom where the students mostly seem to be high functioning, appearances are deceiving because there will likely be many students who are not coping well with the considerable stressors and evaluative pressures they are facing.

So what implications follow from these realizations and conclusions? First, and foremost, given that it is unlikely that some students will ever seek help, it is clear that preventive efforts are essential. It was concluded in our earlier paper (see Flett & Hewitt, 2013) that a strong case could be made for incorporating resilience training into the daily school curriculum and starting this program in the elementary school grades. While this program would involve significant resources and an uncommon level of commitment and proactive intervention if it were offered universally, the savings in terms of both financial costs and human costs would be enormous.

Second, given that a significant proportion of students are indeed flying under the radar, it is

important that school personnel receive training focused explicitly on how to detect and assist students who are hiding psychological pain. Possible warning signs that students are hiding distress include discernible changes in functioning and performance at school with apparent changes in emotion and excessive suppression so that no visible signs of emotion when the experience of negative emotions is quite reasonable. Students who seem to be functioning but isolated from others and avoidant are also quite possibly hiding distress. Another key indicator is the expression of procrastination in school settings. Procrastination can be conceptualized as a form of avoidance behavior, but procrastination is typically accompanied by psychological distress as well as ruminative brooding and frequent thoughts about needing to be perfect and falling short of standards (see Flett, Haghbin, & Pychyl, 2016; Flett, Stainton, Hewitt, Sherry, & Lacey, 2012). Students who procrastinate tend to experience frequent automatic thoughts about their procrastination, and this is likely accompanied by hidden distress and other forms of self-presentation given the established link between procrastination-related rumination and feelings of being an imposter (see Flett, Stainton, Hewitt, Sherry, & Lacey, 2012).

Finally, given that some students are actually quite desperate and determined to hide their psychological campaigns, there is the potential for school programs focused on raising mental health awareness to "backfire" if they heighten general awareness of mental health problems among students without adding components that will either alleviate the distress being hidden by some students or will increase the likelihood that they will now disclose distress that otherwise would have been kept hidden. Of course, it is natural for people who feel like they are now under greater scrutiny to become even more vigilant in terms of hiding their distress and avoiding situations and circumstances where they may be discovered. Here we only need to imagine how the person who feels like an imposter reacts when he or she anticipates that they are going to be discovered.

What messages and approaches should be particularly effective in encouraging students who are hiding significant distress and perhaps some degree of suicide ideation? Below we outline some specific themes and approaches that should be incorporated into preventive programs. Our recommendations reflect five categories: (1) heightening awareness, (2) normalizing distress and help-seeking, (3) tailoring the message, (4) putting mechanisms in play to seek help with hope for change, and (5) providing adult and age-appropriate models who demonstrate distress disclosure and help-seeking.

Heightening Awareness: Key Themes

It is quite possible that significant personal comfort will come for students who are made aware of the widespread prevalence of anxiety and depression and the inherent stressfulness associated with life as a child or adolescent, including the natural feelings that result from transitions such as the transition to high school. Ideally, discussions of the prevalence of stress and distress would be accompanied explicitly by the message that stress and distress are not a reflection of some personal defect or deficiency.

The other main themes that should be addressed simultaneously are the need to not engage in social comparison and the need to develop informational literacy from a critical perspective There is now extensive evidence showing that young people who engage in excessive Internet use, including Facebook use, are more prone to anxiety and depression. This conclusion was reached following a recent highly informative meta-analysis on this topic (see Marino, Gini, Vieno, & Spada, 2018). One of the most important pieces of information that needs to be shared with students is that people present idealized depictions of themselves and their lives on the Internet, so any attempt to engage in social comparison of lives will translate into extensive ego-involved exposure to negative social comparison information, especially if these idealized portrayals are believed and uncritically accepted. The tendency to present a false front online has been called "the Facebook self," and, not surprisingly, those who misrepresent themselves tend to

be frequent users with low self-esteem (Gil-Or, Levi-Belz, & Turel, 2015). It needs to be recognized that social comparison information obtained in general, but especially online, has limited to no information value and is not a useful guide for self-evaluation. Clearly, resilience and self-regulation are more likely among those students who have learned to apply critical information literacy to social media.

Normalizing Distress and Normalizing Help-Seeking

Information about the prevalence of stress and distress sets the stage for emphasizing the key theme that it is normal and typical to experience feelings of anxiety, depression, and stress. These feelings along with an emphasis on identify uncertainty can be framed as part of the typical developmental experience.

Once again the fact that a substantial number of young people are hiding their distress can be incorporated by emphasizing that everyone has their own personal story, and just as it is the case that "you can't judge a book by its cover," judgments of the self and judgments of other people should be kept to a minimum since people can have very challenging life histories that will not be apparent to other people.

Key lessons such as "no one is perfect" yet many people try to seem perfect should resonate with young people who are portraying a false self and a highly idealized self-presentation. Open discussions of the costs and consequences of trying to be perfect can be framed in the context of the widespread prevalence of stress and distress.

It is important when normalizing distress to still reiterate that normalizing does not mean that because it is normal, help-seeking is not required. Research on normalizing the hidden depression among men has detected a tendency to use the concept of normalization as a justification for not seeking help (see Rochlen et al., 2010). It needs to be emphasized that while quite normal, distress and stress that impair functioning and life satisfaction should be addressed if stress or distress persists.

Tailoring the Message

Research on the experience of stigma and the normalization of distress suggests that the wording and the content of messages are important. For instance, people find it less personally threatening to say "I have depression" instead of "I am depressed." Research on depression among men suggests that attributions should also be conveyed to counter an emphasis on self-blame. When depression is described, a more positive response and less personal threat are evident when depression is conceptualized as highly treatable and due to a combination of physical functioning or vulnerability, personal experiences and characteristics, but also the situational forces (for a discussion, see Epstein et al., 2010).

Fostering Hope by Providing Agency and Pathways

The most widely cited work on the psychology of hope is the theory and research conducted by C. R. Snyder. This work is based on the premise that hope consists of providing people the will and the ways in order to be hopeful. Snyder conceptualized will as the sense of agency that emerges when someone truly believes with a sense of conviction that positive outcomes are possible and will happen (see Snyder, 1995, 2000; Snyder et al., 1991, 1997). He conceptualized "the ways" as hope also requiring specific pathways, that is, skills, strategies, processes, and mechanisms that give people ways to achieve their hopes. This emphasis on both agency and pathways has great potential for promoting the tendency for young people to disclose stress and seek help. It is obviously more likely that concealed feelings of psychological pain will be revealed and help will be sought if the young person hears and believes the message that getting help will indeed help. But it is also important to find ways to make it easier to reveal feelings to others. This can be addressed in broad ways by promoting a positive school climate that promotes interconnectedness and social interaction, but pathways are needed at a more personal level.

One thing we suggest is that a part of regular meetings with school personnel (teachers or counselors) that students participate in a "stress checkup" one-on-one interview that is designed primarily to get students talking about themselves and what they are dealing with. This "get them talking" interview could be framed initially to have focus on the problems and stressors that all students face and to acknowledge the stress and pressures that students face, but then there would be an opportunity to discuss problems and stressors that are specific to the student. While there is no doubt that there would be significant complications and complications inherent in actually conducting this type of stress checkup, it would certainly give an opportunity to the student who is hiding distress to reveal this distress. This would provide a mechanism that would allow students to reveal feelings of anxiety and depression, and it would be something that everyone does, so there would be no reason to feel singled out.

Modeling

It is well-established that the basic tenets of social learning theory still apply and children and adolescents will tend to imitate what they see, especially when behaviors are exhibited by powerful and influential models (for a summary, see Bandura, 1986). It is even the case that young people will imitate perfectionistic standards by taking on the exacting standards displayed by adult models (for a discussion, see Flett, Hewitt, Oliver, & Macdonald, 2002). This suggests that interventions that include descriptions of young people who revealed their distress to someone else and sought help rather than kept it to themselves should be effective in general.

On a related note, given the power of role models, there is substantial merit in having parents and perhaps even teachers hold open discussions that include an emphasis on times when they had an upsetting personal problem during their development that caused them upset and they responded by telling someone else about the problems they were experiencing as a younger person. These revelations should normalize the seeking of help and encourage similar tendencies by children and adolescents. This type of discussion can also reinforce themes that reflect the growth mind-set – that is, everyone has struggles and experiences setbacks, but the key is how these setbacks are responded to as opportunities for learning, development, and personal growth.

The importance of discussing past problems was underscored poignantly by Kevin, the father of Thomas, who was described earlier (see Creighton et al., 2017). Kevin suggested in retrospect that he and his wife really only focused on describing the good things that happen in their life in an idealized way and he wished that they had described the thoughts and feelings and struggles that they experienced when they were 15 or 16 years old, so that this would provide encouragement to Thomas and his sister Amelia to speak out about their own difficulties. Amelia had experienced some feelings of depression which she had revealed to her parents and Thomas was aware of this, so he could have at least told his sister about his own feelings of depression. It was suggested that perhaps he did not due to the tendency in rural communities to link masculinity with self-reliance (Creighton et al., 2017).

Conclusion

Our goal in writing this chapter was to provide a comprehensive and contemporary analysis of the tendency for young people to hide psychological distress and what can be done to address it. The work summarized here supports the distinction proposed in the self-monitoring literature between public appearances and private realities and the general notion that there is often a substantial distinction between the self that is presented to others and the actual self. Hopefully, it should be evident from our discussion and analysis that the topic of disguised distress is a complex one and the substantial presence of disguised distress poses several complexities for the detection and treatment of mental health problems in children and adolescents.

If we consider the themes in this chapter in terms of what it means for individual schools, it can be assumed that in a typical school, there will be widespread problems with anxiety and depression, but only a modest proportion of the students who need assistance will be known to school personnel and to their fellow students. It can safely be concluded on the basis of the information provided above that mental health issues are likely more widespread and prevalent than is realized and that mental health services would be far beyond capacity if every student who needed help actually sought it out. This reality points to the urgent need for prevention so that the need for intervention is lessened. Also, we have been working from the premise that there is a subset of students who are currently hiding distress, but they can develop the capability to seek help and then will actually seek help. It is also likely the case that some students who are hiding distress will never seek help, so preventive steps are needed to enhance their ability to cope with and manage their distress.

We will conclude by noting that there is an urgent need for programmatic research on hidden distress and the factors that contribute to putting on a front in children and adolescents. Great insights should emerge from this research, and this information can be used to further enhance preventive programs for children and adolescents.

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20 Resilience to Interpersonal Stress: Why Mattering Matters When Building the Foundation of Mentally Healthy Schools

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Abstract

The current chapter is about the role of interpersonal factors and processes in the mental health problems of children and adolescents. It is dedicated to those caring adults who make a critical difference in young people's lives. It is now generally accepted that one of the most potent factors in the development of resilience among children and adolescents is having close and ongoing contact and interaction with a caring adult. Of course, for many young people, these caring adults are the teachers at school who have taken a special interest in them. The central premise of this chapter is that interpersonal vulnerability factors play a key and debilitating role in potentiating various forms of psychological distress among young people, but in keeping with the role played by caring adults, interpersonal factors and processes such as developing feelings of mattering to others can also protect children and adolescents.

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Resilience to Interpersonal Stress

Why Mattering Matters When Building the Foundation of Mentally Healthy Schools

A careful reading of anyone's biography or autobiography will invariably reveal the role that other people play in someone's life story. Consider, for instance, the life story of author J.D. Vance. Vance came into prominence in 2016 with the publication of his autobiography *Hillbilly Elegy: A Memoir of a Family and Culture in Crisis.* This book details Vance's challenging childhood as he coped with his parents' divorce as well as the chaos in his life due to his mother's chronic battles with addiction and Vance's stress, uncertainty, and struggles to adapt to his mother getting married five times. It also documents the economic decline of his community and the problems being faced by living in his hometown in Middleton, Ohio. This book clearly illustrates how interpersonal circumstances confer a great risk on the developing child. But it also demonstrates how people can play a protective role that is essential during these times of trouble and great challenge. The most poignant aspect of this book is the love that Vance expresses for his grandmother, Mamaw, who he credits with changing his life and encouraging his subsequent achievements. The key turning point for Vance was when his grandmother insisted that enough

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was enough, and he could live with her in her house. This provided a safe haven and sense of permanence that was lacking. Mamaw then carefully guided Vance's development, including issuing threats if he continued to hang out with undesirable peers. Vance (2016) summarized his grandmother's role by stating that "Thanks to Mamaw, I never saw only the worst of what our community offered, and I believe that saved me. There was always a safe place and a loving embrace if I ever needed it" (Vance, 2016, p. 149).

The current chapter is about the role of interpersonal factors and processes in the mental health problems of children and adolescents. It is dedicated to those caring adults who make a critical difference in young people's lives. It is now generally accepted that one of the most potent factors in the development of resilience among children and adolescents is having close and ongoing contact and interaction with a caring adult (see Masten & Garmezy, 1990; Werner & Smith, 1982). Of course, for many young people, these caring adults are the teachers at school who have taken a special interest in them.

The central premise of this chapter is that interpersonal vulnerability factors play a key and debilitating role in potentiating various forms of psychological distress among young people, but in keeping with the role played by caring adults, interpersonal factors and processes can also protect children and adolescents. This theme is explored in terms of considering the resilience construct from a domain-specific approach that includes interpersonal resilience. It is suggested that children and adolescents are well-served by developing a form of interpersonal resilience that protects them from adverse social experiences and encounters that could otherwise trigger bouts of depression and anxiety. A basic premise here is that students who may be academically resilient are not necessarily interpersonally resilient, and it is essential for young people to develop the ability to bounce back and cope with interpersonal problems, pressures, and stressors. This approach recognizes the need for students to develop psychosocial competencies and the ability to engage in adaptive self-regulation when feelings of stress and distress are rooted in their interpersonal experiences and social interactions.

A primary focus of this chapter is that a key element of interpersonal resilience and a foundational aspect of the mentally healthy school is the feeling of being important, valued, and seen positively by other people, as was the case with J.D. Vance and his Mamaw. Accordingly, the current chapter provides an overview of research on individual differences in mattering as described initially by Rosenberg and McCullough (1981). Mattering is an essential factor that is central to well-being, personal development, and achievement, but the concept of mattering itself has been severely neglected by researchers and by counselors and clinicians. Mattering does indeed matter, but it has not received the widespread attention and recognition it deserves, especially given Rosenberg and McCullough's (1981) assertion that mattering is important both for the individual and for society. It is argued that establishing a sense of mattering is essential for students and their teachers to thrive and flourish. A sense of mattering is central to the school's psychosocial environment, and the school is a logical place to promote feelings of mattering as part of a broad focus on developing interpersonal resilience and promoting social cohesion.

Research and theory on mattering in children and adolescents is summarized below, and various ways of assessing and understanding individual differences in mattering are described. It is then demonstrated that feelings of not mattering contribute to anxiety, depression, and suicidal tendencies among young people. The chapter concludes with a summary of intervention studies and proposed steps that can be taken in schools and in communities to promote mattering among children and adolescents.

A key point underscored in this chapter is that mattering at school is conceptually and empirically related to a sense of school belongingness, but mattering has key elements that distinguish it from school belongingness. Discussions of student mental health and mentally healthy schools readily acknowledge the role of belongingness and establishing connections with other people in

student health and well-being (see, for instance, Short, 2016), but mattering is just as important, if not more important. Moreover, it is not redundant with belongingness. Indeed, the child or adolescent who has a joint sense of school belongingness and school mattering has a dual form of protection that confirms advantages not evident among students who have only a sense of school belongingness or only a sense of mattering at school, or neither of these factors.

Stress from an Interpersonal Perspective

The search continues for factors that contribute to the experience, expression, and persistence of distress in children and adolescents. This search is fuelled by mounting evidence of the high prevalence of anxiety and depressive disorders among young people. New empirical evidence of the high prevalence of anxiety and depression would likely not come as a surprise to experienced educators; instead it would be seen as corroboration for what is actually taking place in schools. Principals, vice principals, and teachers are typically able to provide many anecdotal accounts of the mental health problems that their students have experienced. Indeed, it is not uncommon for educators to spend a significant proportion of their days at school attempting to help address the mental health problems experienced by their students.

Any attempt to explain or account for depression and anxiety in children and adolescents would be missing a key element if no attempt was ever made to consider vulnerability to distress from an interpersonal perspective. Emotional and behavioral problems that warrant the proverbial trip to the principal's office are often rooted in social interactions between the child or adolescent visiting the principal's office and other people in the school that were far from optimal.

When attempts are made to account for why emotional problems are so evident among young people, it is not uncommon for explanations to focus on the stress being experienced by children and adolescents. The stress survey conducted annually by the American Psychological Association typically yields findings indicating that there are too many people in general in the United States who are dealing with intense and chronic stress. New insights emerged in 2014 when the results for 2013 were reported separately for adolescents as the question was asked "Are Teens Adopting Adults Stress Habits?" (see American Psychological Association, 2014). The Stress in America survey was administered to a representative sample of almost 2000 adults and over 1000 adolescents between the ages of 13 and 17 years old. The results showed that the adolescent respondents, as a whole, reported a level of stress during the school year that far exceeded what they believed to be healthy. Moreover, their overall levels of stress were substantially greater than the levels of stress found among adults. It was found that the levels of stress were much higher for adolescent girls than boys, and girls were substantially more likely to indicate that their stress impacts their happiness a great deal or a lot. Overall, about one in three adolescents reported a level of stress that left them feeling depressed, wanting to cry, and it left them feeling fatigued. Perhaps most troubling was the finding that only 16% of adolescents felt their stress was decreasing, while 31% reported that their stress levels had increased in the past year, and 34% were convinced their stress levels would increase in the coming year. The responses to other questions led to the conclusion that adolescents are uncertain about stress management techniques and are largely unaware of the physiological impact of stress; unfortunately, this is quite similar to the lack of awareness among most adults. Of course, these data were obtained in 2013 and likely now underestimate the stress currently experienced since the information was gathered before the turbulent political times and uncertainties that began in 2017 in the United States.

When we shift to a person-focused emphasis on the individual adolescent, it becomes quite apparent that there is a potential for certain young people to be burdened with an incredible amount of stress. Some stress may be due to the impact of major life events and adversities that they may be currently experiencing or experienced at a

relatively young age. Some stressors and strains are frequent, typical, and common in that they are experienced to some degree by most young people. However, some young people also must deal with unique stressors in their lives such as being victimized and rejected by peers (see Platt, Kadosh, & Lau, 2013) or enduring profound disruptions in their family and support networks as a result of events such as parental divorce or the death of a parent (see Sandler et al., 2010; Sigal, Wolchik, Tein, & Sandler, 2012). Here, we must not lose sight of the fact that a significant proportion of young people have endured one or more forms of maltreatment, including physical, sexual, or emotional abuse. Unfortunately, it is a reality that many young people must endure very challenging life contexts dominated by the actions of other people, and this can result in chronic exposure to situations that cause hurt and social pain. The child or adolescent who must endure maltreatment is not only traumatized, she or he is also impacted at a deep level in terms of the influence that maltreatment has on personal identity and the sense of self-worth.

Analyses of the stress experience for children and adolescents remind us that there are also more minor daily stressors with an interpersonal basis that need to be taken into account. Daily events have a constant and chronic impact on health and well-being, and those events and occurrences that have an interpersonal basis are troubling, in part, because they often trigger ruminative brooding and reanalysis of what took place. Research on the destructiveness of daily interpersonal stressors is summarized below in the section of daily life hassles.

Finally, a large proportion of students are undergoing a constant pressure to meet perfectionistic expectations. This pressure is often seen as outside the self and takes the form of socially prescribed perfectionism as students seek the approval, recognition, and respect of significant others (for descriptions, see Hewitt & Flett, 1991; Hewitt, Flett, & Mikail, 2017). The relentless pressure experienced by students who are faced with high expectations has been documented via research conducted by Suniya Luthar and her associates on adolescents from more affluent families. Pressure stems from parental expectations, parental criticism, personal expectations, and the competitive pressures emanating from equally driven peers, and it gets expressed in terms of elevated rates of distress, substance use, and exhibitionistic narcissism (see Coren & Luthar, 2014; Luthar & Barkin, 2012; Luthar, Barkin, & Crossman, 2013 Luthar & Becker, 2002; Lyman & Luther, 2014). Recent qualitative studies of the student's experience suggest that these adolescents are exposed chronically to school environments that, in essence, are pressure cookers. Students face extensive pressures to perform within the context of a narrow definition of what constitutes success, along with peer competition pressures and conflict due to discrepancies between personal goals and parental expectations (see Galloway & Conner, 2015; Spencer, Walsh, Liang, Mousseau, & Lund, 2018).

While there are many types of stress experienced by young people, the focus in the current chapter is on interpersonal stress. This emphasis on the interpersonal side of stress is due to various factors. First, it has been documented in the research literature that interpersonal stress is perhaps the most debilitating type of stress. Relevant research is described below. Second, the current chapter focuses on interpersonal stress in order to underscore the need for prevention and intervention programs to include an explicit focus on developing resilience and adaptive forms of self-regulation in response to interpersonal stress. Third, interpersonal stress is relevant because many of the vulnerabilities that young people have are vulnerabilities with an interpersonal basis. For instance, the child with an insecure attachment style or high level of dependency, who experiences an interpersonal loss or rejection, should be deeply influenced by this event. Finally, on a related note, this emphasis on interpersonal stress is warranted given that the emotional and behavioral problems of young people are often triggered, or exacerbated, by adverse interpersonal experiences. Social mistreatment that young people endure comes in various forms (e.g., bullying, interpersonal conflict, rejection, humiliation, social exclusion). Interpersonal

stressors and setbacks exact a very large toll and can potentiate extreme acts of harming oneself or directing harm at other people.

The next segment of this chapter contains a brief overview of research on the interpersonal side of stress in young people. Much of this section focuses on daily interpersonal hassles. The analysis below also considers the tendency for some people to act in ways that generate interpersonal stress in their lives. However, we begin by considering some research on the impact of negative social interactions.

Stress as Negative Social Interaction

A very potent form of stress is the stress that stems from adverse social interactions with other people. It is now widely accepted that negative social interactions have a substantial negative impact on emotional reactions and thought processes, especially when the negative social interaction involves a conflict with a significant other. Numerous studies have established a link between negative social interactions and psychological distress (e.g., Bolger, DeLongis, Kessler, & Schilling, 1989; Lakey, Tardiff, & Drew, 1994; Pagel, Erdly, & Becker, 1987; Rautkis, Koeske, & Tereshko, 1995; Rook, 1984). Some convincing evidence was provided by Bolger et al. (1989). They had students complete a daily diary of events and mood ratings for 6 weeks. Detailed analyses revealed that interpersonal conflicts were associated with the greatest upset, and this type of stress accounted for much of the variance in daily mood ratings. Other research established that the experience of negative social interactions had a greater impact on people than the positive impact of social support (Bolger et al., 1989; Rook, 1984; Ruehlman & Wolchik, 1988).

Not surprisingly, negative social interactions are central to the stress experienced by adolescents, so it follows that stress management programs and resilience promotion efforts need to address interpersonal stress. The negative social interactions experienced by adolescents often involve negative interactions with their peers. Research has established that depressed youngsters have fewer and less satisfying contacts with their peers (Brendgen, Vitaro, Turgeon, & Poulin, 2002), who often reject them for various reasons, including the fact that they may not be pleasant or rewarding to be around. Of course, when viewed from a sequential perspective, these negative peer responses can enhance feelings of social isolation and loneliness while further intensifying the negative self-image and low sense of self-worth already in place. This sequence is very much in line with Coyne's (1976) social interaction model of depression. Negative social exchanges with peers have been linked with adolescent suicide ideation (Bertera, 2007), and longitudinal research has shown that the negative social interactions experienced by adolescents predict their internalizing problems when they are emerging adults (Laceulle, Veenstra, Vollebergh, & Ormel, in press).

Brendgen and associates (2009) conducted an informative study that provided insights into how and why certain young people are especially sensitive to stress. They assessed 336 twin pairs in kindergarten to consider the gene-environment interplay and how it relates to peer rejection and depressive behavior. Analyses revealed that a genetic predisposition for depression is related to an elevated risk of peer rejection. But evidence was also found suggesting that peer rejection could elicit depressive behavior and tendencies even among children who did not have a genetic predisposition. Brendgen and her colleagues (2009) concluded that their results "emphasize the importance of teaching social interactional skills that promote positive peer relations in all children to help prevent the development of depressive behaviour at a young age" (p. 1015).

Negative interactions can also reflect troubled relationships with parents. Lee, Hankin, and Mermelstein (2010) conducted a longitudinal investigation across three timepoints with 350 adolescents in grades 6 through 10. The measures included scales tapping perceived social competence, negative interactions with parents and peers, negative cognitive styles, and depressive symptoms. The results reported for the negative social interaction variables focused on negative interactions with parents and with peers as

assessed at the second timepoint. The correlational results showed that negative interactions with both parents and peers were associated with elevated levels of depression at Time 1 and at Time 3, with the negative interactions with parents having a stronger association with depression. The associations between depression and negative peer interactions were also significant, but not as robust. Multivariate analyses showed further that negative interactions with parents mediated the association that was found between lower levels of perceived social competence and depressive symptoms. Lee et al. (2010) went on to discuss the need for interventions focused on limiting negative social interactions in general but especially negative interactions involving parents.

While our focus is on the experience of psychological distress, the role of negative social experiences in physical health should not be ignored. Negative social interactions have been implicated in the experience of stress-related inflammation among adolescents (Fuligni et al., 2009), and there is evidence linking harsh family climates with stress inflammation (Miller & Chen, 2010). Fortunately, more recent evidence suggests that daily positive affect can play a protective role during adolescence (Chiang et al., 2015).

Daily Hassles

There is also a social element to the daily stressors experienced by children and adolescents. Research and theory on the role of daily stress in the form of life hassles has been a central theme in the stress literature for several decades. The initial impetus for this work was provided by Kanner, Coyne, Schaefer, and Lazarus (1981). They developed the Hassles Scale for adults. Daily life hassles were conceptualized as "... the irritating, frustrating, distressing demands that to some degree characterize everyday transactions with the environment" (Kanner et al., 1981, p. 3). Thus, hassles involve a variety of minor, chronic difficulties. Subsequent research established that daily hassles as a form of stress are associated with psychological distress, and there is extensive evidence suggesting that when daily hassles and major life stress are compared, it is typically the case that daily hassles have a stronger link with maladjustment (e.g., DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Jandorf, Deblinger, Neale, & Stone, 1986; Kanner et al., 1981; Monroe, 1983; Wolf, Elston, & Kissling, 1989). It is generally accepted that the greater impact of these daily hassles is due primarily to cumulative daily influence of these more minor stressors.

Daily hassles also represent a major form of stress for adolescents, and research has established that both daily hassles and major life events' stress contribute to adjustment difficulties in adolescents (Rowlison & Felner, 1988). Several measures have been developed to reflect the relevant hassles experienced by young people including a measure called the Children's Hassles Scale (Kanner, Feldman, Weinberger, & Ford, 1987). This scale yields an overall hassles score, and elevated scores have been linked with elevated anxiety and depression in children and adolescents (Hewitt et al., 2002; Kanner et al., 1987). Hewitt et al. (2002) demonstrated that the items on this inventory could be classified into social hassles and achievement-related hassles, and both types of stress were associated with anxiety and depression in children and adolescents.

Ames and associates (2005) developed another measure designed to assess minor stressors called the Adolescent Minor Stress Inventory (AMSI). The AMSI was developed so that it did not assess school or classroom-based stressors. The scale was administered by mail to 720 adolescents who ranged in age from 13 to 17 years old. Items were written to assess seven themes, including school performance and education stress, as well as three themes that reflected interpersonal stress (i.e., social functioning in romantic and non-romantic relationships, social confidence, and family functioning). Not surprisingly, the interpersonal focus was clearly evident when a factor analysis of item responses to the AMSI was performed. The five factors that emerged in order were performance stress (e.g., I did not have enough time to finish things. I was interrupted

while I was working), relationship stress (e.g., I was ignored. My friends left me out of an activity), education stress (e.g., I had trouble writing. I had to speak in public or in front of others), financial stress (e.g., I did not have enough money for the things I needed. I had too many expenses), and family stress (e.g., I argued with my parents or guardian. My parents or guardian did not like my friend). The relevance of these factors was demonstrated when AMSI scores were found to be associated robustly with state anxiety for adolescent girls (r = .52) and adolescent boys (r = .53).

Subsequent research with the AMSI has highlighted the relevance of relationship stress in outcomes that extend beyond psychological distress. A study of 92 teens who appeared in truancy court examined the role of common stressors in the perpetration of teen dating violence. The focus here was on relationship stressors (e.g., A friend I trusted let me down. I was ignored). Analyses showed that relationship stressors assessed on the AMSI contributed to the prediction of teen dating violence with both past stressors and current stressors being uniquely predictive (Rosenfield, Jouriles, Mueller, & McDonald, 2013). Another investigation with the AMSI examined perceived hassles and disordered eating in adolescent girls and boys (Salafia & Lemer, 2012). Girls reported greater levels of stress across all of the stress categories assessed by the AMSI. It was found for girls and boys that relationship and family stress was associated with body dissatisfaction, and it was the case for girls, but not boys, that body dissatisfaction was linked with both dieting and bulimic symptoms.

Wright, Creed, and Zimmer-Gembeck (2010) also developed a daily hassles scale for adolescents. Item content was based on analysis of existing measures, as well as the authors' experiences with working with adolescents, and a focus group with three students. The scale that was ultimately created had been based on a large item pool, but it was eventually reduced to 14 items through ratings and analyses of item responses. These 14 items reflected two factors – a parent hassle subscale (e.g., parents being strict, parents not listening to my opinion) and another subscale that tapped hassles involving friends and others as well as more general concerns (e.g., being bullied or teased, people not treating me with respect, feeling unsafe in the community). The salience of interpersonal hassles is reflected by the fact that 11 out of the 14 items in the final version had some reference to other people. The relevance of this measure was shown clearly in the third study conducted by Wright et al. (2010). They reported based on the results for a sample of 236 adolescents that both the daily hassles involving parent subscale and the daily hassles involving friend and other subscale were associated with depression, anxiety, and reduced life satisfaction.

My colleague Paul Kohn at York University developed the most widely used measure of adolescent hassles. Kohn and Milrose (1993) created a measure known as the Inventory of High School Students' Recent Life Experiences. Kohn and Milrose (1993) developed this inventory based on a similar measure developed for use with university students. These measures are "decontaminated" in the sense that some hassles scales have scale items that could be construed as actually measuring distress, rather than stress, so items tapping distress were removed. The version of this inventory for high school students has eight factors. The eight factors are social alienation, academic challenge, excessive demands, romantic concerns, decisions about personal future, loneliness and unpopularity, social mistrust, and assorted annoyances and concerns (including several social annoyances and concerns) (see Kohn & Milrose, 1993). Overall, five of the eight subscales have some interpersonal focus.

This inventory has been used to assess the frequency of daily hassles in adolescents (see Chang, 2002; Lai, 2009; Marks, Sobanski, & Hine, 2010). We included it in an investigation of personality vulnerabilities and depression in adolescents (see Flett, Schmidt, Besser, & Hewitt, 2016). We had a sample of 143 high school adolescents from the Toronto area complete a battery of self-report questionnaires that included measures of sociotropy, perfectionism, daily life hassles, and depressive symptoms. We were particularly interested in testing interpersonally based vulnerabilities, so we focused on

a composite of the five hassle subscales with an interpersonal theme. Our results confirmed that sociotropy and socially prescribed perfectionism were associated significantly with depression and daily hassles, including hassles reflecting interpersonal themes such as social mistreatment and social disconnection. Daily hassles were also associated with depression. Analyses of the subscales showed that significant correlations were found between depression and social mistreatment ($r = .47$), loneliness and unpopularity ($r = .46$), assorted annoyances and concerns ($r = .37$), social alienation ($r = .26$), and romantic concerns ($r = .22$). Additional analyses showed that a factor consisting of interpersonal hassle subscales mediated the link between the personality trait vulnerabilities and depression.

Interpersonal Stress Generation

An implicit theme in research on daily stressors is that the person exposed to daily stress is reacting to uncontrollable stressors generated by events or other people outside the self. A very different perspective is provided by research on the stress generation concept. Hammen (1991) introduced this concept in the depression literature, and it has been incorporated into developmental models (see Rudolph et al., 2000). Hammen (1991) posited that some people are more prone to depression because they create or generate the stress for themselves, and this can either trigger or prolong a bout of depression, and the possibility was raised that stress generation contributes to the sex difference in depression. Stress generation is an intriguing notion, in part, due to emphasis on people as active agents who make their own lives, more or less, stressful.

The stress generation concept can be highly interpersonal because one way to generate stress is to act in a manner that results in interpersonal conflict. Another form of self-generated stress exposure is to have an affinity for partners or peers who are nonsupportive or interpersonally harsh if not abusive. A third way to generate stress is to be excessively seeking reassurance from other people; this form of neediness may result in other people distancing themselves from the person who always seems to need reassurance. Finally, stress can also be generated by clinging tenaciously to perfectionistic goals, even when feedback suggests that these goals should be lowered or abandoned. Stress can arise from demanding perfection from others, and this can initiate interpersonal conflict (for a discussion, see Hewitt & Flett, 2002).

When the person does generate stress, they are described by researchers as having "dependent events" that reflect their choices and actions. That is, the stress depends upon their actions. This contrasts with independent events that do not seem to reflect personal characteristics because they are truly due to external forces.

Thus far, strong empirical support, often in longitudinal research, has supported the role of stress generation in depression among adolescents as well as adults, and this research is very much in keeping with the emphasis in the current chapter on interpersonal forms of stress. Shih, Eberhart, Hammen, and Brennan (2006) found that self-generated "interpersonal episodic stress" was a predictor of depression in girls, but for boys, depression was linked with chronic stress in general. Another longitudinal study found that stress generation predicted depression in adolescent girls, but not in boys (Rudolph et al., 2009). Other adverse life experiences may play a role; another study indicated that elevated rates of interpersonal stress generation predicted depression in a sample of adolescent girls with a history of childhood maltreatment (Harkness, Lumley, & Truss, 2008). This link was not found among girls without a history of childhood maltreatment. These data underscore the need to examine interpersonal stress generation within the context of other psychosocial vulnerabilities. The need to consider other contextual factors has been confirmed in more recent research on stress generation in adolescents (see Chan, Doan, & Tompson, 2014; Hamilton et al., 2014). Other evidence implicates stress generation and chronic interpersonal stress in depressive rumination in adolescents (Stroud, Sosoo, & Wilson, 2018).

Domain-Specific Resilience: Interpersonal Versus Academic Resilience

Given the impact and potential destructiveness of these various types of interpersonal stress, an important goal is to strengthen the resilience of children and adolescents in order to withstand interpersonal adversities. It is particularly important to strengthen the child's sense of self-worth and sense of identity in relation to others so that they are able to bounce back from interpersonal problems and stressors. In a recent paper, Flett, Sue, Ma, and Guo (2014) described the need to consider resilience not only in terms of general emotional resilience but also in terms of developing a sense of achievement or goal-related resilience and a tendency to be interpersonally resilient (e.g., less emotional reactivity, less acting-out behavior), when faced with problematic interpersonal situations. An emphasis on this type of resilience recognizes that people who are truly resilient are able to withstand stress and setbacks not only in terms of their emotional reaction and their tendency to respond with grit following academic setbacks and disappointment but also in terms of their responses and reactions to challenges and upset rooted in the behavior of other people. In short, the truly resilient young person is able to flourish not only emotionally and academically but also socially.

This emphasis on interpersonal resilience stems from the general need to focus not only on difficulties and deficits but also on strengths and capabilities (Bell, Romano, & Flynn, 2013). Interpersonal factors and processes can be stressful and potentially quite destructive, but positive interpersonal factors and processes can also be highly protective, as is evident from the vast literature on social support. This emphasis on interpersonal resilience also reflects observations that resilience should be conceptualized as a multidimensional construct (see Luthar, Cicchetti, & Becker, 2000), and it is important to embrace an approach that views young people as being capable of developing multiple competencies across multiple domains. It is also based generally on past conclusions that the development of resilience is largely rooted in positive interpersonal relationships that can be both inside the family and outside the family (see Luthar & Zigler, 1991).

At present, there has been relatively little consideration at the theoretical and empirical levels of interpersonal resilience as a domain-specific form of self-protection. The concept of interpersonal resilience was introduced and advanced by Cacioppo, Reis, and Zautra (2011). They identified personal resource factors that promote social resilience. These nine factors are the following: (1) the capacity and motivation to perceive others accurately and empathically, (2) feeling connected to other individuals and collectives, (3) communicating caring and respect to others, (4) perceiving others' regard for the self, (5) values that promote the welfare of self and others, (6) ability to respond appropriately and contingently to social problems, (7) expressing social emotions appropriately and effectively, (8) trust, and (9) tolerance and openness. Collectively, these factors represent a clear list of positive interpersonal tendencies, social skills, and capabilities that should serve someone well when they are experiencing interpersonal adversities. They also represent positive characteristics that should generate positive interpersonal experiences and limit the amount of self-generated interpersonal stress that someone experiences.

Flett, Flett, and Wekerle (2015) took a somewhat different approach to interpersonal resilience. We listed nine psychological characteristics that comprise interpersonal resilience, including some interpersonal elements of personality. This list of characteristics was not meant to be exhaustive because the psychological elements that underscore interpersonal resilience remain to be discovered via empirical research. The nine characteristics of interpersonal resilience are shown and described in Table 20.1. The nine characteristics are social self-efficacy, feelings of mattering, social hope/optimism, social approach orientation, social malleability/adaptability, low sensitivity to rejection and criticism, adaptive interpersonal disengagement, social self-compassion, and growth mind-set toward the social self. The picture of the young person who

Table 20.1 Facets of interpersonal resilience

Social self-efficacy	A perceived capability to generate positive interpersonal outcomes and connections
Mattering	A felt sense of being important and feeling significant to other people that has been internalized by the self and the person realizes "I matter"
Social hope/ optimism	A tendency to have positive outcome expectancies about one's interpersonal future
Social approach orientation	A willingness and tendency to move toward people instead of avoiding them that is evident after experiencing interpersonal adversity and setbacks
Social malleability/ adaptability	The capability to change and positively redefine oneself in order to accommodate to a novel or challenging social situation
Low sensitivity to rejection/ criticism	A low readiness to attend to, perceive, and react negatively to negative social feedback about oneself
Adaptive interpersonal disengagement	An unwillingness to let negative social feedback and adverse experiences influence and impact self-worth appraisals
Social self-compassion	The capability of responding mindfully toward the self with kindness and self-acceptance after experiencing interpersonal adversities, committing social blunders, or failing to meet social expectations
Growth mind-set toward the social self	Cognitively appraising social blunders and adverse interpersonal experiences outcomes as learning and growth opportunities to develop social capabilities from a process perspective

is "interpersonally resilient" that emerges based on these attributes is as follows: someone who is positively oriented toward people, both now and in the future, based on a general sense of being important to other people and being able to interact effectively and confidently with others. She or he responds to interpersonal challenges and setbacks by adjusting with a form of "interpersonal grit" that translates into not being unduly influenced by negative social feedback and demonstrating self-compassion instead of self-criticism when falling short of personal or social expectations. This interpersonal style is fuelled by a positive and stable sense of the self in relation to others and the recognition that people grow and are not fixed entities. This view of interpersonal resilience is in keeping with the concept of interpersonal functional flexibility (for a discussion, see Paulhus & Martin, 1988).

While we believe that all of these characteristics are important and contribute to someone's overall level of interpersonal resilience, the remainder of this chapter will focus on one characteristic – the feeling of mattering. The young person who feels like he or she matters will feel a sense of being seen and heard by people who value them as unique individuals and who interact frequently with them. They will realize that other people keep them in mind and believe in them. In contrast, the child or adolescent who feels like he or she does not matter will feel invisible and insignificant. They may feel this way because they have experienced emotional neglect, and a history of neglect is associated with feelings of not mattering (Flett, Schmidt et al., 2016). Children may also have low feelings of mattering when significant others are highly self-preoccupied due to being excessively work-focused, or they must contend with a health or mental health condition. Rosenberg and McCullough (1981) suggested low mattering may be a product of parental egocentricity. It is also possible that this sense of not being important reflects family constellation factors (e.g., having siblings who get more than their fair share of attention).

Why focus on mattering? First, when it comes to considering all of the different themes that could be promoted in order to develop the capacity for children and adolescents to become more resilient, it makes sense to focus on those characteristics that are especially powerful. Mattering is one of these factors. This view was endorsed by Oyserman, Uskul, Yoder, Nesse, & Williams, (2007) who suggested that mattering is "… fundamental to well-being" (p. 505) and by Elliott, Colangelo, and Gelles (2005) who described mattering "… as a powerful motivator that resides deep within the self-concept; it is the beginning of a chain of potency that exerts profound influence on other dimensions of the self, and ulti-

mately behavior" (p. 235). These views are very much in keeping with the conclusions reached by Rosenberg (1985). He stated that in terms of feeling significant to one's mother and father "… mattering is important to the human being, and the adolescent high on parental mattering lives a richer, fuller, more satisfying life" (p. 219). Second, mattering is focused on here because it is a concept that has a high resonance value with most people; most people can relate to the feeling of being important to someone who matters to them; indeed, the concept often invokes memories of special people, including teachers, who have played a vital role in the person's well-being and development. Third, it makes sense to emphasize mattering because feelings of mattering can be developed and improved; they reflect an aspect of the self that can be changed. Fourth, mattering is something that does not depend entirely on the reactions of other people to the self; feelings of mattering can be self-determined, at least to some extent, because the individual person can engage in activities focused on the well-being of others or making a difference in other ways that generate personal feelings of mattering. This notion that mattering is somewhat under personal control is something that enhances the resonance value of mattering to most people. Fifth, and finally, mattering can be a very salient theme across life roles and life contexts. Mattering can be developed across relationships (e.g., mattering to parents, peers) and across situations and environments (e.g., mattering at school, mattering in the community, mattering at work, etc.). Thus, feelings of mattering can have a broad and pervasive influence on someone.

Accordingly, the next segment of this chapter focuses on mattering from a definitional and conceptual viewpoint, and the different ways of assessing mattering are outlined. Mattering is then considered in terms of its evidence base; that is, past studies with children and adolescents that link mattering with more positive well-being and adjustment are summarized. This segment of the chapter concludes with an overview of intervention studies, along with a discussion of some recommendations for increasing levels of mattering in children and adolescents.

Mattering

Defining and Conceptualizing Feelings of Mattering

Rosenberg and McCullough (1981) are credited with formally introducing the concept of mattering over three decades ago as an extension of Morris Rosenberg's (1965) seminal work on self-esteem. Mattering reflects our need to feel like we are significant and have meaningful connections with other people. Rosenberg and McCullough (1981) focused on three components: (1) the sense that other people rely on us, (2) the perception that other people regard us as important, and (3) the realization that other people are aware of us and are actively paying attention to us. Rosenberg (1985) extended his conceptualization by suggesting that mattering also includes the notion that other people would miss us if we were no longer around. Rosenberg also posited ego extension as a fifth component, which originally was seen as part of the importance facet.

There are a few important caveats that stem from this conceptualization. First, as noted by Rosenberg and McCullough (1981), feelings of mattering may or may not be veridical. Certain people may dramatically underestimate the extent to which they actually matter to others because they are unable to establish a strong feeling of mattering to others. It is also possible to have an inflated sense of mattering to others. Second, the mattering described here is known as interpersonal mattering. As noted by Rosenberg (1985), it is also possible to consider mattering more broadly in terms of feeling a sense of importance to society as a whole. This broader focus is reflected by some of the research described below on mattering in the community.

A different way to approach the definition of mattering is to consider the attributes of the child or adolescent who has a sense of mattering, versus the child or adolescent who lacks a sense of mattering. We know from research conducted thus far that the young person with a feeling of mattering is someone who has a secure sense of attachment and is capable of demonstrating self-

compassion (see Joeng & Turner, 2015; Raque-Bogdan, Ericson, Jackson, Martin, & Bryan, 2011). This young person also has elevated self-efficacy (see Gruber, Kilcullen, & Iso-Ahola, 2009) and elevated happiness and life satisfaction (Flett, 2018). In contrast, the young person who is low in feelings of mattering is someone who is self-critical and has an insecure attachment to other people. This person is prone to experience various forms of distress, including social anxiety, and it is likely that the he or she will have strong feelings of loneliness (see Flett, Goldstein, Pechenkov, Nepon, & Wekerle, 2016).

Given these contrasting portraits, it should be apparent that the feeling of mattering is highly protective, and it is not surprising that the need to matter is a need that applies to virtually everyone. However, Rosenberg and McCullough (1981) posited that it is particularly relevant to adolescents given their emerging sense of self and the development issues and experiences they face. They also noted that "… one reason why the adolescent clings so tenaciously to his peers is that to them, at least, he matters. If it is true that the feeling of being socially irrelevant is widespread among adolescents, this fact may underlie some of the problems of contemporary youth" (p. 180). This observation by Rosenberg and McCullough (1981) seems highly relevant to today's youth, both adolescent boys and adolescent girls, and we will see below that feelings of not mattering are quite prevalent.

One reason for schools to emphasize mattering is that opportunities to develop mattering have been recognized as central to positive youth development. Eccles and Gootman (2002) determined that high-quality youth development programs are characterized by eight specific attributes: physical and psychological safety, appropriate structure, supportive relationships, opportunities to belong, positive social norms, support for efficacy and mattering, opportunities for skill building, and integration of family, school, and community. While our focus is on mattering in psychological health and well-being, mattering tends to promote positive development across a variety of indicators, including achievement-related outcomes. For example, Lemon and Watson (2011) studied 175 high school students and found that mattering was associated significantly with less perceived stress ($r = -.28$) but also with less likelihood of dropping out of school ($r = -.23$).

The relevance of mattering in the lives of studies is reflected by the views stated eloquently by William Glasser in an interview that took place over 30 years ago. Glasser observed that "When the so-called poor student says, "I feel important here; they depend on me; they encourage me; they want me to produce – and I am going to produce because I don't want to let anyone down,' he or she is no longer a poor student" (Glasser & Gough, 1987, p. 660). This observation reflects the possibility that attaining a sense of mattering can transform a student's academic self-concept and their sense of what is possible. However, Glasser also lamented that too many students do not regard their schools as places that can make them feel important, and when students make the transition to high school, they run the risk of going from a prior situation of feeling important to no longer feeling important. This observation seems intuitively quite reasonable and points to the need for a particular emphasis on maintaining or enhancing feelings of mattering among adolescents making the transition to high school.

Assessing Feelings of Mattering

A brief overview of the measures used to assess mattering is provided in this section. The measures discussed below differ substantially in their focus and in their item context. This key fact is important to keep in mind when considering research on mattering because it is quite likely that the empirical results are a reflection, to some degree, of how mattering was measured.

Most studies evaluate mattering, either as an overall general feeling or with a focus on mattering to specific people in one's life (i.e., mother, father, friend, etc.). The most predominant measure is the General Mattering Scale. The specific origins of this measure are a bit murky in that several researchers attribute the measure to Rosenberg, while others attribute the measure to

Table 20.2 Items for the General Mattering Scale

How much do other people depend on you?
How much do you feel other people pay attention to you?
How important do you feel you are to other people?
How much do you feel others would miss you if you went away?
How interested are people generally in what you have to say?

one of Rosenberg's students named Marcus. My sense is that both contributed together (see Marcus & Rosenberg, 1987), but the original impetus was clearly provided by Rosenberg's seminal views on the mattering construct. The scale items for the General Mattering Scale first appeared in print in a journal article by Deforge and Barclay (1997). In any event, the General Mattering Scale (GMS) is a brief five-item self-report scale. The GMS has four response options for each item ((1) a lot, (2) somewhat, (3) a little, and (4) not at all), and it is intended to measure one dimension. Accordingly, it is scored by summing across the five items, with higher scores reflecting a higher level of mattering. The scale items are shown in Table 20.2.

A more extensive mattering measure was developed by Elliott, Kao, and Grant, (2004). It has been used in only a few studies with children or adolescents. This 24-item inventory, the Mattering Index, assesses three subscales: (1) awareness (i.e., being the object of other's attention), (2) importance (i.e., being an object of others' concern), and (3) reliance (i.e., other chooses to look to me for help, advice, support, etc.). It provides an overall total score but also provides the three subscale scores. Another concern is that the Mattering Index was created to assess overall feelings of mattering in general; the inventory has been modified by some researchers to reflect their specific interests. For example, Elliott, Cunningham, Colangelo, & Gelles (2011) used a shortened 15-item version of Elliott's own measure and amended the items to assess mattering to family. Although there was item content representing all three subscales, there was no attempt to look at individual subscales. An earlier investigation by Elliott et al. (2005) used a 30-item version of the Mattering Index with 15 items modified to assess mattering to one's family, and the same 15 items modified a second time to assess mattering to friends.

The emphasis on mattering to specific people was introduced by Marshall (2001). She developed the Mattering to Others Questionnaire to assess mattering to one's mother, father, and friend. A related measure constructed by Schenck et al. (2009) has seven-item measures that provide separate assessments of mattering to mothers versus mattering to fathers. The usefulness of distinguishing among mattering to one's mother, father, and friends is shown by research findings that clearly indicate that mattering to parents versus mattering to friends is far from equivalent. For instance, mattering to friends, relative to mattering to parents, has a much stronger association with social self-esteem (see Marshall, 2001). Levels of mattering to mothers versus fathers are correlated, but the correlations obtained can be lower than .50 (see Cookston, Olide, Adams, Fabricius, & Parke, 2012). Thus, it must be acknowledged that the reality for some people is that they feel like they matter more to one parent versus the other parent.

The measure developed by Marshall (2001) is highly adaptable in that it can be modified to assess mattering to a range of specific people in someone's life. For instance, Marshall's measure has been modified to assess the extent to which young people feel like they matter to their mentor (see Karcher, Nakkula, & Harris, 2005). This research was conducted with 63 adolescent mentors from high schools who were paired with elementary school students. They were assessed 4–6 weeks after being matched with their mentees. Mentors committed to their role for a year.

The main focus in this chapter is children and adolescents, but it should be noted that it is also quite possible and meaningful to assess mattering in the workplace (see Jung & Heppner, 2017), and this is especially relevant to schools because teachers also need to feel like they matter at school. A new measure was created to assess elements of mattering in physical education teachers. Research with this scale showed that feelings of mattering as a teacher (e.g., How important do

you feel you are to other people at your school? How much attention do you feel other people pay to you at school?) were linked with lower levels of role conflict and role ambiguity. Moreover, teachers who felt they mattered at school had higher self-reported levels of mattering on the Connor-Davidson Resilience Scale (Richards, Gaudreault, & Woods, 2017). Related research established that low feelings of mattering among physical education teachers predicted job burnout across all three burnout components of depersonalization, emotional exhaustion, and reduced personal accomplishment (Gaudreault, Richards, & Woods, 2017).

Returning to children and adolescents, brief measures have also been used to assess the extent to which adolescents feel like they matter in the community. Several studies have administered as part of a broader survey (i.e., the Youth Risk Behavior Survey) a highly face valid one-item global assessment of mattering to the community (i.e., "In my community, I feel like I matter to people"). There can be little doubt that feeling significant and important in one's community is a central way of fulfilling the need to connect with others and to feel worthwhile and competent, and establishing a sense of mattering in the community is a way of overcoming or at least buffering a feeling of not mattering at home. Unfortunately, the results from many jurisdictions that have used the Youth Risk Behavior Survey suggest that, at best, fewer than three out of five, the young people being surveyed tend to feel like they matter to some extent in their community (see Murphey, Lamonda, Carney, & Duncan, 2004), and feelings of not mattering in one's community among young have several negative correlates. The most recently available set of results supports this conclusion. The 2017 survey results from the city of Munroe in the state of New York show that 58% of the students agreed or strongly agreed with the statement "In my community I feel like I matter to people" (see Munroe County Department of Public Health, 2017). A feeling of community mattering was found among 63% of adolescent boys and 55% of adolescent girls, and perhaps this difference helped account, in part, for the much higher levels of depression and suicide ideation among adolescent girls. For instance, 37% of the girls and 19% of the boys acknowledged feeling sad or hopeless almost every day for 2 weeks or more. Some other relevant findings involving this one-item measure of community mattering will be highlighted in the subsequent section on the association between feelings of not mattering and maladjustment.

Unfortunately, at present, there has been very little empirical research on mattering in schools. Mattering at school should be a key resource that buffers stress and promotes resilience among children and adolescents, but there has been relatively little emphasis thus far on mattering at school due to the lack of a well-developed measure to assess it. The development of feelings of mattering at school can help fill the void for children and adolescents who do not get a sense of mattering either at home or at school. To what extent does this void exist? Here, some recent statistics from the 2017 School Climate Survey results from the York Region District School Board are highly informative and point to the role that schools could play. This survey asked students at the elementary school and high school levels to indicate the degree to which they agree or disagree with the statement "I feel like I matter to people at home or in the community". Overall, it was found on the basis of responses from well over 25,000 students that 84% of elementary school students in grades 5 to 8 and 79% of high school students in grades 9 to 12 either agreed or strongly agreed with this statement; however, it can also be concluded from these results that about 1 in 6 elementary school students, and about 1 in 5 high school students, do not feel like they matter either at home or in their community (see York Region District School Board, 2017). We have found that when students are asked whether they matter in general to other people and no setting is mentioned, about three in ten students do not express feelings of mattering (Flett, 2017).

School represents one domain that could compensate for not mattering at home or at school, but survey data suggests that it cannot be assumed that most students feel like they matter at school. The 2017 York Region District School Board sur-

vey also inquired about mattering at school. Survey results found that 59% of the students in grades five to eight and 57% of the high school students felt like they mattered at school. Thus, about two out of five students did not feel like they matter at school. Mattering at school likely contributes to learning and engagement, but not mattering at school clearly does not bode well for future school success.

A widely cited study of school belongingness conducted by Roeser, Midgley, and Urdan (1996) provided some initial empirical evidence of the benefits of mattering at school. According to the authors, they examined school belongingness, achievement goals, and perceptions of the school psychological environment in a sample of 296 eighth-grade students. However, when I examined the four-item school belongingness factor, it became apparent that it actually measures school belongingness and mattering at school. One item measures belongingness (e.g., I feel like I belong in this school), and one item measures performing well at school (e.g., I feel like I am successful in this school), but the other two items are items that assess mattering at school (e.g., I feel like I matter in this school. I do not feel like I am important in this school; reverse-coded). Psychometric tests showed that the scale had an adequate degree of internal consistency for a four-item scale with an obtained alpha of .76, item responses were likely consistent across the four items. This composite measure of belonging and mattering at school was associated significantly with personal task goals ($r = .46$), positive school affect ($r = .45$), academic self-efficacy ($r = .52$), positive school affect ($r = .45$), a grade-point average ($r = .38$), and more positive teacher-student relationships ($r = .35$). Moreover, school belongingness and mattering mediated the association between positive teacher-student relationships and positive school-related affect.

Research in our laboratory is now exploring the unique benefits of mattering at school in middle school students and high school students. A complete description of these results is beyond the scope of this chapter, but an extensive summary is available in Flett (2018). Collectively, our initial results show that even a very brief measure of mattering at school is related to a measure of belonging at school, but it is not redundant with school belongingness. In addition, and perhaps more importantly, when brief measures of mattering in general and mattering at school are examined, the association between mattering in general and mattering in school is fairly modest (i.e., *r*'s ranging from .40 to .50). More descriptive analyses suggest that at either the middle school or high school level, about one in four students do not have a sense of mattering at school.

This segment on assessment concludes with a brief mention of how it should be the case that mattering is maximally protective to the extent that the child or adolescent has a feeling of mattering in multiple life domains or across multiple roles and settings. This conclusion is in keeping with data gathered on relatedness by Furrer and Skinner (2003). They had children assess their level of relatedness with respect to their mothers, fathers, teachers, classmates, and friends. On the surface, this research was designed with a focus on "relatedness," but it turns out that relatedness to each of five targets (mother, father, teachers, classmates, and friends) was actually assessed with brief four-item measures that primarily tap mattering (e.g., I feel like someone special) or not mattering (e.g., I feel unimportant). Most importantly, support was found for a cumulative risk model. That is, the lowest levels of engagement were typically found among children who felt relatively unimportant across all five of the social sources (i.e., they did not feel special to anyone). Of course, it should be obvious that children who feel no sense of importance across their mothers, fathers, teachers, classmates, and friends are children who are very much at risk. But there is still reason for hope. Why? Furrer and Skinner (2003) found that children had higher levels of engagement if they had just one source who provided them with a sense of being personally important.

The next portion of this chapter examines the role of mattering in psychological health and well-being. The research conducted thus far with children and adolescents is limited in that it is mostly cross-sectional research, but there is little

doubt about the protective role for feelings of mattering to other people.

Mattering in Psychological Well-Being and Adjustment

Research is growing on the protective role of mattering in psychological well-being among children and adolescents. Representative research is described below. The research conducted thus far supports some clear conclusions. First, there is a consistent association between deficits in mattering and maladjustment in elementary school and high school students. Second, the associations between mattering and poor psychological well-being are not accounted for by other constructs related to mattering such as self-esteem and belongingness. Indeed, mattering is a unique predictor of psychological well-being. Third, the protective role of mattering extends well-beyond indices of psychological well-being. Rosenberg and McCullough (1981) showed in their initial work that low mattering was associated with indices of school delinquency in adolescent boys. There are also clear indications that reduced feelings of mattering are implicated in antisocial and potentially violent tendencies. For instance, lower levels of mattering were found among violent delinquent youth, relative to non-violent youth (Crooks, Scott, Wolfe, Chiodo, & Killip, 2007). Another recent study assessed mattering and deviance from qualitative perspective. Lewis (2017) reported that a central theme found among a sample of young offenders is an abiding sense of failing to matter; this feeling was magnified by family being absent from the young offenders' lives. More generally, general feelings of not mattering among adolescents are associated with beliefs and awareness of the destructiveness of violence and less violence toward family members (Elliott et al., 2011), and feelings of not mattering in the community have been linked with girls being involved in mutually violent dating relationships (Chiodo et al., 2012) and a greater frequency of physical and sexual violence in dating situations (Edwards & Neal, 2017).

It is surprising that there is not a more extensive body of research on mattering and mental health in children and adolescents given the clear demonstration of the relevance of mattering provided by Rosenberg and McCullough (1981) in their initial work. Rosenberg and McCullough (1981) showed across four large samples of adolescents that there were significant associations between depression and mattering after taking into account the links that both mattering and depression had with self-esteem. Rosenberg and McCullough (1981) also provided the first empirical evidence of a link between mattering and anxiety. Anxiety measures were administered to the participants in two of their four large samples. Analyses of their Baltimore sample data showed that there was no significant correlation between mattering and worries in these adolescents. However, in the nationwide representative sample of over 2000 adolescent participants, mattering was associated with fewer worries ($r = .19$), a measure of anxiety tension ($r = .22$), and a mixed measure of somatic anxiety symptoms and physical health symptoms ($r = 0.36$).

Subsequent research on mattering and anxiety focused on early adolescents. Dixon, Scheidegger, and McWhirter (2009) administered the GMS and the Beck Youth Inventory anxiety and depression measures to early adolescents in grades six to eight. They reported that mattering was negatively associated with anxiety for adolescent boys ($r = -.39$) and adolescent girls ($r = -.53$). Mattering was also associated significantly with depression for adolescent males ($r = -.39$) and adolescent girls ($r = -.25$).

The research conducted above is similar to most research in the mattering field in that it is conducted typically in North America. Research in our lab has taken an expanded approach and we were able to conduct investigations with children and adolescents in China. Our first study assessed mattering in 232 Chinese high school students from advanced and non-advanced high schools (see Flett, Su, Ma, & Gu, 2014). The distinction between advanced and non-advanced high schools reflect how students are placed on the basis of achievement results, with advanced students having higher levels of achievement and

likely greater academic potential. The students in this study completed measures of mattering, depression, shame, social anxiety, and social phobia, as well as a measure of academic buoyancy designed to tap academic resilience. Significant associations were found between mattering and lower levels of depression ($r = -.38$), shame ($r = -.26$), social anxiety ($r = -.32$), and social phobia ($r = -.27$). Mattering was also correlated significantly with higher levels of academic buoyancy ($r = .25$). These correlations were comparable for students from the advanced and non-advanced high schools, but it is noteworthy that the students from the advanced school, relative to those students in the non-advanced school, reported lower levels of mattering; perhaps this unanticipated difference reflects greater evaluative pressures placed on the students with more advanced academic accomplishments.

Flett, Sue, Ma, and Guo (2016) followed this study by conducting another investigation that focused on younger children. We reexamined the association between mattering and depression and evaluated whether mattering would predict depression when considered along with other predictors. We assessed 218 Chinese children with the GMS and also had them complete measures of dependency, self-criticism, self-esteem, and unconditional self-acceptance. Correlational analyses confirmed the association between depression and low mattering. Moreover, as can be seen in Table 20.3, mattering was a significant unique predictor of depression when considered in a regression analysis along with other significant predictors, including dependency, self-esteem, and unconditional self-acceptance. Self-criticism failed to predict depression when it was included along with these other variables.

Another recent study examined mattering in 254 middle school students from a southern US school district in a rural area. This investigation by Watson (2017/2018) also utilized the GMS, but the focus was on a measure of positive wellness rather than depression. This study also included measures of self-esteem and school belongingness and found that mattering, self-esteem, and school belongingness all predicted

Table 20.3 Multiple regression analysis for variables predicting depression in Chinese children

Variable	R^2	B	t
Predictor block	.277***		
Sex		−.055	−0.92
Mattering		−.193	3.02**
Self-esteem		−.232	3.59**
Unconditional self-acceptance		−.176	2.94**
Self-criticism		.097	1.56
Dependency		.207	3.28**

Note: *$p < .05$, **$p < .01$, ***$p < .001$

significant unique variance in wellness. Mattering was associated significantly with self-esteem ($r = .52$) and with school connectedness ($r = .46$). The findings from this study should perhaps be underscored because this research attests to the fact that mattering is associated with, but distinguishable from, school connectedness.

The studies examining mattering and adjustment in adolescents have almost entirely relied on the GMS to assess the mattering construct. Marshall (2004) did conduct two studies that examined mattering and well-being, and mattering was assessed with the Mattering to Others Scale. The two studies had respective samples of 128 and 532 adolescents. The clear conclusion that emerged from this research was that psychological health was poorer among those adolescents who had low levels of mattering to parents and friends. However, it must be noted that these two studies did not measure depression per se; instead, the key outcome measures were indices assessing behavioral misconduct, including aggressive and antisocial behavior.

We have examined the links between depression and mattering to mothers, fathers, and friends in a sample of 171 adolescents in high school from the Toronto area. This unpublished study included the Mattering to Others Questionnaire and a measure of depressive symptoms. We also include measures of trait perfectionism and perfectionistic self-presentation. The results were examined separately for adolescent males and females. It was found in both instances that higher levels of depression were associated with trait perfectionism, perfectionistic self-presentation, and multiple mattering

measures. Hierarchical regression analyses found that the predictors combined to account for 33% of the variance in depression scores for adolescent males and 26% of the variance in depression for adolescent females. Examination of the predictor blocks showed that for both males and females, it was the case that measures of trait perfectionism and perfectionistic self-presentation were both statistically significant, but it was also the case that all three mattering subscales were also statistically significant. It can be inferred from these results that deficits in mattering are not redundant with perfectionism when predicting depression in adolescents, and negative feelings about mattering to mothers, fathers, and friends all contribute to elevated distress.

Edwards and Neal (2017) established that feelings of not mattering in the community are also associated with depression in adolescents. Their sample consisted of almost 25,000 high school students from New Hampshire. Feelings of not mattering in the community assessed with the one-item mattering measure listed above were associated with depression and poor academic performance, and it predicted unique variance in these key outcomes, beyond the variance accounted for by physical and sexual dating victimization and demographic characteristics.

Mattering and Suicidal Tendencies

Elliott et al. (2005) were the first researchers to investigate the association between mattering and suicide ideation. They utilized the results available from approximately 2000 adolescents who completed a version of the Youth at Risk Survey. The participants responded to 18 items assessing mattering to friends and 18 items assessing mattering to parents. Suicide ideation was assessed via two questions (i.e., "During the past 12 months, did you ever seriously consider attempting suicide?" and "During the past 12 months, did you ever seriously consider attempting some action you hoped would cause your death by someone else?"). Finally, participants also completed a slightly abbreviated version of the Rosenberg (1965) Self-Esteem Scale. An odds-ratio analysis revealed a strong effect of mattering on suicide ideation after taking into consideration other possible predictors. However, the association with mattering was substantially reduced after taking self-esteem into account, so the authors concluded that self-esteem acts as a mediator of the association between low mattering and suicide ideation.

The research described above focused on mattering to parenting and friends. Other research illustrated the benefits of feelings of mattering in the community. Murphey et al. (2004) reported the findings from responses of over 30,000 adolescents from Vermont who completed the annual Youth Risk Behavior Survey developed by the Centers for Disease Control and Prevention. The usual survey was supplemented with items assessing various youth assets, including one assessing perceived mattering at the community level. Participants also reported whether they had made suicide plans sometime in the previous 12 months. Analyses found that community mattering was linked with reduced planning for suicide (see Murphey et al., 2004). Comparisons of six youth assets established that mattering in the community was the most important asset in terms of protection from suicide plans.

Similar results have been detected elsewhere. For instance, data collected in Alaska confirmed that mattering in the community is linked with less hopelessness, and suicidal ideation and hopelessness (see Heath et al., 2015). More recently, Olcon, Kim, and Gulbas (2017) reported analyses from a sample of 2560 high school students who participated in the 2013 Texas Youth Risk Behavior Survey. The measures in this survey included a global assessment of community mattering (i.e., "Do you agree or disagree that in your community you feel like you matter to people?") as well as separate items that asked whether the students had considered attempting suicide during the past year, and whether they had actually made a suicide attempt. Overall, it was found that almost one in ten students reported an attempted suicide, and about twice as many students had some degree of suicide ideation. Once again, it was revealed that lower community mattering was evident among students who either attempted or

thought about suicide. Statistical estimates indicated that having a sense of community mattering reduced the odds of suicide ideation by 34% and a suicide attempt by 20%.

The findings reported above are also in keeping with research that focuses on wellness indicators. The Lemon and Watson (2011) study described earlier also include a multi-domain wellness measure, and, as was expected, mattering was associated positively with all five indicators. An earlier study by Rayle (2005) found similar results based on the use of both the GMS and the Mattering to Others Questionnaire in a sample of 462 high school students.

It is likely that feelings of not mattering are also implicated in acts of intentional self-harm among adolescents, but unfortunately, research has yet to evaluate this possibility. Nevertheless, it should be noted that when a sample of 50 high school teachers were asked to explain why students engage in self-injury, teachers often pointed to low self-worth. Indeed, one teacher observed astutely that "… they feel they don't matter to anyone, lack of affection, love, care, and high negligence. The kid doesn't care, has no way out" (Heath, Toste, & Beettam, 2006, p. 83).

Interventions: Research Studies and Community Initiatives

Given the general paucity of research on mattering, it is not surprising that there have been few intervention studies with a focus on increasing levels of mattering in children and adolescents. These studies are described below. In total, there are four published studies and one unpublished study. It will be seen that the studies vary in terms of the extent to which mattering is an explicit focus. Collectively, these studies do provide initial evidence that levels of mattering can be increased among young people.

We begin with a brief overview of published intervention studies. The first study by Abel and Greco (2008) would seem, at least on the surface, to most readers to have little to do with mattering promotion. It was conducted with 130 youths in grades 5–9 who took part in a program named FAME (Family Action Model For Empowerment), which was developed to promote abstinence from sex. In essence, FAME is a youth empowerment program with an emphasis on improving family functioning by developing better communication patterns and tendencies between children and their parents. Most of the program is delivered to children and youth, but parents also take part in workshops created for them. All 130 adolescents participated in FAME, so there was no control group for comparison purposes. In total, 90 adolescents were assessed before and after program participation. Measures that were completed in pre-post assessments included the Rosenberg Self-Esteem Scale, and the mattering to mother and father subscales from the measure devised by Marshall (2004). Statistical analyses showed that significant increases were found at posttest in levels of self-esteem, mattering to mothers, and mattering to fathers. Comparisons indicated that larger effect size pre-post changes were stronger for mattering than for self-esteem. These data suggest that participation in a general program focused on empowering youth and improving the degree and quality of family communication tends to enhance levels of mattering to one's parents. Of course, one caveat though is that conclusions are limited by the lack of a control group with participants that did not take part in the intervention.

The second study by Mann (2013) had a more explicit focus on mattering and involved an intervention that is more in line with contemporary programs focused on enhancing resilience and well-being. This program was designed to enhance the academic performance, self-confidence, and resilience of middle school girls with a high risk of school failure. The research was based on a small sample of 37 adolescent girls ranging in age from 12 to 15 years old. The vast majority of participants in this study were adolescent girls with an extensive history of adversity. Overall, almost all of the participants (95%) had been sexually abused, physically abused, or both. In addition, almost all of the girls in this study had experienced family fragmentation with their fathers being either missing, absent, or unavailable.

The program they participated in was initially designed as an organization-based intervention for delinquent adolescents, but it was modified to address the needs of adolescent girls with school difficulties. Key aspects of the program include an emphasis on developing safe and trusting relationships between the participants and adult team leaders. Empowerment and self-confidence were addressed by taking a challenge trip to a national forest camp and taking part in various outdoor challenges with planned exercises. The program concluded with "a transference phase" focusing on how learning and the overall experience could be put into practice in each adolescent's daily life.

The participants were divided into an intervention and a control group. Assessments were taken before and after the program. A third assessment was conducted 10 months later. These assessments included completing a brief version of the Mattering Index (Elliott et al., 2004). Analyses found pre-post differences with there being a significant increase in levels of mattering for the participants in the intervention group, relative to those in the control condition. Unfortunately, however, the follow-up data suggested that scores on these increases in mattering were not evident month later; that is, scores had decreased and were not close to initial baseline levels. Overall, this study provided some key insights. It was clear from this investigation that mattering levels can be enhanced, but it should not be assumed that the increased levels of mattering will be maintained. A booster session may be needed. However, it is also quite possible that participants were returning to a personal life context that promoted a sense of not mattering rather than mattering.

The third study was conducted in Boston with 39 students (see Martinez et al., 2016). This investigation included a focus on mattering, though mattering was not the primary focus. A brief mattering measure was included as part of the battery of measures used to examine the potential benefits of engaging youth of color in inquiry-based education with a component focused on student constructed learning. Overall, about three-quarters of the participants were either Hispanic/Latino (53.7%) or African American/Black (18.5%). They were participants in an out-of-school science education program that promoted the students' ability to think like health scientists. The goals of this program included improving science education attitudes but also promoting engaged citizenship. Mattering was a measurement focus because a key outcome measure was a measure of neighborhood social connection with items that assessed a sense of community mattering (e.g., In my town or city, I feel like I matter to people. Adults in my town or city listen to what I have to say). Analyses found in general that the program was quite effective, and this extended to substantial increases in neighborhood social connection. It is likely that this improvement was due to the element of the program focused on engaged citizenship, but this is not certain due to the absence of a control group.

Lisa Wexler and her colleagues (2017) conducted the most recent study thus far in terms of published work. This investigation was conducted in Alaska in response to survey findings indicating that the elevated rates of suicide found in Alaska are a reflection, in part, of feelings of not mattering. Wexler et al. (2017) evaluated the impact of a program called the Youth Leaders Program (YLP). The YLP was described as a health intervention that included "natural helpers" and peer leaders. Peer leaders are selected on the basis of who students tend to approach when they have an issue at home or at school that they need to talk about. Peer leaders are typically those students who are seen as trustworthy and typically capable of providing assistance and insight. The YLP was designed specifically to decrease the risk of suicide and lessen the impact of other adverse events by reducing risk factors and bolstering protective factors. The YLP had a strong emphasis on the role of psychosocial factors in enhancing resilience. Overall, pretest and post-intervention data were gathered from 764 adolescents in grades 8 to 10. Mattering was assessed with the five-item General Mattering Scale. It was included because of its similarity to belongingness, which was also a focus, but also because of perceived relevance of the mattering construct.

The study itself came about when the YLP program leader sought out a research evaluation of the program for the 2013–2014 school year. Unfortunately, the Time 1 pretest assessment did not take place before the program started, so it was not a true pretest posttest design in the typical sense. This is important to underscore because it could help explain the results found when analyses were conducted of the mattering measure, which was the five-item General Mattering Scale. Also, Wexler et al. (2017) only reported the survey results from the 61 YLP youth leaders, and the results have yet to be provided from the large sample of participants. Analyses of the leaders' data revealed that they did not experience a significant increase in their levels of mattering, which Wexler et al. (2017) attributed to the fact that they already had relatively high levels of mattering at the Time 1 assessment.

A more positive conclusion came from the qualitative data that were gathered. The opportunity and challenge of becoming a peer leader puts young people in a role that involves other students depending on them, and, of course, being depended is a distinct and salient element of the mattering construct. The investigators found that both the advisors and the youth leaders saw some remarkable changes in the youth leaders themselves. There were clear signs of increased maturity, sociability, and self-confidence, especially among some of the youth leaders who had been quite disruptive bullies before taking on the leadership role. The change in some youth leaders was quite dramatic. One advisor noted that some of the youth leaders would not speak with anyone 1 year earlier and would do their best to hide, but now they were front and center and even willing to talk during school assemblies.

As for unpublished research, as part of graduate work conducted at Colorado State University, a study was conducted to compare the functioning of adolescents classified as having shown delinquent tendencies who either did, or did not, take part in a mentoring program (see LeBoeuf, 2011). The program was Campus Corps, a college-based mentoring program for youth designed for low-level or first-time offenders. Participants completed a battery of scales that included the importance and awareness subscales of the Mattering Index (Elliott et al., 2004). Statistical analyses confirmed that program participants, relative to adolescents who did not take part in the mentoring program, had higher levels of self-esteem and higher levels of mattering in terms of perceived importance to other people after they had taken part in the program. Moreover, secondary analyses indicated that the results seem to reflect the quality of the mentoring; that is, adolescents in higher-quality relationships had less noncompliance, greater self-esteem, and higher feelings of being noticed and being of importance to other people. This intriguing study yielded findings that certainly do seem to merit being published.

Collectively, the studies are highly flawed and they provide a mixed picture overall. But it does seem that mattering can be increased, though programmatic well-designed investigations are needed to show definitively that mattering can be enhanced. In the meantime, in terms of knowledge implementation and mobilization, programs have been developed by organizations, and communities have launched campaigns centered around the mattering theme due to resonance of the mattering concept. Many of these initiatives can be traced back to suicide prevention efforts in the United States. A resource was developed in 2012 called the National Suicide Prevention Lifeline, and it is based on the theme "You Matter" (see youmatter.suicidepreventionlifeline.org). The phrase "You Matter" has spread via social media, and it is possible to go online and find many examples of how the "You Matter" theme has been the catalyst for action.

For instance, the state suicide prevention plan of Vermont has the "UMatter" initiative (see http://vtspc.org/). This initiative includes various programs and events. Most notably, one alternative is the "UMatter for Schools Youth Suicide Prevention Training for School Professionals.". This training occurs over 2 days. The first day of training focuses on warning signs and risk indicators that can be used to identify, assess, and respond to vulnerable students. The next day is designed to facilitate the development of school protocols for suicide prevention with the goal of

providing interventions that are both responsive and respectful to the students. This package also includes a series of lessons that can be delivered to middle school students.

Other programs have been developed at many high schools and universities. They vary in terms of their scope, but they all reflect mattering. For instance, Bennington High School in Omaha developed an initiative following a presentation by Jay Asher, author of *Thirteen Reasons Why*. This book and subsequent Netflix movie focused on the 13 reasons why a girl took her own life. The Bennington students responded with their campaign "Thirteen Reasons Why You Matter," which emphasized 13 reasons for living. Other schools who have hosted Jay Asher have started "Why You Matter" card campaigns. Another school in Iowa, Mount Vernon Middle School, created a "You Matter, We Need You" initiative for victims of bullying. There are also many initiatives at the college and university level. For instance, the University of Southern California School of Social Work has their own "You Matter" campaign. One specific recommendation from this initiative is focused on anti-bullying and supporting victims of bullying by letting them know that they matter. The power and determination of individual communities also deserves special mention. For example, in 2017, some remarkable parents from an Arizona community responded to the deaths of three students by expressing their care and concerns in a remarkable way. They stationed themselves at the local school and greeted students arriving at school with "You Matter" signs.

The programs focused on mattering that have sprung up largely reflect the fact that people recognize that just about everyone has a need to matter and young people who engage in behavior that is destructive to themselves or others must not have a sense of mattering. Once someone reaches the point of feeling a sense of not mattering, and this is projected into how he or she sees the future, there is a profound sense of emotional pain and feelings of isolation along with little concern about what may be lost in the future by engaging in extreme behavior.

I will conclude this segment by noting a remarkable initiative in Canada called the "We Matter" campaign. Tunchai Redvers and her brother Kelvin Redvers from the Northwest Territories decided that they must address the alarming rate of suicide found in Northern Canada by letting Indigenous children, adolescents, and emerging adults know that they matter and that support is available. Tunchai survived her own suicide attempt at the age of 15 years old. They developed an online platform for people to broadcast inspirational messages and their own stories of hope. The We Matter campaign began in October 2016 and is available online (see wemattercampaign.org). Prime Minister Justin Trudeau signed on to the campaign in February 2017 when he shared his own video of support.

Recommendations for Promoting Mattering to Prevent Distress

This segment concludes with some observations and suggestions about what schools can do to promote mattering. This analysis will focus on general themes and principles because a complete description of steps that can be taken, and that have been taken, is beyond the scope of this chapter.

First, and foremost, it is important to realize that, while there is now extensive evidence from meta-analyses of the general benefits of interventions designed to increase student well-being and resilience, and reduce various forms of maladjustment (e.g., Hodder et al., 2017; Werner-Seidler, Perry, Calear, Newby, & Christensen, 2017), there is still much room for further improvements due to the lack of a specific focus on mattering thus far. It must be acknowledged that the feeling of not mattering is a specific vulnerability factor, and when it poses a problem for a particular student as it does for many students, this sense of not mattering must be addressed with a specific approach tailored to address the need for this student to matter. The links established between feelings of not mattering and suicidal tendencies suggests it is warranted to address the mattering theme as a

high priority. The child who feels insignificant and not heard and not seen who takes part in a mindfulness program, for instance, will likely learn some useful techniques that can help address negative emotions and how they respond physiologically when they feel stressed, but this program will not address the specific vulnerability that is creating their emotional problems and associated deficits in motivation and achievement. It is the case for many students that the need to matter and feelings of not mattering represent a core schema that is deeply ingrained and central to the sense of personal identity and the psychological needs that must be addressed. I have seen through assessments of children and adolescents that they seem to have good functioning in terms of many attributes and indicators but they are still prone to anxiety, depression, and resentment due to their pervasive sense of having been treated like they don't matter, and this is especially painful for them when this treatment comes from significant others.

Second, when developing programs and policies, it is important to focus on boosting feelings of mattering, but it is also just as important to consider aspects of the student experience that may make them feel like they don't matter. The "You Matter" message in a school setting will be undermined and "ring hollow" if there are other factors at play that make students feel like they don't matter. An example would be a situation in which a school as a whole has embraced a focus on mattering promotion, but there are still some teachers who treat students in ways that marginalize these students. Specific programs and opportunities at schools can be evaluated in order to determine the extent to which they are effective in providing a sense of mattering. The item "I feel like I matter in this program" has been used to assess youth activities and opportunities (e.g., Akiva, Cortina, Eccles, & Smith, 2013).

Ideally, a focus on mattering should be embraced according to a whole school approach. The healthy school is one that regularly sends key messages (e.g., no one is perfect) but with a particular emphasis on mattering. Themes such as "everyone matters and everyone counts" need to be framed in terms of specific actions that support the theme "everyone matters because everyone has a role to play." It is generally accepted that positive relationships represent a key component of a positive school climate, and it is important that teachers convey to their students their sense of interest and caring about them. The positive outcomes of this approach have been well-documented (see, for instance, Possel et al., 2016).

Because the feeling of mattering exists when children and adolescents feel that they are being seen and their voices are being heard, it is important to provide youth-led opportunities that result in the youth voice being seriously considered. Students will benefit from positive mentors who clearly care about them, but they will also derive great benefit and satisfaction by having the opportunity to mentor other young people and make a difference in their lives. The sense of mattering can extend beyond the school and the local community to include campaigns to positively impact broad issues such as environmental concerns. Regarding the need to matter by being depended on, it is vital that young people be given meaningful roles that matter (for a discussion, see Scheve, Perkins, & Mincemoyer, 2006). The tendency to consult and engage with adolescents in ways that amount to "lip service" and do not instill a sense of mattering will result in a lost opportunity to promote mattering and will be seen as further evidence of not really mattering in a meaningful way.

Given that mattering can be assessed in many contexts, the ideal mattering promotion program will take an integrated approach that includes, but extends, well beyond the school. Mattering at home and mattering in the community must also be promoted in order to reduce the number of children and adolescents who do not feel a sense of mattering in either setting. At the community level, meaningful opportunities need to be created so that there are ways for students who want to volunteer in order to make a difference can actually make a difference. At the family level, it is hopefully the case that parents who adopt the goal of ensuring that their daughters and sons realize that they matter will translate into a greater awareness of the stressors and pressures that young people face. One investigation focused on students in the ninth grade showed that moth-

ers dramatically underestimated the stress that their adolescent sons and daughters were experiencing across all eight stress domains assessed, but those mothers who did a more accurate assessment of stress were the ones who had more frequent and higher-quality communications with their sons and daughters (see Hartos & Power, 1997). Perhaps in many instances all it takes is a regular demonstration of both interest and care on the part of the parent. Unfortunately, the lack of accuracy in stress estimation seems to extend to appraisals of mattering. The evidence described above suggests that 20–30% of adolescents do not feel like they matter, but other data we have been able to access suggests that the vast majority of parents report that their sons and daughters do feel like they matter with only about 8% indicating that their child feels otherwise and has some sense of not mattering to others. Thus, it seems that many parents are unaware of the fact that their children do not feel any sense of importance.

In summary, the current chapter was written to highlight the need to consider the stress and distress of children and adolescents from an interpersonal perspective. Clearly, interpersonal issues can dramatically undermine academic pursuits and achievement outcomes, and they can potentiate highly destructive forms of distress and behavioral problems. Intervention programs that fail to address interpersonal problems and stressors will be missing a key element that impacts the current and future lives of young people. While there are many factors and processes to address when seeking to boost interpersonal resilience, the focus here has been on the promotion of mattering because of its powerful role and its resonance and relevance in school settings. The young person who has a feeling of mattering in general and in specific situations is someone who is advantaged in the sense that she or he has a personal resource that should provide psychological protection in "times of trouble" but should also, according to Rosenberg and McCullough (1981), provide a mechanism that promotes social integration and a heightened sense of being connected to other people and society as a whole.

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School-Based Intervention for Adolescents with Impairing Social Anxiety

21

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Abstract

Social anxiety disorder (SAD) is a common problem during adolescence that can result in a range of impairments to school-related functioning, including lower academic achievement and higher rates of peer rejection. Yet, most affected students with SAD do not receive mental health services, in part because SAD often goes undetected at home and school. Schools may be an appropriate venue for helping adolescents with SAD, as school-based interventions can directly target school-based impairment. Given the potential advantages of school-based mental health services, Masia Warner and colleagues developed Skills for Academic and Social Success (SASS), a cognitive-behavioral group treatment for adolescents with SAD designed for implementation in schools. This chapter provides an overview of the SASS intervention, including its structure and components, and describes findings from a series of randomized controlled trials which demonstrate its feasibility, efficacy, and effectiveness. We conclude by discussing future research directions, including the need to identify ways to enhance SASS' sustainability and extend its generalizability to youth in underresourced schools and underserved communities.

Anxiety disorders are the most common type of psychopathology during the middle and high school years, with a lifetime prevalence rate of 31.9% in a nationally representative sample of youth prior to age 18. Among anxiety disorders in adolescents, social anxiety disorder (SAD) ranks as second most common, after specific phobia (Merikangas et al., 2010). Characterized by an excessive fear and avoidance of social and performance situations (American Psychiatric Association, 2013), SAD peaks in onset around age 11 (Beesdo, Knappe, & Pine, 2009) and reaches a lifetime prevalence of 9.1% prior to age 18 (Burstein et al., 2011; Merikangas et al., 2010). When left untreated during adolescence, SAD is associated with a relatively persistent and stable course of symptoms into adulthood (Beesdo-Baum et al., 2012; Pine, Cohen, Gurley,

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Brook, & Ma, 1998), as well as increased risk of other serious mental health problems, such as depression, alcohol and drug dependence, and suicide (Beesdo et al., 2007; Dahne, Banducci, Kurdziel, & MacPherson, 2014; Kessler, 2003; Tomlinson, Cummins, & Brown, 2013; Wittchen & Fehm, 2003). Anxious youth are also vulnerable to impairments of social, family, academic, and occupational functioning, with adolescents with SAD at particular risk for social and school-related impairments (Blöte, Miers, Heyne, & Westenberg, 2015; Swan & Kendall, 2016).

Social Anxiety and School-Related Functioning

Many studies have examined the short-term and long-term impacts of SAD and other anxiety disorders on how adolescents function in the school environment (see review by Blöte, Miers, Heyne, et al., 2015). This body of research reveals a robust association between adolescent social anxiety and interference in school-related functioning, within both academic (e.g., achievement and school engagement) and interpersonal (e.g., friendships with classmates and bullying) domains.

Academic Performance

Research in adolescent samples links SAD with lower academic performance (Van Ameringen, Mancini, & Farvolden, 2003) and greater problems with learning and concentration in the classroom (Bernstein, Bernat, Davis, & Layne, 2008). In addition, common social fears of socially anxious teenagers may directly interfere with their classroom performance and ability to complete course requirements. For example, in a study of 2218 Swedish junior high school students, Gren-Landell et al. (2009) revealed that 91.4% of students with social anxiety reported impairment in the school domain due to their social fears, compared to 17.2% of the overall sample. These included speaking in front of the class and raising their hand during a lesson. Similarly, among a sample of 63 adolescents with SAD, Beidel et al. (2007) found that "oral reports or reading aloud" and "asking the teacher a question or asking for help" were identified as two of the most distressing social situations. These findings are consistent with those from the Social Anxiety and Normal Development (SAND) study (Westenberg et al., 2009), which found that socially anxious adolescents were more likely to experience distress and avoid a variety of school-related social situations, including answering questions in class, reading aloud, giving a speech in class, writing on the board, and taking tests. Thus, it is clear that situations which are commonly encountered during the school day can cause considerable difficulty for students with SAD.

Moreover, poor academic performance may be related to cognitive dysfunction implicated in SAD. Individuals with SAD demonstrate heightened attention to threatening stimuli (Roy, Dennis, & Masia Warner, 2015), negative interpretations of routine interactions and situations, and low expectations of personal performance (Alfano, Beidel, & Turner, 2006; Rapee & Lim, 1992). In addition, the attention of individuals with social anxiety is excessively self-focused and characterized by frequent negative self-images and thoughts, as well as hypervigilant self-monitoring of their behaviors (Clark & Wells, 1995). Such competing cognitive activity may impair memory capacity, the ability to inhibit goal-irrelevant information (Airaksinen, Larsson, & Forsell, 2005; Moriya & Sugiura, 2013), and concentration and attention to academic tasks (Bernstein et al., 2008). In sum, it appears that both social and cognitive impairments can contribute to poor academic performance in youth with SAD.

School Engagement and Completion

Because the school environment features many challenging social situations that are often avoided by socially anxious students, it can be difficult for them to remain engaged. In addition to participating less in the classroom, students with SAD may be less involved in extracurricular

activities, such as school clubs and sports. This frequent avoidance of interaction with classmates and teachers may further erode student engagement and school connectedness, or the extent to which students feel supported by others in the school environment. Students reporting low school connectedness tend to experience greater social anxiety and exclusion, as well as greater potential for degree non-completion (Blum & Libbey, 2004; Bond et al., 2007; Resnick, Harris, & Blum, 1993; Shochet, Dadds, Ham, & Montague, 2006). Indeed, social anxiety is also associated with increased risk for absenteeism, school refusal, and premature withdrawal from school (Heyne, Sauter, Van Widenfelt, Vermeiren, & Westenberg, 2011; Stein & Kean, 2000; van Ameringen et al., 2003). For example, in a longitudinal study of 1426 high school students, Monroe, Borzi, and Burrell (1992) reported that those with communication apprehension were more likely to drop out of school and avoid post-secondary education, citing fear of communicating with others as the primary reason. Van Ameringen, Mancini, and Farvolden (2003) reported similar findings in a sample of 201 anxious adults, who noted social fears (e.g., speaking up in class, feeling nervous in school) as their main reasons for disliking school and terminating school prematurely.

SAD is also associated with somatic complaints in adolescents (Ginsburg, Riddle, & Davies, 2006) that may contribute to additional disruption in their classroom involvement because of a frequent need to visit school nursing staff. Withdrawing from school activities due to social anxiety and related physical symptoms may serve to reinforce school-related fears. As students continue to move away from the school environment, they may be at further risk of negative academic outcomes and school dropout (Janosz, Archambault, Morizot, & Pagani, 2008; Wang & Holcombe, 2010), as well as risky health behaviors associated with absenteeism, such as illicit drug use and suicide attempts (Kearney, 2008). Taken together, it is evident that several characteristics linked to adolescents with SAD, including social avoidance and somatic complaints, can interfere with their ability to remain engaged and complete school.

Peer Relations and Friendships

The transition to middle school and high school requires adolescents to navigate a period marked by greater emphasis on interpersonal relationships, including social demands from classmates, social media, and dating. During adolescence, youth are also expected to become more independent and receive less help from their parents in developing social connections. Thus, the adolescent period can be quite challenging for many students and, not surprisingly, presents particular difficulties for students with SAD, who struggle in social situations. Youth with SAD often experience distress around social behaviors needed to engage unfamiliar peers, such as initiating and joining conversations and asking peers to hang out. Consequently, they may avoid these interactions and engage less with their classmates (Schneider, 2009), which can restrict the development of new friendships and social opportunities (Erath, Flanagan, & Bierman, 2007). Indeed, research suggests that socially anxious adolescents tend to be less popular (Van Zalk, Van Zalk, Kerr, & Stattin, 2011), have fewer friends, and perceive less support and intimacy in their friendships (La Greca & Lopez, 1998; Tillfors, Persson, Willen, & Burk, 2012; Vernberg, Abwender, Ewell, & Beery, 1992). They are also more likely to befriend other socially anxious classmates, which can unfortunately serve to maintain and exacerbate their own social anxiety (Van Zalk et al., 2011). In the school environment, discomfort around peers may manifest itself in different ways, ranging from discomfort around eating with others in the cafeteria to avoiding school clubs and activities (Beidel, Turner, & Morris, 1995, 1999; Gren-Landell et al., 2009). Ultimately, these difficulties with social behaviors and relationships at school may leave students with SAD feeling isolated and lonely (Beidel et al., 2007).

Peer Rejection and Victimization

A consistent body of research demonstrates an association between social anxiety and various forms of peer rejection, including exclusion,

teasing, and bullying by classmates (e.g., Blöte, Miers, & Westenberg, 2015; Inderbitzen, Walters, & Bukowski, 1997; Ranta, Kaltiala-Heino, Frojd, & Marttunen, 2013; Ranta, Kaltiala-Heino, Pelkonen, & Marttunen, 2009; Storch, Brassard, & Masia Warner, 2003). Moreover, evidence suggests that this association reflects actual treatment, rather than negatively biased perceptions of socially anxious students. For example, based on their study of 84 middle school students, Erath, Flanagan, and Bierman (2007) found that social anxiety was associated with decreased peer acceptance and increased victimization, as reported by youth and peers. Negative expectations of social performance and social withdrawal were identified as mechanisms by which social anxiety contributed to negative peer relations. Similarly, Blöte and Westenberg (2007) reported that socially anxious high schoolers felt more negatively treated by their classmates, a perception that was shared by their nonsocially anxious classmates. In addition, youth who are victimized at school may internalize the content of peer attacks and harassment (Troop-Gordon & Ladd, 2005), resulting in greater avoidance of social interactions (Storch, Masia Warner, Crisp, & Klein, 2005) and fear and avoidance of school itself (Kearney, 2008), which can exacerbate academic problems. Importantly, the relationship between social anxiety and peer rejection appears reciprocal (Rubin & Burgess, 2001; Siegel, La Greca, & Harrison, 2009). That is, while peer rejection may lead to social fears and avoidance, social anxiety may increase risk for experiencing peer rejection.

Rationale for School-Based Intervention

Despite the high prevalence, chronic course, and functional impairments associated with adolescent SAD, most affected students remain untreated. SAD is the second most untreated psychological disorder in adolescents, after specific phobia (Costello, He, Sampson, Kessler, & Merikangas, 2014). Among a nationally representative sample, a scant 12.1% of adolescents with SAD reported receiving mental health services, including only 21.3% of adolescents with *severe* SAD (Merikangas et al., 2011). Adolescents with SAD may be unlikely to access services because SAD often goes undetected at home and school (Kashdan & Herbert, 2001). For example, parents tend to have more difficulty recognizing signs of anxiety in their children and perceive anxiety as less burdensome, disruptive, and warranting intervention, when compared to more overt externalizing problems (Albano, DiBartolo, Heimberg, & Barlow, 1995; Angold et al., 1998; Wu et al., 1999; Thurston, Phares, Coates, & Bogart, 2015). Similarly, youth with SAD may be "invisible" in the classroom (Strauss, Lahey, Frick, Frame, & Hynd, 1988) and only come to the attention of school personnel when they refuse to attend school (Beidel & Morris, 1995). Although school-based mental health screenings can accurately identify students with SAD (Sweeney et al., 2015), they are a low priority for public schools, which are more likely to use their limited resources to support programs targeting overt behavioral problems, such as anger management and substance abuse prevention (Foster et al., 2005). For those teenagers identified through school-based mental health screenings, referrals for additional care are less frequently provided to those with internalizing problems (e.g., anxiety), compared to those with externalizing problems (Husky, Sheridan, McGuire, & Olfson, 2011). Even when adolescents are linked with mental health services, they may be reluctant to engage due to stigma about treatment and fears of negative evaluation (Jagdeo, Cox, Stein, & Sareen, 2009; Jorm, Wright, & Morgan, 2007; Meredith et al. 2009).

In light of how many adolescents with SAD go unrecognized and untreated, and the substantial impact of SAD on functioning in the school environment, there have been calls for efforts to increase and improve service delivery for SAD in school settings (Kashdan & Herbert, 2001). Schools may be an especially appropriate venue for treating adolescents with SAD for several reasons. First, SAD appears less responsive than other anxiety disorders to individual treatment formats (e.g., Ginsburg et al., 2011), presumably

because group-based interventions more easily facilitate social skills practice and exposure exercises targeting the social avoidance associated with the disorder (Beidel et al., 1999; Kendall, Settipani, & Cummings, 2012). It can be easier to organize a group intervention in a school than an outpatient mental health setting, where scheduling and logistical issues make group formats less feasible. Second, school-based interventions can directly address the school-related impairment caused by SAD, as well as more readily address the many triggers of SAD that commonly occur at school. School-based clinicians can coordinate exposure exercises both in the classroom (e.g., requesting teachers call on students to answer questions or read aloud) and out of the classroom (e.g., having students start conversations with peers in the cafeteria). Third, school-based clinicians (e.g., school counselors, school psychologists) are uniquely well-positioned to monitor student progress, particularly any changes in school and social functioning, and address issues or setbacks that arise. Fourth, situating mental health care in schools can inform school personnel of the signs and symptoms associated with SAD. This may increase the likelihood of early detection and intervention, given that teenagers with social anxiety access services more successfully when referred by school personnel (Colognori et al., 2012). Finally, school-based mental health services have been shown to address practical barriers to service utilization by adolescents, including financial costs, insurance coverage, transportation, and stigma (Slade, 2002).

Skills for Academic and Social Success (SASS)

Given the potential advantages of school-based mental health services, Masia Warner and colleagues developed an approach to intervention for adolescent SAD that tailored evidence-based strategies for delivery in school settings (Masia Warner, Colognori, & Lynch, 2018). This intervention, called Skills for Academic and Social Success (SASS), was adapted from Social Effectiveness Therapy for Children (SET-C), an empirically supported, clinic-based treatment that consists of 12 individual sessions of exposure, 12 group sessions of social skills training, and unstructured generalization exercises which provide opportunity for children with SAD to practice socializing with non-anxious peers. SET-C was chosen due to its demonstrated efficacy in attention control trials (Beidel, Turner, & Morris, 2000; Beidel, Turner, Young, & Paulson, 2005), as well as a group format and emphasis on activities with peers that match well with the natural availability of same-aged classmates in the school environment.

A number of significant modifications were necessary in adapting the intervention for school-based delivery. The number, length, and pace of sessions were reduced in order to facilitate implementation within a typical class period. Based on evidence suggesting that socially anxious adolescents are more likely than children to engage in negative self-talk (Alfano et al., 2006), a module on cognitive restructuring (called "realistic thinking") was added to the program. Finally, the school environment was incorporated into the program in order to enhance treatment gains and maximize real-world generalization of skills. For example, treatment exercises include teachers and school peers, and adolescents practice skills in school and community locations.

The core elements of SASS target many of the processes implicated in the school-related dysfunction commonly experienced by adolescents with SAD. SASS aims to teach cognitive reappraisal of feared negative outcomes in social and school situations, enhance social skills, and facilitate exposure to feared school situations. The theory of change underlying SASS proposes that these cognitive and behavioral changes will result in decreased social anxiety and avoidance, improved attention and concentration, decreased somatic complaints, and improved social functioning. In turn, these gains may result in improved school functioning by reducing the risk of premature school termination and increasing academic performance, school connectedness, and school engagement. In the rest of this chapter,

we describe the SASS program and findings from controlled trials evaluating its feasibility, efficacy, and effectiveness.

Structure and Components of SASS

SASS is comprised of 12 in-school group sessions, two booster group sessions to target relapse and remaining obstacles, and two brief individual sessions. Parents are encouraged to attend two parent group sessions to learn about social anxiety, the SASS treatment, and strategies for managing their teenager's social anxiety. Students also attend four weekend social events, at which they have the opportunity to socialize with prosocial peers ("peer assistants"), practice skills learned during the intervention, and engage in real-world exposure. The program lasts approximately three months, and the group and individual sessions are held during the school day during rotating class periods.

School Group Sessions

Group sessions in SASS are 30–40 min in length, kept small (three to six students), and facilitated by one to two group leaders. Each of the 12 sessions focuses on a different component of SASS: psychoeducation, realistic thinking (cognitive restructuring), social skills training, facing your fear (exposure), and relapse prevention. Sessions conclude with the assignment of practice exercises that are then reviewed at the beginning of the next session.

Psychoeducation In the first session, group leaders provide an overview of the rationale, structure, and components of SASS. Group leaders also work with the students to establish group rules and discuss the importance of confidentiality. In addition, students learn about the symptoms of social anxiety, with emphasis on the anxiety triad. Students are asked to describe their own anxiety symptoms, discuss the social situations that they fear or avoid, and provide examples of how social anxiety affects their bodily reactions, thoughts, and behaviors. A main goal of this session is for students to recognize the interaction between the emotional, cognitive, and behavioral manifestations of their social anxiety. Understanding the role of avoidance is also a key focus of this session. Lastly, to foster motivation, students are encouraged to identify specific changes they would like to see occur as a result of their participation, including social situations in which they would like to feel more comfortable.

Realistic Thinking The second session focuses on cognitive reappraisal, with strategies adapted from Ronald Rapee's (1998) book *Overcoming Shyness and Social Phobia: A Step-by-Step Guide.* In this session, students learn about the role of negative self-talk, how to identify unrealistic thought patterns, and steps for thinking more realistically. A main goal of the session is for students to understand the connection between thoughts and feelings. Group leaders provide several examples to illustrate how having a certain thought in a given situation can lead to a different emotional reaction. Next, group leaders explain that individuals with social anxiety tend to engage in negative self-talk. In order for this to be relatable to teenagers, group leaders refer to this as being "overly negative." Students learn about two types of cognitions associated with SAD: exaggerated negative expectations (e.g., "If I give a class presentation, I'll mess up") and exaggerated feared consequences (e.g., "If I mess up, everyone will remember that I messed up"). To think more realistically, students are taught to identify their negative thoughts (i.e. "What am I afraid of? What am I predicting will happen?"), ask questions to assess the reality of their predictions (e.g., "Am I exaggerating? How many times has this happened in the past?"), and think more flexibly by proposing alternative explanations. Group leaders then elicit real examples of feared social situations from the students in order to practice applying these realistic thinking strategies in session. Although this is the only session focused on cognitive restructuring, students are asked to practice these strategies at home, as well as in subsequent sessions as needed.

Social Skills Training Learning and practicing social skills can help increase the confidence of adolescents with SAD in facing social situations they might otherwise avoid. SASS covers four different social skills: (1) initiating conversations, (2) maintaining conversations and establishing friendships, (3) listening and remembering, and (4) assertiveness. Group leaders explain the concept and rationale of each skill, model them for students, and then facilitate role play exercises that allow students to engage in practice with their fellow group members. In each session, students participate in at least two role plays, which feature scenarios relevant to typical adolescent experiences (e.g., practicing how to start a conversation with a classmate). For each skill practice, group leaders provide feedback tailored to each student. Given that adolescents with SAD may appear unapproachable because of nervous nonverbal behavior (e.g., tense expression or jitteriness), suggestions may be given to encourage a friendlier demeanor, such as making eye contact, smiling, or speaking in a louder voice.

In the first social skills session, initiating conversations, students learn about opportunities for starting conversations (e.g., sitting next to someone in the cafeteria), ways to open conversations (e.g., commenting on something you have in common), and body language that conveys friendliness. Group leaders emphasize that conversation starters can be simple and even dull, in order to reduce the pressure that socially anxious teenagers may feel to sound witty or interesting. As part of the second skill, maintaining conversations and establishing friendships, students practice asking open-ended questions to facilitate conversations and changing topics appropriately, rather than prematurely due to feelings of discomfort. To bolster each student's confidence in establishing friendships, group leaders encourage them to practice extending invitations and identify common concerns about asking others to get together. The goal of the third skill, listening and remembering, is to combat anxiety interference, which occurs when teenagers with social anxiety become preoccupied by their own negative self-evaluations (e.g., "Do I sound boring?"). Thus, students are taught to pay attention to what their conversation partner says and to build on it during the conversation. As part of the fourth and final skill, assertiveness, students learn to refuse requests and express difficult feelings through the use of "I" statements (e.g., "I felt upset when you didn't complete your part of the project on time.").

Facing Your Fear Five sessions of SASS are devoted to exposure exercises in which group leaders work with students to confront feared and avoided social situations. Group leaders present the rationale of exposure, explaining that avoidance of social situations reinforces fear, whereas gradually facing these situations reduces discomfort in the long run. Next, group leaders explain that effective exposure is gradual in nature and usually requires staying in the situation and repeated practice. Metaphors are frequently used to illustrate these concepts. For instance, to convey the gradual nature of exposure, group leaders describe how a person with a fear of heights would not be expected to start at the top floor of the Empire State Building but would instead start at the first floor and climb a few floors at a time as they become more comfortable. Students then create a fear hierarchy (or "fear ladder") by ranking their feared social situations, in order from least to most anxiety-provoking. When developing hierarchies, group leaders emphasize the importance of addressing "core fears" related to embarrassment, criticism, and rejection. Common situations that target core fears include giving an incorrect answer in class, asking peers to get together, and making social mistakes, such as tripping in front of classmates.

Prior to starting each exposure, students are asked to provide their predictions (e.g., "What are you expecting will happen?"), along with a Subjective Units of Distress (SUDS) rating from 0 (completely calm) to 8 (absolutely terrified). Group leaders elicit SUDS ratings from students periodically during the exposure and upon its conclusion. SUDS ratings are expected to decrease at least 50% by the end of the exercise.

If a student is resistant to entering the feared situation, group leaders briefly explore the student's negative expectations and may adjust the exposure if necessary. Upon conclusion of the exposure, group leaders compare the initial and final SUDS ratings and ask students how the experience compared to their earlier predictions (e.g., "Was it as bad as you expected?"). Students then discuss their experience and provide feedback before identifying exposure exercises they will practice in between sessions.

Conducting exposures in school offers the opportunity to capitalize on the school environment by creating realistic situations that target common, everyday social fears. During exposure exercises, student practice entering feared situations in the group (e.g., reading aloud) or throughout the school (e.g., talking with an unfamiliar peer in the cafeteria). For example, one exposure session focuses on a "speed chatting" exercise, in which students pair up with their fellow group members to practice conversing. In an effort to encourage students to confront their nervousness around maintaining conversations, group leaders let each conversation last for a few minutes before switching up the pairs. Exposure exercises may also be tailored to a student's specific difficulties in school (e.g., meeting with teachers, approaching unfamiliar peers at lunch) or outside of school (e.g., calling for food delivery). In addition, because common school fears for adolescents with SAD involve talking with authority figures, group leaders facilitate exposures in school with the assistance of school personnel. Examples may include visiting the main office to speak with administrative staff or asking questions to the librarian. Finally, exposures may be developed to target fears of group activities, such as joining a club or approaching a coach to discuss joining an athletic team.

Relapse Prevention The final group session focuses on maintenance of gains and avoiding relapse. Each student gives a speech about their experience in the program, including what they learned and achieved, along with goals for future improvement. Group leaders then facilitate a discussion of strategies for continuing gains and managing setbacks to prevent relapse. Students identify warning signs that their social anxiety symptoms have returned or worsened, as well as strategies for addressing them. We have found it useful to remind students that setbacks are inevitable while instilling confidence in them based on their increased ability to cope with social situations.

Individual Sessions

Two 15-min individual sessions are conducted to check in with students about their treatment goals and address any issues that may impede their progress. In addition, students have the opportunity to share concerns they may not feel comfortable expressing in the groups, such as stressors (e.g., being bullied, academic struggles) that may interfere with their ability to complete practice exercises. Other aims of individual sessions can be to conduct a customized cognitive restructuring exercise, review social skills that may be challenging for the student, and develop and refine the student's fear hierarchy.

Booster Sessions

Group booster sessions are conducted monthly for two months after completion of the program. The purpose of these follow-up meetings is to evaluate progress, assess and discuss obstacles to improvement, and reinforce and identify strategies for establishing relationships. Additional exposure exercises may be conducted as needed.

Social Events

Four weekend social events are included in SASS to facilitate skill practice and generalization. Events may involve different activities (e.g., bowling, rollerblading, or laser tag) and are attended by group leaders, group members, and peer assistants (see next section for description). These activities allow for group members to practice social skills learned in the program and

engage in exposure to commonly avoided social situations, such as attending a gathering with unfamiliar peers, starting conversations, and eating and playing games/sports in front of others. Group leaders are also able to observe how group members function in realistic social situations. While group leaders facilitate the first event and encourage interaction between participants, they are typically less involved during subsequent events, unless a student is having significant difficulties. As the program progresses, later events may also be less structured (e.g., having a picnic) in order to provide a more naturalistic situation that challenges students to use their new skills.

Peer Assistants

Peer assistants are friendly, helpful, and prosocial students who assist with the program. The main role of peer assistants at social events is to promote a positive experience for the group members and help integrate them into activities. Peer assistants may also assist with social skills practice and exposure activities during group sessions, such as having conversations with group members in the school hallways. While students may be nominated by school personnel to serve as peer assistants, it is ideal to have students who previously completed the program return to be peer assistants, as they are typically sensitive and empathic toward the current group members. In addition, serving as a peer assistant can reinforce for them how much their social anxiety has improved since completing the program.

Parent Sessions

Parents are invited to two meetings during the course of the intervention. If parents cannot attend, group leaders offer to speak with them via telephone to provide a summary of the meetings and address any concerns. The first session provides parents with psychoeducation about social anxiety, as well as an overview of the SASS program. Parents of adolescents with SAD may feel frustrated by their teenager's avoidance behaviors (e.g., refusing to order food in a restaurant) and struggle to understand the extent of their teenager's distress. Therefore, if parents can develop greater understanding of the symptoms, distress, and impairment associated with SAD, they may be more patient with their teenager and receptive to implementing different parenting strategies.

The second parent session focuses on teaching parents to distinguish between unhelpful and helpful strategies for responding to their teenager's anxiety. Parents may initially express concern that their style of parenting has caused these difficulties in some way. As a result, group leaders use a nonjudgmental approach during this discussion, acknowledging that the unhelpful strategies (e.g., providing excessive reassurance, being overly directive, permitting avoidance) are common and natural reactions for parents when observing their children experience distress. However, parents learn that these strategies only provide their children with short-term relief of anxiety while promoting long-term avoidance of challenging situations. Therefore, parents are advised to discontinue the unhelpful strategies and instead communicate empathy, prevent avoidance, encourage constructive coping, and reinforce non-anxious behavior. If parents can implement these strategies effectively, they can help their children develop adaptive coping and problem-solving skills and promote increased autonomy important for ensuring a successful transition to young adulthood.

Teacher Involvement

Educating and collaborating with teachers are important advantages of school-based treatment. In addition to meeting with teachers to provide psychoeducation about social anxiety and an overview of SASS, group leaders work with teachers to identify areas of social difficulty for participating students. During the program, teachers work with group leaders to support their students and plan appropriate and graded exposure exercises in the classroom. For example, teachers may assign leadership roles in group

activities to students participating in the program. In addition, if a student has fears of class participation, the teacher may initially provide the student with the answer to a question before class and subsequently call on the student to answer the question. Eventually, the student practices answering questions sufficiently such that they can participate more spontaneously. As the program continues, teachers can also provide feedback about student progress and identify other areas to be addressed.

Outcome Studies of SASS

To date, SASS has been evaluated in a small open trial (Masia, Klein, Storch, & Corda, 2001) and three randomized controlled trials (RCTs): two efficacy trials, including a waiting-list control trial (Masia Warner et al., 2005) and an attention control trial (Masia Warner, Fisher, Shrout, Rathor, and Klein, 2007), and one effectiveness trial of SASS delivered by school counselors (Masia Warner et al., 2016). In the first RCT, Masia Warner et al. (2005) randomized 35 adolescents (ages 14–16) with SAD from two urban parochial schools to either SASS (n = 18) or a waiting list (n = 17). SASS was co-led by a clinical psychologist and a psychology graduate student trained in the intervention. Compared to the waiting list group, adolescents assigned to SASS experienced greater improvements in social anxiety, avoidance, and functioning, as noted by adolescent, parent, and blinded evaluator ratings. Among SASS participants, 94% were classified as treatment responders at post-intervention, compared to only 12% of control group participants. In addition, 67% of the SASS group, versus only 6% of the waiting list group, no longer met diagnostic criteria for SAD at post-intervention. Clinical improvement was maintained nine months after treatment completion. In addition to linking SASS to improvement over time compared with no treatment, this study demonstrated that SASS could be feasibly implemented in schools.

In the second RCT, Masia Warner et al. (2007) compared SASS (n = 19) to a credible attention control group (n = 17) in a sample of adolescents (ages 14–16) with SAD. The attention control was designed to match SASS in time and professional attention; however, it omitted the main SASS components (e.g., social skills, exposure) and consisted of psychoeducation, relaxation training, and four social events without peer assistants. Findings confirmed the superiority of the SASS intervention, with 82% of SASS participants classified as responders at post-intervention, compared to 7% of attention control participants. Of the SASS group, 59% no longer met the criteria for a diagnosis of SAD at post-intervention, versus 0% of the attention control group. Furthermore, at post-intervention and six-month follow-up, SASS participants had lower clinician-rated social anxiety severity and greater global improvement. Overall, this study supported the specific efficacy of SASS and provided justification for further study of its effectiveness and disseminability to school settings.

Most recently, Masia Warner et al. (2016) completed a large investigation of high school students with SAD to examine whether SASS could be delivered effectively by school personnel without specialized training in CBT. A total of 138 ninth through 11th graders from three public high schools were randomized to one of three conditions: SASS as delivered by school counselors (C-SASS), SASS as delivered by clinical psychologists with experience in CBT for youth anxiety (P-SASS), and *Skills for Living* (SFL), a nonspecific, manualized school counseling group program. To train school counselors in SASS, they attended a 5-hour workshop led by the treatment developer. School counselors also co-led a 12-week SASS training group with a postdoctoral fellow, who provided weekly consultation during this training phase as well as when counselors implemented the SASS program independently.

Findings revealed that significantly more participants in C-SASS (65% and 85%) and P-SASS (66% and 72%) were classified as treatment responders at post-intervention and 5 months later, compared to SFL participants (18.6% and 25.6%). At post-intervention and follow-up, students who completed C-SASS and P-SASS also

had lower severity of SAD than students who completed SFL. Diagnostic remission was higher for C-SASS (22% and 39%) and P-SASS (28% and 28%) than SFL (7% and 12%) at post-intervention and follow-up assessments; however, only a trend in favor of C-SASS was found at post-intervention, and remission rates were lower compared to previous trials. No differences between C-SASS and P-SASS were observed on any of the main clinical outcomes. Taken together, these findings support the disseminability of SASS by showing that school counselors can provide effective treatment to adolescents with SAD, with benefits comparable to care delivered by psychologists.

Future Directions

Enhancing Sustainability of SASS

Clinical trials demonstrate that SASS is an efficacious, school-based treatment for adolescent SAD that can be feasibly implemented in school settings and effectively delivered by school counselors with limited background in cognitive-behavioral therapy (CBT). However, to be a cost-effective and viable option for treating adolescent SAD in schools, the implementation of SASS cannot rely on significant ongoing involvement from research psychologists with expertise in CBT. Therefore, several critical areas require further development in order for SASS to be a sustainable intervention in schools. First, given that SAD is often undetected in students, the development of feasible screening and identification efforts at school is essential. One option may be to train teachers and other school personnel to better detect signs of SAD. Accuracy might be improved by having school counselors complete checklists of behaviors associated with SAD during routine student meetings. Brief student screenings could also be conducted during health classes, freshman orientation, or other school activities.

Moreover, further study is needed to determine the type and amount of training and consultation needed for school personnel to deliver SASS with effectiveness. Clearly, the level of training and supervision cannot compromise the quality of SASS implementation. Masia Warner et al. (2016) demonstrated that, with intensive consultation, school counselors can deliver SASS with strong adherence and competence, but this training model will likely be an obstacle to dissemination. Additional investigation is needed to determine the level of fidelity necessary to yield positive treatment outcomes. In addition, it may be possible to streamline SASS to target compliance of essential ingredients (Dobson & Singer, 2005; Kazdin & Nock, 2003). Alternative models of training should also be explored, such as distance learning, web-based or computerized training, telemedicine technology, and pyramid training, in which one extensively trained school personnel would train and supervise others (e.g., Demchak & Browder, 1990). Each of these options may promote skill maintenance over time while being more practical and affordable for schools.

Finally, feasible methods are also needed for monitoring students' response to intervention (e.g., severity and functioning). While independent evaluators are considered the "gold standard" in RCTs for assessing treatment response, this is not feasible and cost-effective in school settings. Evidence from the effectiveness trial of SASS suggests that adolescents and their parents may serve as reliable informants (Fox & Masia Warner, 2017). Another possibility is to examine the utility of obtaining treatment response ratings from school personnel.

Enhancing Generalizability of SASS

Overall, there is a paucity of intervention research involving racial and ethnic minority communities, particularly for anxiety (Huey Jr. & Polo, 2008). Of evidence-based treatments shown to be effective with minority children and adolescents, almost half target conduct problems, with only three studies (Ginsburg & Drake, 2002; Pina, Zerr, Villalta, & Gonzales, 2012; Silverman et al., 1999) of anxiety. In addition, prominent RCTs of CBT for youth anxiety disorders often feature

samples largely composed of participants from White and middle-class backgrounds (e.g., Pediatric OCD Treatment Study Team, 2004; Walkup et al., 2008).

Rates of SAD and other anxiety disorders are high among racial/ethnic minority students (Beidas et al., 2012; Merikangas et al., 2010; Yeh et al., 2002). For example, Asian-American and Latino high schoolers and college students have been found to report more social anxiety and school-related interference, when compared to other racial/ethnic groups (Lau, Fung, Wang, & Kang, 2009; Masia Warner et al., 2013). Yet, rates of mental health service utilization are particularly low among racial/ethnic minority students with anxiety disorders (Gudiño, Lau, Yeh, McCabe, & Hough, 2009; Merikangas et al., 2011), who are also at higher risk of prematurely terminating mental health services (Gonzalez, Weersing, Warnick, Scahill, & Woolston, 2011; Gordon-Hollingsworth et al., 2015).

School-based mental health services have emerged as a potentially critical strategy for increasing access to low-income and racial/ethnic minority youth (Cummings & Druss, 2011; Keeton, Soleimanpour, & Brindis, 2012; Lyon, Ludwig, Vander Stoep, Gudmundsen, & McCauley, 2013; Stephan, Weist, Kataoka, Adelsheim, & Mills, 2007) and addressing practical barriers to mental health care, such as cost and transportation (Weist, 1999). Minority youth are more likely to receive mental health services in schools than community clinics (Cummings, Ponce, & Mays, 2010; Jaycox et al., 2010). In a population-based survey of economically disadvantaged communities, more than three-fourths of children receiving mental health services were seen in the educational sector (Burns et al., 1995).

Therefore, an important direction for future research is to extend school-based intervention efforts to adolescents with the most significant unmet mental health needs, including students with SAD from low-income and racial/ethnic minority backgrounds. Consistent with models of cultural adaptation of evidence-based interventions (Cardemil, 2010; Castro, Barrera, & Martinez, 2004), one approach may be to tailor SASS to schools in racial/ethnic minority communities by addressing core values, beliefs, and norms of different student populations that impact expression of SAD and willingness to engage in treatment, along with ensuring cultural competence in school personnel delivering SASS. For example, the questioning of authority figures by youth may be considered inappropriate in traditional Latino and Asian-American families who value compliance and shyness (Kumpfer, Alvarado, Smith, & Bellamy, 2002). School personnel delivering SASS may be encouraged to design exposures that target social fears when they contribute to impairment, while still respecting the cultural values of their students. By enhancing the cultural sensitivity of SASS and adapting it to fit within the culture of the local community and school environment, it may help remediate unmet mental health needs of a broader population of youth with SAD.

Summary

School-based treatment is considered a valuable approach for addressing the high rates of adolescents with SAD who remain unrecognized and untreated. Intervening in schools is especially appropriate for treating SAD, which confers a number of academic and social impairments that make school challenging for socially anxious students. Inspired by these potential benefits, Masia Warner and colleagues developed Skills for Academic and Social Success (SASS), a cognitive-behavioral group treatment for adolescents with SAD designed for implementation in schools. In this chapter, we outlined the format and components of SASS and described findings from several clinical trials evaluating the program. Research demonstrates that SASS can be disseminated to schools and effectively implemented by school counselors without previous specialized training. Future research should explore ways to enhance SASS' sustainability, including developing efficient and cost-effective models of identifying students with social anxiety, as well as training and consultation for school counselors. Finally, extending the generalizability of SASS to racial and ethnic minorities and

underresourced schools is essential to addressing the unmet needs of youth with SAD in underserved communities.

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22

Implementing and Integrating Parenting Education into Early Childhood Education Environments

Shawna Lee and Jacqueline Specht

Abstract

This chapter examines the transition of strategies in supporting children's mental health in family environments for use in educational settings. Insight on the significance of mental health prevention and intervention in early learning contexts and the rationale for integrating strategies from evidence-based parenting intervention programs into early learning and care systems are provided. Findings from a randomized controlled trial indicated the value to this approach. This study also highlighted implementation challenges in adopting early childhood mental health interventions within educational settings.

Early Childhood Education and Emerging Mental Health

Recognition of the foundation in early childhood for positive mental health in middle childhood, adolescence, and adulthood has been well established (Waddell, Schwartz, Barican, Andres, & Gray-Grant, 2015). Childhood signifies the unique intersection of developmental growth; the opportunities for educators to influence and support children's mental health have been underscored in previous research (Rodger et al., 2014). Several studies (e.g., Graham, Phelps, Maddison, & Fitzgerald, 2011; O'Connor, Dearing, & Collins, 2011) have indicated that educator-child relationships characterized by low conflict, positive interactions, and frequent communication and connectedness are fundamental influences relating not only to a child's academic development but also to their mental health, social-emotional well-being, and behavioral development. Given the documented importance of the educator-child relationship, early childhood educators are positioned to be primary service providers in prevention and early intervention related to challenges in children's mental health.

Many of the behavioral problems associated with challenges to mental health first become evident in early learning settings (Perry, Holland, Darling-Kuria, & Nadiv, 2011). However, educators, administrators, and family members cite a lack of training and skill in child guidance techniques and in supporting social-emotional competency development for young children continues to be a significant need (Fuchs, Monson, & Hatcher, 2010; Hemmeter, Santos, & Ostrosky, 2008; Reinke, Stormont, Herman, Puri, & Goel, 2011).

There are numerous difficulties faced by educators in relation to classroom management and

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teaching practices. Children who exhibit behaviors that adults experience as challenging (e.g., aggression, opposition, disruption, and inattention) add a considerable strain to resources. As a result, children with emotional disorders are rated as significantly more stressful to teach *even compared to their classmates who possess other challenges* (Greene, Beszterczey, Katzenstein, Park, & Goring, 2002; Tsouloupas, Carson, &Matthews, 2014). This poses challenges for educators to support a child's sense of belonging and well-being in the classroom. In fact, educators who experience a disparity in supports may quickly become frustrated with these children, engage in power struggles, have negative reactions, and become verbally abusive (Brendgen, Wanner, & Vitaro, 2006; Howes, Phillipsen, & Peisner-Feinberg, 2000; Mack, 2004). Bell (2006) states "Teachers may inadvertently contribute to social structures that encourage defiant, aggressive, or bullying behavior, either through ineffective disciplinary procedures or through lack of awareness of social hierarchies that exist in class" (p. 21).

Brophy-Herb, Lee, Nievar, and Stollak's (2007) research with educators of 183 preschool children investigated the relationship between educator behavior, classroom climate, and ratings of children's social competence. Teachers' behavior and the quality of the classroom climate predicted ratings of children's social competence. Educators' negative ratings of children were predicted by negative educator behavior and poor classroom climates. Similarly, positive assessments of children's social competence coincided with both positive classroom climate and educator behavior. These findings indicate that the subjective interpretation relating to the functions of a child's behavior may inappropriately influence the manner in which behavioral challenges associated with mental health competency may be addressed. "Adults often interpret behaviour from the perspective of their own life experiences and current circumstances. These perspectives affect the observer's expectations for the student" (Ontario Ministry of Education, 2010, p. 21). For example, if children with emotional disorders experience frustration as a result of having difficulties with certain tasks, the educator may perceive the child to be misbehaving and fail to recognize that the educator's own behavior may in fact be a contributing factor to the situation. This interpretation could contribute to a negative reinforcement paradigm between the child and educator that becomes noninstructional or even disruptive (Tsouloupas et al., 2014).

Warm and responsive educator-child relationships are distinguished in part by decreased anger and severity, which are linked to a child's greater academic achievement and social competence (Li Grining et al., 2010; O'Connor et al., 2011). Friendly and Prentice (2009) state that, although child care staff tend to offer "physically safe environments that protect children's health and safety, staffed by warm, supportive adults" (p. 59), most centers provide care that is of only modest quality and may compromise the child's development. Furthermore, although the development of approaches to child care staff management of behavior problems in young children continues to expand (Brennan, Bradley, Allen, & Perry, 2008; Fox, Hemmeter, Snyder, Binder, & Clarke, 2011; Conners-Burrow, Whiteside-Mansell, & McKelvey, 2012; Hemmeter, Ostrosky, & Corso, 2012), research indicates that early childhood educators do not customarily rely on research or evidence-based knowledge to solve practice dilemmas (Buysse & Wesley, 2006; Purper, 2015). These educators continue to identify that meeting the needs of children with social-emotional and behavioral challenges poses a significant gap in their knowledge and skills (Fuchs, Monson, & Hatcher, 2010; Hemmeter, Santos & Ostrosky, 2008; Reinke et al., 2011).

Children with challenges to their mental health require educators to understand the factors related to their needs in being better equipped in managing the associated difficulties in educational settings (Graham et al., 2011; Happo & Maatta, 2011). Providing training and support so that educators improve early recognition of challenges related to children's mental health is essential, and it is now considered a necessary component of a supportive environment that enables the child to learn and grow to their full potential (Health Canada, 2002; Schwean & Rodger, 2013).

Transforming Parenting Intervention Supports into Early Learning and Care Centers

Parents are increasingly accessing early childhood centers to provide care and education for their young children. This has resulted in the creation of an intricate link between parents and educators that requires consistency, unity, and a coordinated effort that facilitate a child's healthy development. In order to address the knowledge and practice gaps of the early childhood educator as they relate to supporting children with challenging behavior, as well as advance educator/parent collaboration that promotes healthy child development, a variant of the Triple P Positive Parenting program (referred to as Triple P for the remainder of this chapter), the Positive Early Childhood Education Program (PECE) was developed for use by educators in early childhood learning contexts.

Research on interventions that address behaviors in children that educators find challenging in early childhood education environments is limited (Upshur, Wenz-Gross, & Reed, 2009). Even fewer studies exist that evaluate the implementation of evidence-based early childhood programs (Dunlap et al., 2006; Metz & Bartley, 2012). What follows is an overview of implementation strategies in reporting on a randomized clinical trial for the PECE program that examines the translation of the Triple P program from a parenting framework to an educational framework. Fundamental to this work is recognition of the caregiving role of early childhood educators in reporting on the PECE program as an innovative application of the evidence-based Triple P program.

The Link Between Triple P and Early Childhood Education

Triple P Parenting The evidence base for the effectiveness of Triple P has been well established, reflected in meta-analyses and systematic reviews that have documented its positive effects (deGraaf, Speetjens, Smit, de Wolff, & Tavecchio, 2008; Sanders, Kirby, Tellegen, & Day, 2014). Triple P is now a recommended program by (Abraham, Kelley, West, & Michie, 2009). Triple P is currently used in 25 countries worldwide, and there is over 30 years of empirical evidence in supporting it as a multilevel, multidisciplinary approach in promoting effective parenting (www.triplep.net). The United Nations has cited Triple P as an evidence-based leading program in the promotion of positive parenting practices (UNODC, 2010).

Sanders et al. (2012) describe Triple P as "a tiered multilevel system of parenting support that has both preventive and treatment components and incorporates five levels of intensity and several delivery formats (for example, large group, small group, individual, self-directed, media, and online interventions), with different variants and applications targeting different types of clinical problems, age groups and populations." Triple P is highly effective in demonstrating long-term benefits in the prevention and treatment of a variety of mental health disorders in its application as a population health approach to service delivery (Waddell et al., 2015). Triple P has demonstrated flexibility in implementation that is applicable in both treatment (Sanders & Prinz, 2005) and prevention (Prinz & Sanders, 2007) contexts. Triple P draws from a variety of theoretical principles and is built upon strong developmental research in achieving positive child outcomes (e.g., Bandura, 1995; Hart & Risley, 1995; Patterson, 1982; Risley, Clark, & Cataldo, 1976; Rutter, 1985).

Triple P uses a strength-based, self-reflective approach to parenting that promotes positive relationships between parents and children in building upon parents' strengths to prevent and treat behavioral, emotional, and developmental challenges (Sanders, Markie-Dadds, & Turner, 2003). The tiered levels of intervention incorporate the public health principle of minimal sufficiency, namely, the least amount of intervention required to effect change and prevent future difficulties (Prinz, Sanders, Shapiro, Whitaker, & Lutzker, 2009), in maximizing efficiency at the earliest point of contact. Similar to Triple P, the PECE program draws on social learning and cognitive-behavioral principles that are integrated with concepts of self-regulation

and attachment. A core principle of the Triple P system is the process of learning to change one's behavior and become an independent problem solver through self-regulation that includes self-sufficiency, self-efficacy, self-management, personal agency, and problem-solving (McWilliam, Brown, Sanders, & Jones, 2016). This approach to the process of learning parallels similar foundational principles found in many early learning pedagogies.

Systemic and coordinated implementation of parenting supports across agencies and service sectors has demonstrated population-level impact on child mental health and parenting outcomes (Sanders et al., 2008). In all current variants of Triple P, content delivery is aimed at supporting parents of children 0–16 years of age. Researchers recommend the training of existing workforces that have access to families, such as child care, education, or primary care providers in attaining the broadest reach of support (Shapiro, Prinz, & Sanders, 2010). However, these service providers are not routinely trained or supported in the implementation of evidence-based parenting programs (Shapiro, Prinz, & Sanders, 2012).

Development of PECE The development of PECE reflects the demand for early childhood educator skill development in preventing and addressing child behavior, with the call for workforce training to address parenting needs. PECE is an innovative application of the evidence-based Triple P for use in early childhood education environments that is aimed at supporting early childhood educators to promote aspects of positive adult-child relationships and guidance, which are consistent with those being adopted by the parents.

The Triple P intervention system explicitly promotes self-sufficiency and independent problem-solving (Shapiro et al., 2010). Triple P has also demonstrated its effectiveness in reducing dysfunctional adult-child interactions and increasing adult self-efficacy in addressing a child's behavior that is challenging (Boyle et al., 2010). The innovative application of these strategies to early learning settings holds the potential to address the research and practice disparity identified earlier in this chapter.

Translating Triple P from a Parent to an Educational Context

Translating Triple P from a parenting framework to an educational framework is a natural extension of the landscape of Triple P. It builds on the capacity of child care staff who are challenged with behaviors and emotions that children in their care present while supporting consistency in approaches encouraged and used among the parents through the Triple P program. Examination of the implementation and effects of Triple P in child care settings is timely. Waddell et al. (2015) indicate that intervention in childhood is optimal for addressing and averting poor life course outcomes. Waddell et al. (2013) indicate that, like many western nations, Canada is in dire need of a population health approach to children's mental health. Triple P as a broad-based intervention employs a population health approach to prevention and intervention. Additionally, Anderson et al. (2003) contend that early childhood developmental interventions that are situated within early childhood education centers significantly promote the development of a coordinated system of supportive services for families in linking early childhood interventions with evidence-based parenting supports. Examining the application of parenting support strategies in early childhood education environments contributes to a better understanding of both effectiveness and implementation of the evidence-based strategies in this context.

PECE Program Design PECE corresponds to a level 4 intervention in Triple P's multilevel system (Standard Triple P; Sanders, Markie-Dadds, & Turner, 2012). Its intention is the development of broad focus skill development that addresses multiple challenging child behaviors. PECE is a low intensity, self-administered online child guidance program for early childhood educators designed to be interactive, video-enriched, and personalized. It aims to promote the social and emotional skills of children. The PECE program consists of four online modules, each taking approximately 1 h to complete. The modules examine (a) what is positive child care (module 1), (b) building social and

emotional skills (module 2), (c) helping children develop a positive approach to learning (module 3), and (d) helping children learn new ways to behave (module 4). Coaching sessions are embedded into the program design. The coaching sessions support staff with the practical implementation of the positive child care skills that are introduced in modules 1–4 and conducted over a 3-week period. Coaching sessions continue until the early childhood educator (ECE) is observed to accurately implement positive attending strategies and the start and stop routines (generally a minimum of one and a maximum of three sessions are completed). The following section summarizes a recent investigation of the implementation of the above-cited components of PECE.

Testing for the Effects of PECE

A group of early childhood center directors/supervisors were identified and trained as PECE practitioners to facilitate the coaching sessions. These individuals were selected based both on their leadership and/or managerial role within their early learning center and their ability to provide supervision and support to staff. The 1-day practitioner training course was built on preexisting training in the Triple P program through providing an overview of the content of the PECE online program. This overview included information on the range of strategies designed to promote a child's development within an early education or child care setting. In addition, the practitioner training provided practical, skills-based education in a range of consultation skills necessary for the delivery of coaching and supervision sessions with early childhood education staff to promote their confidence and competence with the delivery of the program.

In evaluating the impact of PECE, program implementation data was collected at three time points: T1, pre-assessment (on enrollment in the study); T2, post-assessment (approximately 10 weeks later); and T3, at 2-month follow-up.

Findings In part, this foundational trial of the PECE program examined the twofold effectiveness of the program: first as it relates to child behavior and educator perceptions and second the challenges attached to successful implementation. Analyses were completed on a sample of 96 ECE participants; 53 in the usual service non PECE condition and 43 in the intervention condition. Director/practitioner data was collected separately.

Child Behavior Child behavior was assessed using the *Strengths and Difficulties Questionnaire* (SDQ) for children 4–10 years of age or *Early-Years* SDQ for reporting on children 2–4 years of age (Goodman, 1999). Variables examine strengths and difficulties related to emotion, conduct, hyperactivity/inattention, peer relationship challenges, and prosocial behavior. Analyses of the SDQ total score revealed a significant univariate effect between groups at T3, indicating improvements of total strengths and difficulties in the intervention condition compared to the control condition ($t(42) = -2.07$, $p = 0.044$).

Clinical changes over time relating to the *Strengths and Difficulties Questionnaire* and *Early-Years Strengths and Difficulties Questionnaire* (Goodman, 1999) indicated notable shifts in the intervention condition between T1 and T3. As indicated in Fig. 22.1, the total SDQ for both intervention and control conditions were in the clinical range at T1 (pre). The intervention condition moves to borderline at T2 (post) and normal at T3 (follow-up); however, the control condition remains roughly the same at T3.

The *Child and Adolescent Disruptive Behavior Inventory (CADBI) Screener* (Burns, Taylor, & Rusby, 2001) reflected data from ECE participants who rated children's attributes and disruptive behavior. Variables examined the perception of disruptive behavior toward adults and peers and the overall activity level while at child care. Multivariate analysis for treatment effects at T2 revealed no significant differences between groups, $F(3, 89) = 1.259$, $p = 0.293$. However, significance levels across imputed datasets were significant ($p < 0.05$) suggesting further investigation of univariate ANCOVAs were warranted. Multivariate analysis for treatment effects at T3 revealed a significant difference, with intervention participants reporting significantly fewer

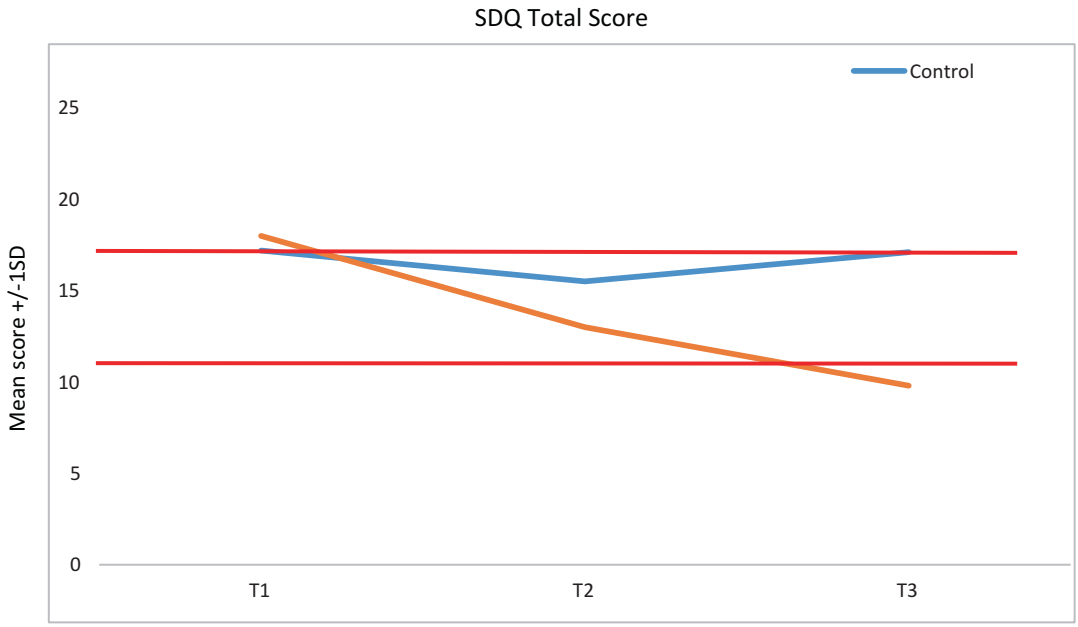

Fig. 22.1 SDQ plot of mean scores related to overall score with clinical cutoff indicated by solid line and borderline indicated by dashed line

disruptive behaviors, $F\,(3, 89) = 5.080$, $p = 0.003$. Follow-up ANCOVAs investigating differences between groups at T2 and T3 revealed no significant univariate effects at T2 in all areas. A significant univariate effect indicating greater improvements in the intervention condition vs. the control condition regarding behavior toward adults was found at T3 ($t\,(54) = -2.3$, $p = 0.026$). When analyzing the *CADBI* using generalized least squares (GLS) linear regression to determine interaction effects between groups and time points, a significant difference indicating improvement in the intervention condition was also evident in behavior toward adults ($p = 0.035$).

Implementation The study findings as they relate to efficacy of the PECE program are promising; however, there were also notable barriers to implementation that may have contributed to the above cited outcomes.

Intervention Usage Web analytics reports which study the impact of a website on its users revealed the extent and nature of staff use of the PECE online modules. These indices measured the number of codes issued and activated and the state of progress of the PECE online program. Progress was measured by module number, with each module representing 25% of the online program component. Implementation fidelity of the PECE program called for all four modules and related coaching sessions to be completed prior to T2 data collection. Web analytic reports related to the use of PECE online modules indicated that, of the director/practitioner codes issued, eight were not launched; one indicated an initial launch occurred the day of T3 data collection, with one module completed at that time; and two indicated full intervention completion prior to T2 data collection. Of the 43 ECE participant codes issued, web analytics reports revealed that there were no participants who had completed all of the online modules at T2. At T3, 4 ECE participants had completed in full or in part online module 1 (what is positive child care?); 6 ECE participants had completed all of module 1, plus in full or in part

online module 2 (building children's social and emotional skills); 6 ECE participants had completed all of modules 1 and 2, plus in full or in part online module 3 (helping children develop a positive approach to learning); and 24 ECE participants had completed all of modules 1–3, plus in full or in part online module 4 (helping children learn new ways to behave). Three ECE participants did not launch codes at all.

Organizational Factors Analysis of the organizational climate relating to the implementation process was measured using the *Implementation Driver Assessment* (Fixsen, Blase, Naoom, & Duda, 2013), in identifying the presence and strengths of a variety of implementation drivers. Implementation drivers are considered the key components of organizational infrastructure that initiate and support a program's success in implementation. Given that the timelines between recruitment and initial data collection were narrow, the status of implementation drivers at T3 is reported here, as this assessment asks participants to reflect upon organizational practice related to implementation in the past 6 months. Six months reflects the timeline from initial recruitment to T3 (follow-up) data collection. Multiple items were provided in each category, with directors/practitioners identifying their preparedness for the implementation through ratings ranging from not in place, partially in place, and in place. Calculation of the extent of the implementation drivers that are in use reflects those conditions in which at least 50% or more of the items in each category were indicated by the director as being *in place*. Table 22.1 reflects the ratings of implementation driver's assessment summary as reported by the director/practitioners.

The overall organizational preparedness as reported by practitioners indicated recruitment and selection of staff participating in the PECE program were equally dispersed between partially in place and in place. The competency driver that examined *training* considered not only practitioner training but also accountability in monitoring for program completion and skill-based rehearsals or interactions of ECE participants. Findings indicated that at T3 data collection, one third of the participant organizations still had not had this driver in place. In recognizing that implementation and adherence relate to the degree of involvement the directors themselves had in understanding PECE, the absence of training as an implementation consideration is pertinent. Though each director participated in a full-day training that provided an overview of PECE and codes were provided to reflect their own engagement in PECE modules, directors were not explicitly required to launch or complete the program. This begs the question: can directors provide implementation support without having experienced the program itself?

Brown and Zhang (2016) state that implementation of evidence-informed practices "cannot be achieved without the direct support and buy-in of school leaders (who, via transformative approaches to leadership are able to steer school cultures)" (p. 797). Without a comprehensive working knowledge of the PECE modules, it may be difficult for directors to inspire the transformative change in classroom management techniques. The directors that viewed PECE program completion as an extension of their training and therefore did complete the modules indicated they had completed the coaching sessions; this group reported the highest fidelity scores to the

Table 22.1 Implementation driver's assessment summary ($n = 6$)

Competency driver	In place	Partially in place	Not in place	
Recruitment and staff selection	3	3		
Training	3	1	2	
Performance assessment	2	2	2	
Facilitative administrative supports	2	3	2	
Decision support data systems	3	3		
	Strongly agree	**Agree**	**Neutral**	**Disagree**
Leadership	3	3		

self-regulatory model and program adherence. This was despite gaps in documentation and use of implementation support tools provided in PECE.

The competency driver that examined *performance assessment* considers accountability for staff competency and effectiveness in adopting the PECE program. Findings indicated that at T3 data collection, one third of the participant organizations did not have this driver in place. The competency driver that examined *facilitative administrative supports* considers leadership and implementation teams that facilitate implementation procedures and feedback loops from staff and stakeholders.

Findings indicated that at T3 data collection, one third of the organizations participating still did not have facilitative administrative supports in place. The competency driver that examined *decision support data systems* considers how data related to PECE utilization is collected and reported within the organization. Findings indicated that at T3 data collection, decision support data systems were equally dispersed between "partially in place" and "in place." The competency driver that examined *leadership* examined technical leadership, which focuses on issues of relevance at the practice level, as well as adaptive leadership, where leaders within the organization continually seek ways to align product, policy, and practice. Ratings ranged from disagree, neutral, and agree to strongly agree.

With respect to the relationship between organizational factors, program adherence, and PECE outcomes in the intervention condition, differences were noted in both program adherence and completion rates where competency drivers were identified as being in place. Directors/practitioners who completed the modules reported increased fidelity in program adherence in providing implementation support such as conducting coaching sessions and allowing time for staff to engage in program completion. In those sites where directors reported not completing modules and/or not facilitating implementation drivers, staff completion rates declined. At T2 a borderline effect was found for outcomes being influenced by program completion. However, given the limited sample size in measures associated with implementation variables (n = 6), statistically significant differences in resistance and response may have gone undetected.

There were a mix of organizational factors influencing practitioner adherence to program fidelity and implementation, and the effects of organizational factors remains largely unknown. At the T2 data collection time point, where it was intended that program completion would have occurred and thus data would be considered post intervention, 100% of participants in the intervention condition had not completed the online modules, with no coaching sessions conducted at any intervention site. Though most staff had completed the online modules at T3 (follow-up), less than 30% of the staff participated in coaching sessions at this time point. Program directors indicated that though they saw value to conducting the coaching sessions, there was inadequate time to complete the coaching sessions within their daily tasks. Demands on time were particularly prevalent at centers identified as "large" size (ten or more ECE staff). In these particular settings, there was a high frequency of "no coaching sessions" taking place at any of the time points. Implementation barrier themes identified by both the directors and the ECEs included a lack of facilitative administrative supports and conflicting demands for both practitioners and ECE participants.

The Challenges to Implementation

The complexity of effective implementation relies not only on the intervention itself but also on the level at which the intervention is integrated with fidelity, the nature and commitment of individuals involved, and the process by which implementation is accomplished (Damschroder et al., 2009). As identified previously, fidelity to the implementation of the PECE program required all four modules and related coaching sessions to be completed prior to T2 data collection. However, web analytic reports relating to the use of PECE online modules indicated that only 2 of the director/practitioner participants

and only 24 of the 43 ECE participants (55%) completed all online modules. There was only minimal evidence that the coaching sessions were being completed as they were intended in the original program design.

The lack of program module completion rates, combined with the overall scarcity of formalized coaching sessions, highlights that fidelity to the model was compromised, and support systems designed to enhance confidence, competence, and self-efficacy of the individuals involved, such as in the self-regulatory framework that is the pillar of the coaching model, were disregarded, thus reducing the propensity of ECE participants to develop these skills. Without documentation of coaching sessions in locations where practitioners reported they had been completed, the ability to perform analysis that controlled for fidelity was compromised. Thus critical information regarding who those practitioners were who adhered to the program with increased fidelity, competence, and confidence is unknown at this point. It should be noted, however, that the online program modules primarily focused on changes the ECE made that were child related that included building positive relationships, developing social and emotional skills with a positive approach to learning, and learning new ways to behave. The coaching sessions were intended to build on these preliminary skills through the promotion of self-reflection by the ECE in deepening their understanding of how, as individuals, they could support or prevent situations they may find challenging. In the absence of coaching sessions and the related documentation, there are limitations in the data that prevent knowing what the impact of participation in the coaching component of the program may have had on the ECE perceptions of their competency.

It is also important to note that participants were offered site readiness support from Triple P Canada prior to and throughout this research study. Though Triple P Canada offered support in helping agencies enact the implementation of PECE, none of the child care centers expressed an interest in receiving this support. This raises a consideration for the role of the researcher in implementing the study, and how this process may parallel or influence the implementation of the program itself. Although the initial decision to adopt PECE was initiated at the child care center level, the actual implementation process appeared to be influenced by organizational capacity to support and integrate program completion and skill development at both the ECE and director levels. In the review of literature, it was noted that ECEs do not tend to rely on research to solve practice dilemmas (Buysse & Wesley, 2006; Purper, 2015). It is possible that the complexity of program integration and implementation may be a relatively new concept in early learning settings and boundaries and responsibilities of research participants and the researcher should be explicitly determined, particularly when evaluating both program efficacy and implementation. For example, given that the practitioner coaching did not happen using the PECE design introduced through practitioner training, it is acknowledged that more discussion related to addressing barriers to coaching *prior to implementation* would be beneficial. It is unrealistic to anticipate that the day-to-day demands on child care directors will decrease; however, understanding the barriers to providing direct supervision and support would help to ensure future sustainability of the program model. If more time was spent in the planning phase of implementation or a gradual rollout was enacted rather than a full center approach, then challenges to implementation fidelity may be more effectively addressed.

Despite the lack of formal coaching, however, there were still statistically significant and clinically relevant changes made by both staff and children, though notably, ECE participants in locations where coaching sessions were completed reflected the highest program completion rates and the strongest implementation support.

With the increased focus on staff connectivity and mutual support throughout the PECE implementation, it is noteworthy whether there is any additional value provided through the formal coaching process versus a less formal peer support model. Though directors stated that they

found value in the full-team approach for initial implementation, it does place additional demands on implementation support as PECE is initially integrated into their centers. In acknowledging the competing demands for directors to meet the complex job performance expectations, it may not be realistic to anticipate program adherence in full-staff implementation with weekly coaching sessions. However, reducing the demands on the directors/practitioners by removing or reallocating the coaching responsibilities would not address where ECE participants could access meaningful and effective supports for the implementation and integration of the program.

Summary

A recent Canadian-based study focused on the return on investment for mental health promotion in early childhood development identified that, for each 1% population reduction in conduct disorder, there is a potential savings of CA$456,244 over the life course (Doran, Jacobs, & Dewa, 2011). Given the importance of early intervention related to children's mental health and recognizing there are often barriers to accessing timely treatment (CMHA, 2018), the potential for clinically significant changes in children's mental health through effective implementation and delivery of PECE in early learning settings is both critical and timely. Family Resource Programs (FRP Canada) (2011) has stated "Programs are most effective if the primary focus stays on supporting the child within his or her family and community. Child, family and community well-being must be equally valued, since they are inextricably linked" (p. 15). Equipping ECEs with evidence-based strategies designed to prevent and treat behavioral and emotional challenges in children through an intervention such as PECE contributes to a seamless coordinated system of care which effectively recognizes the needs of children in community-based mental health supports, as it ensures children whose parents do not have access to parenting programs do have some exposure to these interactions. However it is not enough to merely equip ECEs with these strategies. Strategic and mindful implementation supports at all stages of program adoption must be given a priority in maximizing program outcomes.

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23 Youth in High-Achieving Schools: Challenges to Mental Health and Directions for Evidence-Based Interventions

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Abstract

In this chapter, we review evidence on a group recently identified as "at risk," that is, youth growing up in the context of high-achieving schools (HAS), predominated by well-educated, white-collar professional families. Though these youngsters are thought of as "having it all," they are statistically more likely than normative samples to show serious disturbances across several domains including drug and alcohol use, as well as internalizing and externalizing problems. We review data on these problems with attention to gender-specific patterns, presenting quantitative developmental research findings along with relevant evidence across other disciplines. In considering possible reasons for elevated maladjustment, we appraise multiple pathways including aspects of family dynamics, peer norms, and pressures at schools. All of these pathways are considered within the context of broad, exosystemic mores: the pervasive emphasis, in contemporary American culture, on maximizing personal status and how this can threaten the well-being of individuals and of communities. This chapter concludes with ideas for future interventions, with discussions on how research-based assessments of schools can best be used to reduce stressors and to maximize positive adaptation, among youth in highly competitive, pressured school environments

Introduction

In this chapter, we review evidence on a group recently identified as "at risk," that is, youth growing up in the context of high-achieving schools (HAS), predominated by well-educated, white-collar professional families. Though these youngsters are thought of as "having it all," they are statistically more likely than normative samples to show serious disturbances across several domains including drug and alcohol use, as well as internalizing and externalizing problems. We review data on these problems with attention to gender-specific patterns, presenting quantita-

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Youth in High-Achieving Schools: Defining the Population

In our early studies of this population, we wrote of these youth as being "affluent" or "privileged" (for a review, see Luthar , Barkin, & Crossman, 2013), but over time, we have moved toward a different descriptor, that is, students from high-achieving schools (HAS). This in fact is the common denominator across schools sampled; since the late 1990s, each of our 25–30 school-based assessments has been on students from schools that have high standardized test scores, rich extracurricular and academic offerings, and graduates heading for the most selective colleges and universities. Admittedly, such schools generally serve white-collar professional, well-educated families, but some students do come from families of relatively low-socioeconomic status (SES).

A second reason to avoid references to family affluence is because of recent evidence from large nationally representative samples. Two studies, one in the USA and one in Norway, have shown that it is not family level of affluence or even neighborhood affluence that connotes elevated risks to adolescents (Coley, Sims, Dearing, & Spielvoge, 2017; Lund, Dearing, & Zachrisson, 2017). Instead, risks are associated with school-level affluence, as described further below; it would appear that having a high proportion of schoolmates from high-income families connotes high risk, rather than one's own family income.

Why Are HAS Youth "At Risk": What Is the Evidence?

In studies of risk and resilience, the concept of risk is defined in terms of statistical probabilities (Luthar & Cicchetti, 2000; Masten, 2001), wherein those exposed to a particular condition (e.g., parent alcoholism) are statistically more likely than others to show adjustment problems. This does not mean that all children in that group are troubled; rather, that overall, their odds of difficulties are higher. Thus, not all HAS students have adjustment problems, but compared to national norms, a substantially higher proportion show serious maladjustment.

The problems that this group faces were first identified by chance through the data we collected in the mid-1990s on youth recruited as a comparison sample for inner-city teens (Luthar & D'Avanzo, 1999). Results showed that the high-socioeconomic status students were higher than their low-SES counterparts in their reported use of cigarettes, alcohol, marijuana, and hard drugs; the lowest levels of abstinence were found among high-SES girls. While these results were startling to our research group, they were not at all surprising to the teachers in the affluent, suburban school. A decade later, these findings were replicated among tenth graders in a different Northeast suburb (Luthar & Goldstein, 2008). Several other research labs also documented high alcohol use, binge drinking, and marijuana use in areas with mostly well-educated, white, high-income, two-parent families (Botticello, 2009; Patrick, Wightman, Schoeni, & Schulenberg, 2012; Reboussin, Preisser, Song, & Wolfson, 2010; Song et al., 2009).

Analyses of large, national data sets have yielded consistent findings, as noted earlier. In a study of a US national sample, Coley et al., (2017) found that students attending schools with a high proportion of affluent schoolmates were more likely than others to report intoxica-

tion and use of illicit drugs (marijuana, cocaine, and other illegal drugs). In similar analyses of Norwegian national data, Lund and colleagues (2017) found links between school-level affluence and drinking to intoxication.

By all accounts, these trends worsen through college, as indicated by prospective data in the New England Study of Suburban Youth (NESSY; Luthar, Small, & Ciciolla, 2017). This longitudinal study entailed surveys of two cohorts assessed as high school seniors and then annually (1) throughout 4 college years and (2) across ages 23–27. Across gender and annual assessments, results showed substantial elevations, relative to norms, for frequency of drunkenness and using marijuana, stimulants, and cocaine. More importantly, relative to national norms, NESSY-O (the older cohort) women's and men's rates of psychiatric diagnoses of alcohol/drug dependence were three and two times as high, respectively. Among NESSY-Y (the younger cohort), rates of diagnoses were close to norms among women but were twice as high among men (Luthar et al., 2017).

Individuals in these HAS samples also report elevated rule-breaking. Although delinquency is generally thought to be a problem of youth in poverty, we have found that students in affluent schools had similar average scores on self-reported rule-breaking relative to youth in inner-city schools. At an item level, the former endorsed random acts of delinquency, such as stealing from parents or peers, whereas the inner-city teens displayed behaviors potentially needed for self-defense, such as carrying a weapon. These findings were later supported by results showing that neighborhood affluence was associated with higher rates of delinquency among boys (Lund & Dearing, 2012).

Early studies by our own group were conducted in public schools in the Northeast; subsequently, there have been multiple studies of HAS students from different parts of the country, including independent and public schools, day schools, and boarding schools (findings on boarding schools are currently being written up), and in cities and suburbs. Across all of these samples, the evidence has been unequivocal: as a group, students in these high-achieving schools reflected a substantially higher incidence of serious levels of internalizing symptoms such as depression or anxiety, externalizing problems such as rule-breaking or delinquency, and misuse of drugs and alcohol (see Luthar & Barkin, 2012; Luthar et al., 2013). The particular problem area in which elevations were seen has varied somewhat by geography. For example, substance abuse has been seen most consistently across all Northeast schools over the years, and serious depression/anxiety was markedly elevated in the Pacific Northwest schools. However, the overall conclusion was clear – as a group, teens from these high-achieving schools are, in fact, an at-risk group.

Understanding Mechanisms: "Conduits" of Risk, Vulnerability, and Protection

In resilience research, once a broad risk factor has been identified, the task is to try and understand "why or how" risk is conferred and to disentangle processes that might mitigate and exacerbate this risk (commonly known as protective and vulnerability processes). Accordingly, we now consider processes occurring in the context of affluence that might confer or exacerbate vulnerability of youth. As Garcia Coll and colleagues argued in their seminal 1996 paper, in research on little-studied groups, we must consider not just well-known risks that affect all children – such as alienation from parents – but also subculture-specific ones, such as discrimination for ethnic minority youth, or neighborhood blight among low-income groups (see Garcia Coll et al., 1996; Luthar, 1999).

Pressures to Excel: Multiple Sources

Our work over two decades suggests that there is one superordinate or overarching construct that is implicated in conferring vulnerability in HAS contexts and that is high and ongoing pressures to achieve. These pressures come from multiple sources: parents, schools, peers, and values in the larger subculture in the USA. Tacitly or otherwise, adults and students alike endorse the common

belief that there is one path to ultimate happiness – getting into a prestigious college. Young people come to believe that this is an essential gateway to land high-status jobs in the future and, conversely, that attendance at a second- or third-tier college would imply poor life prospects in later life. Thus, students in HAS contexts begin working on enhancing their "resumes" starting as early as junior high school.

Among HAS students, these pressures become particularly acute, with a sense of *urgency to achieve* given a pervasive belief that exceptionally lofty goals (such as achieving admission to the very best of universities) are actually well within reach (Luthar et al., 2013). Chronic exposure to pressure has many untoward psychological complications and consequences. The strivings of young people are no longer striving due to personal wishes and volition; rather, these teens now have internally controlled forms of motivation that strip away a sense of autonomy, in ways that limit satisfaction with achievements (see Ryan & Deci, 2017). Flett and associates (2016) have suggested that it is this tendency to be internally controlled that provides the fuel for the urgent and relentless striving of the child or adolescent who has developed self-oriented perfectionism. This pressure can become overwhelming when coexisting with frequent daily stressors, setting the stage for elevated anxiety, depression, and acting out behaviors, as well as substance abuse to provide relief from distress.

The Role of Parents

As has been emphasized before in the literature, affluent parents, as a group, are neither neglectful nor disparaging (Luthar & Barkin, 2012; Luthar & Latendresse, 2005), and as previously noted here, these youth as a group are not at risk because of their family wealth but rather, because they are in affluent school contexts (Coley et al., 2017; Lund et al., 2017). Having said this, it bears noting that on average, affluent youth from mostly two-parent families do not feel closer to their parents as compared to very low-income youth, mostly from single-mother-led families (Luthar & Latendresse, 2005). Across various dimensions, sixth graders from an affluent suburb rated parent-child relationships no more positively than did their counterparts living in harsh conditions of poverty. Thus, in the affluent community just as in the low-income one, some children felt quite distant from their parents, suggesting pressures faced by some families in both cases.

In HAS communities as in others, there are some critical aspects of parent-child relationships that are strongly related to the children's adjustment (Garcia Coll et al., 1996). In terms of discrete parenting behaviors that are powerful, we found, as resilience research has recurrently shown (Luthar, Crossman, & Small, 2015), that "bad is stronger than good," wherein harsh, disparaging words can have much stronger effects than words of affection or praise (Baumeister, Bratslavsky, Findenauer, & Vohs, 2001). Our research has shown that as compared to feelings of trust or good communication with parents, perceived parent criticism shows stronger links with diverse adjustment indices (Luthar & Barkin, 2012).

Besides this, generally we have seen stronger associations, with teens' adjustment outcomes, for quality of relationships with mothers as opposed to fathers (Luthar et al., 2013; Ebbert, Infurna, & Luthar, 2018). This makes sense intuitively. Given that pre-teens and teens, like younger children, generally have more frequent interactions and more intimate relationships with their mothers than their fathers (Collins & Russell, 1991), it follows that relationships with mothers should have greater ramifications. In multivariate analyses of overall attachment – high trust, good communication, and low alienation – felt attachment to mothers explained much more variance across various teen adjustment dimensions as compared to felt attachment to fathers (Luthar & Barkin, 2012; Luthar & Becker, 2002).

Parenting Processes Especially Salient in the HAS Subculture

A major "culturally specific" protective factor or vulnerability that we have discovered is the notion of parent's containment for substance use, or students' perceptions of the seriousness of repercussions if parents discovered use of

drugs or alcohol. Early in our research, several HAS community members indicated that the signs of high substance use we were seeing were related, in part, to some parents' overall *laissez-faire* attitudes toward alcohol use or the belief that "all kids do this." To test this possibility, we created a questionnaire that asked teens, "How serious would the repercussions from your parents be if they found out that they did the following behaviors?". Errant behaviors included substance abuse, delinquency, rudeness to adults, and academic indolence. Results in fact showed that anticipated repercussions were the lowest for substance abuse across these behaviors (Luthar & Barkin, 2012; Luthar & Goldstein, 2008). Additionally, low levels of perceived containment were related to high levels of self-reported substance use, consistently across samples studied.

A second culture-specific dimension of parenting that we have measured is perceived parental overemphasis on achievement. In this measure, students were told of six values that parents tend to have for their children and were asked to rank and order the top three that they felt their parents would want for them. Three of these had to do with achievements, such as getting excellent grades, and three had to do with personal decency, such as being kind and helping others in need. In an early study (Luthar & Becker, 2002), we found that students who felt their parents disproportionately prioritized the achievement dimensions were at significantly greater risk than others for various adjustment difficulties. In more recent work, we asked the same questions on parent values but separately for mothers and for fathers (Ciciolla, Curlee, Karageorge, & Luthar, 2017). Findings showed that the highest levels of adjustment problems among children were those who felt that both their parents were high on achievement emphasis. By contrast, the lowest levels of adjustment problems, or the healthiest profiles, were seen among those who reported that both parents had middle to low emphasis on achievements relative to integrity, kindness, or decency.

It is critical to note that pressures to achieve come not just from parents but as much, if not more so, from outside the family. Coaches and performing arts teachers, for example, can be highly invested in the performer's star status, setting exact schedules for practice and rehearsals and single-minded pursuit of distinction at the county and state levels. Furthermore, as we discuss in more detail below, significant pressures can also derive from the peer group in HAS communities, via their admiration of dubious behaviors as well as the ongoing competition to keep up with, if not surpass, highly accomplished peers.

Another potential culture-specific dimension, as suggested by other researchers, is the tendency of some upper-middle-class parents to problem-solve excessively for their children, rather than allowing them acquire and practice everyday life and coping skills (Marano, 2008; Mogel, 2010; Twenge, 2006). Affluent high school seniors anticipating departing for college reportedly often indicate high levels of fear, anxiety, and uncertainty (Marano, 2008). Worries were less about the academic challenges in college than about how they would handle the logistics of everyday living, ranging from dealing with a difficult roommate, trouble with courses, food not to their liking, or a malfunctioning laundry machine (Hofer & Moore, 2010). Inhibiting the adolescent's developing autonomy is a parenting dimension that clearly warrants more systematic attention in quantitative hypotheses testing, in future research on HAS youth.

The Role of Peers

While parents have an important role in culturally specific protective and vulnerability processes, peers also play a vital role. To begin with, HAS teens constantly rank themselves against each other in extracurriculars as in academics, with each distinction coveted by all those who are eligible (Chase, 2008). As would be expected, envy is an unfortunate by-product of constant competition to be "the best" (Marano, 2008). In comparisons of students from an elite, upper-middle-class school versus high achievers in an inner-city magnet school, we found that the former (especially girls) felt significantly more envi-

ous of peers whom they felt surpassed them across the realms of popularity, attractiveness, academics, and sports (Lyman & Luthar, 2014). More seriously, findings of this study, as well as those from another study of boys in independent schools (Coren & Luthar, 2014), point to the negative ramifications of being highly envious. Envy of others, especially with regard to physical appearance, was clearly linked with several indices of maladjustment, a finding that takes on added importance given the exceptionally high levels of maladjustment that we have recurrently detected across multiple HAS samples. These associations between envy and psychological difficulties are likely a reflection, at least in part, of the propensity to feel "less than" others, as envy derives from unfavorable social comparisons with others who are (or seem to be) superior to oneself. In HAS contexts, therefore, there is a need for teens to develop abilities to self-regulate emotions that stem from social comparisons; at the same time, these results underscore the benefits of limiting the frequency of social comparisons in the first place.

Aside from envy, peers can contribute in the active endorsement or encouragement of some unhealthy behaviors, notably substance use. Alcohol and drugs play a large role at social gatherings in HAS. Inebriation is not just standard, but it is often socially desirable and commonly associated with the credo, "we work hard, and we play hard" (e.g., Mason & Spoth, 2011). Logistically, it is easy for youth in HAS to host parties where drugs and alcohol are freely available, as many have the means to purchase them (Hanson & Chen, 2007).

Our research has shown that among suburban boys, high self-reported substance use has been significantly linked with high "liked most" nominations by their classmates. These links have recurred in middle and high school samples and are statistically significant despite controls for possible confounds (Becker & Luthar, 2007; Luthar & D'Avanzo, 1999). Similar links are seen among girls, but in their case, substance use is also linked with frequent "liked least" peer nominations, indicating gender-based double standards in peers' perceptions of substance use (see also Chase, 2008). Students in HAS also apply a set of double standards to boys and girls around "hooking up" with different sexual partners; while for boys, it engenders peer admiration and respect, for girls, it is instead accompanied by disdain (Chase, 2008; Khan, 2011).

With regard to links particularly pronounced among girls, we have found two other sets of troubling associations with high peer status, that is, with relational aggression, and physical attractiveness. Consistent with suggestions that "mean girls" tend to be socially dominant (LaFontana & Cillessen, 2002; Simmons, 2002), our research has shown that HAS girls who were rated by peers as aggressive toward others were also rated as highly admired by them (Becker & Luthar, 2007), perpetuating the social dominance of relationally aggressive girls. Similarly, links between peer-rated attractiveness and peer admiration were substantially stronger among HAS girls as compared to their male counterparts, and as compared to inner-city girls and boys, illuminating a major potential reason for why these young women can become excessively preoccupied with their physical attractiveness.

As Simmons has effectively described in her 2018 book and we have documented in our research (Luthar & Goldstein, 2008; Luthar et al., 2013), girls also face high, and often competing, demands from adults. They are expected to succeed every bit as much as boys in domains that are traditionally male such as academics and sports and also in the "feminine" domains of caring and kindness. Simmons cautions that we are raising a generation of young women who are far too focused on achieving and being "exceptional." These girls are prone to presenting an exterior image of self-perfection, particularly on social media. In everyday life, they tend to shy away from taking chances on critical daily living tasks, including investment in relationships that are critical for bringing them comfort, support, and affirmation of their true selves. The result is an underlying sense of anxiety, self-criticism, and conviction that no matter how hard they try, they will never be successful enough, attractive enough, popular enough, or admired enough.

There is growing evidence of young people acting as if they are effortlessly perfect (see Flett,

Nepon, Hewitt, Molnar, & Zhao, 2016; Travers, Randall, Bryant, Conley, & Bohnert, 2015), and this focus on seemingly "perfect" is counterproductive in many ways. Tendencies to project success without expending effort are potentially destructive both for the self-presenting adolescents and for their peers. Some of the difficulties associated with this orientation reflect a tendency to strive for extrinsic, status-oriented life goals, such as being famous, attractive, and wealthy. Lyman and Luthar (2014) found that an unwillingness to display or admit to imperfections was associated with having high levels of externally oriented motives and with disparities in the pursuit of extrinsic versus intrinsic goals that reflect investment in close relationships and in promoting the welfare of others. Additionally, recent analyses suggest that the self-presentation as effortlessly perfect comes with a great potential for hidden distress, as students hide behind a mask or a front and do not seek the help that they need (see Flett, Hewitt, Nepon, & Zaki-Azat, 2018). At the same time, projecting an image of being effortlessly perfect represents an unattainable upward comparison standard. Flett et al. (2018) describe the high destructiveness of social comparison when vulnerable adolescents become highly preoccupied with their standing in life relative to the apparent standing of youth who portray what seems like the ideal life.

More research is needed on areas in which HAS boys could be particularly at risk by virtue of what it takes to achieve high peer status. During the high school years, their high peer status is linked not only with good looks and athletic prowess but also the "cool" factor of frequent substance use noted earlier and also being desired as sexual partners by many girls (Becker & Luthar, 2007; Chase, 2008; Khan, 2011). Potential fallouts include low capacity for true intimacy with others (as opposed to frequent hookups) as well as overly high investment in power and status, or "being a baller" (Luthar et al., 2013). Working with HAS students, Chase (2008, p. 55) reports that teens agree that in relating to the opposite sex, girls usually want relationships, but boys generally want sex: "One boy says he will tell a girl, 'I'll still care about you. Nothing will change.' These are the bullshit lines we use. And they work!" In a study of boys from two academically elite, independent high schools, one for boys only and the other coeducational, both samples showed elevations, relative to norms, on exhibitionistic narcissism, as exemplified by items such as, "I like it when others brag about good things I've done" (Coren & Luthar, 2014).

Cohort Differences: Why High SES Might Connote More Risk for Today's Youth

Students from HAS are more at risk than past generations, in part because of globalization and the growth of technology. These youngsters, as a group, tend to view their parents as "being well-off financially," and they use their parents' income and educational levels as standards that they themselves must attain in the future. However, in today's competitive, globalized economy, it has become much more difficult for these youngsters to attain the standards of living that their parents were able to achieve (Steuerle, McKernan, Ratcliffe & Zhang, 2013).

Additionally, rising rates of stress and anxiety among this group may be linked with technology. From a young age, sometimes even extending from before birth, this generation has their lives on display, as parents document their children's successes on social media. Now, more than ever, children can easily compare their successes to peers by simply glancing at their cell phones (Simmons, 2018). Added stress comes from the widespread use of formal college preparation programs such as, "Naviance," a subscription service that permits students to input data on their grades, awards, extracurricular activities, volunteer work, and more, to get a sense of the type of college they might get into (Pappano, 2015). Originally designed for high schools, this program is now reportedly used in over 1700 middle schools in the USA, representing nearly 1.1 million youth.

Parents in HAS communities track their children's prospects via such programs, but technology now also allows their vigilance of children's school lives well before high school and on a

much more frequent basis. Many schools post students' progress through the semester rather than once per semester, so that parents could theoretically discuss each suboptimal comment or test grade. Additionally, whereas just a decade ago, a child caught cutting class might result in a call home, parents can now track their child's every move using GPS technology on cell phones and in cars. These increased levels of surveillance add additional stress to children's lives.

Increases in technology have also impacted the way that students from HAS view themselves and interact with one another. New technology has enabled students to interact with each other on a constant basis but without forming personal, intimate relationships. As students are now more able to text and communicate over social media, they are more easily connecting with friends online but are disconnecting with friends in real life (Akhtar, 2011; Simmons, 2018).

Relatedly, what used to be leisure activities are no longer done simply for fun. Children in HAS contexts rarely play impromptu games of kickball or basketball in cul-de-sacs; as early as the second grade, they are playing in "recreational" games, where they are already competing to secure spots in travel teams. Poor performances at a given game are watched (and commented on, if covertly) by not only peers but by a large group of community parents. Reviewing the many benefits of play for psychological and cognitive development – including beneficial neural effects in the brain's frontal lobe (see Panksepp & Biven, 2012) – Marano (2008, p. 29) cautions that, "What play there is has been corrupted…Kids' play is professionalized; team sports are fixed on building skills and on winning and losing, not on having a good time."

Future Directions: Interventions

In discussing intervention needs and directions, we emphasize first that suggestions we offer generally involve the use of existing community resources. In US schools broadly speaking, the scant resource dollars available for children's mental health services should be reserved for those serving low-income communities. Within HAS settings specifically, what is needed is heightened awareness of risks within their communities and, based on research, guidance in the best use of existing resources toward positive youth development (Doherty, 2000; Luthar, 2006; Weissbourd, 2009). In discussions that follow, we present possibilities for such interventions.

Research-Based Interventions: Central Considerations

Our approach to intervention is based on longstanding guidelines from research on resilience (Luthar & Cicchetti, 2000; Luthar & Eisenberg, 2017). Core considerations are that once a particular group is identified as being "at risk," what is then needed is a research-based understanding of (a) the specific types and degree of adjustment difficulties they manifest as a group; (b) the major pathways to these, with an emphasis on subculture-specific influences; (c) careful consideration of the perspectives of major stakeholders; and (d) the use of research-based findings to guide intervention priorities and procedures.

Measurement of HAS Students' Adjustment

With regard to the first of these issues, since the turn of the century and especially the publication of the popular press book, *The Price of Privilege* (Levine, 2006), there has been a surge of interest in assessing students in HAS communities across the country. Typically, surveys of students involve self-report instruments such as the YBSSR (Youth Risk Behavior Surveillance System; https://www.cdc.gov/healthyyouth/data/yrbs/questionnaires.htm), and the approach is to compare average scores of students on each of these dimensions, with mean scores of students in similar schools.

Such comparisons of mean scores are useful, but they miss an important dimension, that is, the proportion of students who have symptom scores – in particular domains – *in the clinically*

significant range, and thus cause for serious concern. We illustrate the importance of this with an example. In a given school, the average score for students' symptoms of anxiety may be 50. Theoretically, this average score might derive from the fact that most students are around the "normal" level with scores of 40 as at the low end and 60 at the high. Alternatively, an average of 50 could derive from several students scoring at the extremes of 20–35 on the low end and 65–80 on the high end. Using just mean scores does not illuminate the proportion of students who need clinical attention. Thus, in our own work, we have relied on the Youth Self-Report (Achenbach, Rescorla, & Mariuish, 2004) instead. This instrument allows us to report that whereas 7% of students nationwide have serious anxious-depressed symptoms, rates in School X, on anxious-depressed or somatic symptoms (e.g., headaches and stomachaches not related to a physical health problem), are 20%, or three times as many as those in norms. Stated differently, one in five students in this school has symptoms high enough that parents and school administrators should treat these issues as cause for concern.

With regard to the YBSSR in particular, there are at least two concerns about using this instrument as the sole measure of adjustment of students in HAS contexts. The first is that several items are largely irrelevant for them (such as six items concerning guns, physical fights, and safety in schools). Externalizing behaviors in HAS contexts are generally not those involving overt aggression but are those involving covert rule-breaking including stealing and cheating (Luthar & Ansary, 2005).

Second, there is scant attention in the YBSSR to the problems that do tend to be serious in HAS contexts: Internalizing problems such as anxiety, depression, and somatization. There is a single question on depression (aside from those related to suicide) "During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?" and there is no scale measuring anxiety, which arguably, is among the most serious, widely talked about problem in HAS contexts (see, e.g., Denizet-Lewis, 2017; Merikangas et al., 2010; Rosin, 2015). The absence of items that assess social anxiety is also a troubling omission, given the importance of attaining and demonstrating social status and the mounting evidence of both the high prevalence and the considerable consequences of social anxiety among young people (see Knappe, Sasagawa, & Creswell, 2015).

Third, missing in the YBSSR are the real threats to adjustment in this particular context, such as feelings of perfectionism, competition, and achievement pressures. This goes against what we learned years ago when research on poverty began to proliferate in developmental science (e.g., Huston, McCloyd, & Garcia Coll, 1994): it is a mistake to use a "one size fits all" in measuring environmental risk and protective influences for groups outside of mainstream America.

On the topic of pathways, in our own applied work with HAS communities, we have made concerted efforts to capture not only "modifiable" dimensions commonly assessed by developmental psychologists for teens in general – parental warmth and discipline – but also those that are especially potent in the particular subculture. Examples of these were provided earlier – containment of substance use and parents' perceived overemphasis on achievements as opposed to integrity. Similarly, with peers, it has not been enough just to examine victimization and support but also constructs that are especially prominent in these settings, such as envy of peers and competition among them (and associated effects on well-being). It is powerful when parent and faculty groups see a Power Point slide clearly showing that envy of friends is significantly higher across domains among affluent youth than their inner-city counterparts.

To our knowledge, there are two groups that have burgeoned in conducting assessments of HAS in particular, and one is the Challenge Success group based in California (http://www.challengesuccess.org/about/). This group is founded and led by educators and clinicians, who have written widely read books for the lay public including Levine (2006) and Pope (2001). This consulting group provides a survey that measures

"middle and high school students' perspectives on homework, extracurricular activities, sleep, physical health, stress, parent expectations, academic engagement, academic integrity, and teacher support." With dozens of schools assessed thus far, ostensibly, schools are given reports on mean students' scores on each of these dimensions, with reports across schools.

What would be invaluable from Challenge Success would be more research evidence to back up their methods. To our knowledge, there are no peer-reviewed quantitative studies in developmental, school, or educational psychology journals providing reliability and validity of measures and stringent statistical analyses testing postulated links between risk/protective factors and outcomes particularly problematic in HAS contexts. With regard to the latter, from the website description, it is not clear how this group captures different types of internalizing or externalizing symptoms. The same concern applies to interventions offered; it is not clear if there have been any randomized trials, or even pre- and post-intervention comparisons of students' adjustment or feelings about school climate. Per their site, this group offers leadership seminars for administrators and leaders: "Through interactive presentations, workshops, and dialogue with peers, you will learn new strategies to improve student well-being and promote academic engagement in your school community," but there is no accompanying evidence supporting prior use of these strategies (see http://www.challengesuccess.org/schools/school-program/new-school-information/).

A second group that uses similar approaches is the Independent School Health Check, by a group based on Connecticut. Again, this group offers a 45-min survey covering the following topics: "Academic achievement and motivation; Attitudes about school, teachers, parents; Parental oversight and support; Academic pressure; Academic honesty; Use of out-of-school time; Internet use and misuse; Alcohol and substance use; Social life; Nutrition; Sleep; Sexual activity; Bullying; Fitness; Ethnicity; Gender Identity; Sexual Orientation; Help Seeking Behaviors; And many other topics relevant to independent schools" (https://independentschoolhealth.com/about/). With so many domains assessed in 45 min, it is likely that several of them are measured by one or two items, which clearly limits reliability of measurement (as compared to multiple item scales that generally higher reliability and thus validity). Although there is a page on "Research," once again, it is not clear if the measures, methods used, and analyses are those that would pass the scrutiny of peer review in scientific publications.

The critical importance of attention to these issues is evident from prior attempts in psychology and education to intervene with children at risk where approaches have not been scientifically tested. At best, such interventions can lead to the use of resources with students' high distress continuing unabated; at worst, this distress can be exacerbated. A good example of this is therapeutic programs involving groups of disruptive adolescents, where the teens can end up reinforcing poor behavior in each other through negative "peer contagion" (Dishion & Tipsord, 2011; see also Yaeger, Dahl, & Dweck, 2018).

As noted earlier, for the aforementioned consultant groups committed to working with HAS communities, it would be extremely helpful to provide science-based data, and a useful model for this lies in a different group that more generally targets social-emotional learning, the Collaborative for Academic, Social, and Emotional Learning (CASEL; https://casel.org/2017-meta-analysis/). This is a group where assessments as well as interventions in the schools are grounded in decades of rigorous science in peer-reviewed journals. Unfortunately, it is unlikely that CASEL's highly effective initiatives have reached adolescents particularly in HAS contexts. As indicated in a recent meta-analysis, most successful social-emotional programs have been with younger students; Domitrovich, Durlak, Staley, and Weissberg (2017) have underscored that we need more research-based programs in schools that are developed and tested at the high school level. In addition, there are some unique social-emotional skills that would likely need attention in HAS context. To illustrate, under the category of "self-awareness," there would be spe-

cial need for students' awareness of tendencies toward perfectionism, high anxiety, and even envy (see Flett et al., 2018). Among "relationship skills," there could be value in promoting an understanding of the negative implications of unhealthy competition among peers, or excessive reliance on social media or hooking up as a means to connect with others.

Two other intervention approaches that have gained popularity in recent years have been to foster growth mindsets and grit. Each of these is very helpful in many respects, but there is scant evidence on the benefits of applying interventions based specifically on these approaches in HAS contexts. With growth mindsets, for example, Yeager et al. (2018) reported that interventions using "wise feedback" to students, wherein teachers indicated respect for their competence and capacity to improve, have had significant benefits for African-American seventh graders but small and nonsignificant effects for White students (see also Amemiya & Wang, 2018).

Similarly, in a recent meta-analysis of 88 independent samples, Credé, Tynan, and Harms (2017) indicated that grit was only moderately correlated with performance and retention. "In aggregate our results suggest that interventions designed to enhance grit may only have weak effects on performance and success, that the construct validity of grit is in question, and that the primary utility of the grit construct may lie in the perseverance facet" (Credé et al., 2017; p. 492).

More seriously, efforts to promote grit could have inadvertent negative fallout in HAS contexts (as did previously noted well-intentioned programs that elicited negative peer contagion). This has been effectively described by Rachel Simmons (2018) in her book, *Enough as she is: how to help girls move beyond impossible standards of success and live healthy, happy and fulfilling lives.* "For too many girls today, the drive to achieve is fueled by brutal self-criticism and anxiety that they will fail. We are raising a generation of girls who may look exceptional on paper, but are often anxious and overwhelmed in life.... No matter how many achievements they accrue, they feel that they are not enough as they are." Qualitative accounts support suggestions that the significant stress of adolescent girls reflects pervasive performance pressures, narrow definitions of success, and discrepancies in personal versus parental expectations (Spencer, Walsh, Liang, Mousseau, & Lund, 2018).

Undoubtedly, many of the same concerns apply to boys in HAS contexts; thus, the major concern in these schools is that for most students, *it is not a lack of motivation and perseverance that is the big problem. Instead, it is unhealthy perfectionism, and difficulty with backing off when they should*, when the high-octane drive for achievements is over the top (see also https://www.greatschools.org/gk/articles/can-you-have-too-much-grit/.) Among highly ambitious, achieving youth, each new accomplishment tends to set the stage for pursuing another. Skilled athletes tend to enlist in competitive teams year-round – soccer followed by basketball and then lacrosse – as the talented musician plays not just for the jazz band but also for orchestra and the pep band (with all the required practices and rehearsals). Academically, these students take every Advanced Placement course they possibly can, even when they are ill-equipped to handle the stringent curricula (Tierney, 2012). The exhaustion and depletion that can accrue are poignantly described in journalists' essays profiling the lives of individual children (Denizet-Lewis, 2017; Rosin, 2015).

The description of the pressures facing these youth is very much in keeping with the concept of socially prescribed perfectionism that was introduced in the seminal work of Hewitt and Flett (1991). This highly destructive type of perfectionism is based on the perception that others expect perfection, and it only results in expectations being escalated higher and higher. Given the unrelenting nature of this pressure, Flett and Hewitt (2014) have advocated for a focus on multifaceted school-based programs focused on the prevention of perfectionism and the maladaptive reactions that typically emerge when perfection is not attained.

In a related vein, it is critical that we ensure greater care in the use of words such as "character"; outside of academia and science, it appears that character is often conflated with grit. In a

recent commentary on the topic, Anderson (2016) indicated that "the debate is no longer about whether character matters, but which traits – grit, open mindedness, optimism – matter the most and how to effectively teach those." In future research and interventions with HAS groups, we would do well to think in more fine-grained ways about dimensions of character that most urgently warrant attention in HAS settings. While considering positive, nonacademic aspects of students' development that warrant attention, arguably, it behooves us to focus on constructs such as altruism, prosocial behavior, integrity, and compassion (Luthar, 2017): Knowing as we do that HAS teens are at high risk for rule-breaking and cheating, it is important to ascertain not just what promotes high striving but also rule-abiding behaviors and going step further, to illuminate what promotes strong principles, integrity, and doing for the greater good.

Applied Developmental Science: Collaborative, Quantitative Research to Inform Interventions

Our own programmatic work with HAS groups has involved a limited number of schools at a given time, as it entails time- and labor-intensive collaborations with major stakeholders. This collaboration starts at the point of planning assessment. Typically, interested schools review our standard battery of measures, all with documented good psychometric properties. Invariably, individual schools request some changes, and we work with school administrators and parent representatives to ensure that we capture issues that they are particularly concerned about. As examples, one school recently assessed requested measurement of the use of pornography among students and its ramifications, as another school asked for specific questions on the use of "Juul" – a particular type of e-cigarette rampant in their community.

Second, when results of school-based surveys are collated, the first author personally presents the results to parents and faculty, bringing them together in collaborative efforts to address the areas of identified need. In any community that has faced high incidence of student self-harm or addiction (low or high income), it is natural that adults are anxious, which sometimes manifests in tendencies of parents and school personnel to feel that the other party should do more to prevent these problems. In our own presentations to schools, the data are presented not just in terms of the backdrop of programmatic research on resilience but also include personal insights from an educator and mother who has firsthand experience of raising children in a HAS community. As in work with children in poverty, it is important if scientists from outside the community can convey, with some empathy, that they are not the only town or school facing these problems (that hyper-competitiveness is endemic to high-achieving schools across the country), nor are the "parents to blame" (or the schools). This mutual give and take is critical to get the buy-in of diverse stakeholders and to maximize the enthusiasm with which they come together with support to address salient intervention initiatives.

Third, we go beyond offering simple descriptive findings in reports to pursue in-depth analyses of data. Resilience researchers have long been criticized for producing lists of risk and protective factors ranging from personal attributes to aspects of brain functioning, as these are not helpful for community stakeholders looking for specific directions of how best to change (Luthar & Eisenberg, 2017). What they request is guidance on the top two or three initiatives they should most, and this means identifying in multivariate analyses which particular variables are the most strongly linked with outcomes, having considered others that are conceptually related. Again, consider an example: parents' containment of substance use is correlated with students' self-reported substance use at say 0.30. At the same time, more conventional measures of monitoring and discipline are each also related to substance use at 0.30. Multivariate regression analyses allow us to ascertain that containment is most strongly related to substance use *even after considering general monitoring and supervision*. The message for parents and schools is important, that is, in order to minimize your child's substance abuse in a context

where it is rampant, it is not enough just to keep track of your adolescent's whereabouts or to know who her friends are. It is specifically important that children believe that the repercussions from you, the parent, will be nontrivial if they discover the use of drugs and alcohol.

Parenthetically, this type of perceived parental engagement also conveys to children and adolescents that they matter to their mothers and fathers. In large samples of adolescents, Rosenberg and McCullough (1981) documented that mattering to parents is associated uniquely with reduced depression and anxiety and fewer antisocial tendencies, and these associations were found after taking related individual differences in self-esteem into account. Research on mattering is not extensive but continues to show consistently that young people are less at risk when they have a clear sense that they matter to parents (see Flett, 2018).

There are several other examples of how such multivariate analyses have pinpointed what is particularly important. These analyses have shown, for example, that more than the number of hours in extracurricular activities, it is the relationship with parents that is important for children's adjustment; more than low affection, high perceived criticism from parents has strong effects; even after considering aspects of parent-child attachment, perceived emphasis on achievements is significantly related to children's distress. Such empirically-based pinpointing of "what's the most important" can be invaluable for parents who themselves are bewildered by messages that 18 of 25 "risk and protective factors" are correlated with children's adjustment, giving them some sense of exactly which areas most urgently need attention.

A fourth characteristic of our collaborative approach is working with the schools as a system. In a recent study, we established that HAS students' feelings of emotional engagement with the school were significantly linked with students' adjustment even after considering multiple aspects of their relationships with mothers and with fathers (Zillmer, Phillipson, & Luthar, 2018). These findings led us to ask, what is it about a school that helps children to feel emotionally engaged with it? Collaboratively working with school personnel, we are now examining diverse aspects of school climate, testing the relative strength of their links with children's outcomes. Over a dozen indices are being examined, ranging from the number of Advanced Placement, college level courses and hours of sleep, to the school's perceived tolerance of bullying and respect for diversity. What is particularly appealing about this approach, from a school's perspective, is not just that these are dimensions shown statistically to be important, but critically, they are dimensions readily changeable by administrators and faculty. For instance, the benefits of exposure to caring adults are well-documented (e.g., Luthar et al., 2015; Werner & Smith, 1982), and this can take the form of being able to interact with caring teachers and other staff members, who instill a strong sense of mattering at school in children as well as adolescents. To reiterate, students' having a clear feeling of mattering is an essential element of the psychologically healthy school (see Flett, 2018).

In addition to documenting links of these various dimensions with adjustment outcomes, we also now provide, for individual schools, information on where their own students stand on those dimensions that appear to be the most influential. Examples are shown in Fig. 23.1. In this particular school, there were four dimensions of school climate that were most consistently linked with well-being of both boys and girls: feeling like there (a) were adults at school who cared about them, (b) was low tolerance for bullying, (c) was fairness in enforcing rules (and low favoritism), and (d) were few adults who were critical of them or from whom they felt alienated. As shown in Fig. 23.1, this particular school fared very well on three of these four indices; most students had a mean score of between 3 and 5 (neutral to extremely positive) on the scales involved. On the scale involving criticism and alienation, however, it was of concern that as many as 20–25% of students fell in the mean range of 3–5. These results led to focus groups between trusted adults at the school and students and to try and understand how best to minimize such feelings of alienation.

Although we have not yet performed statistical comparisons of school climate or students'

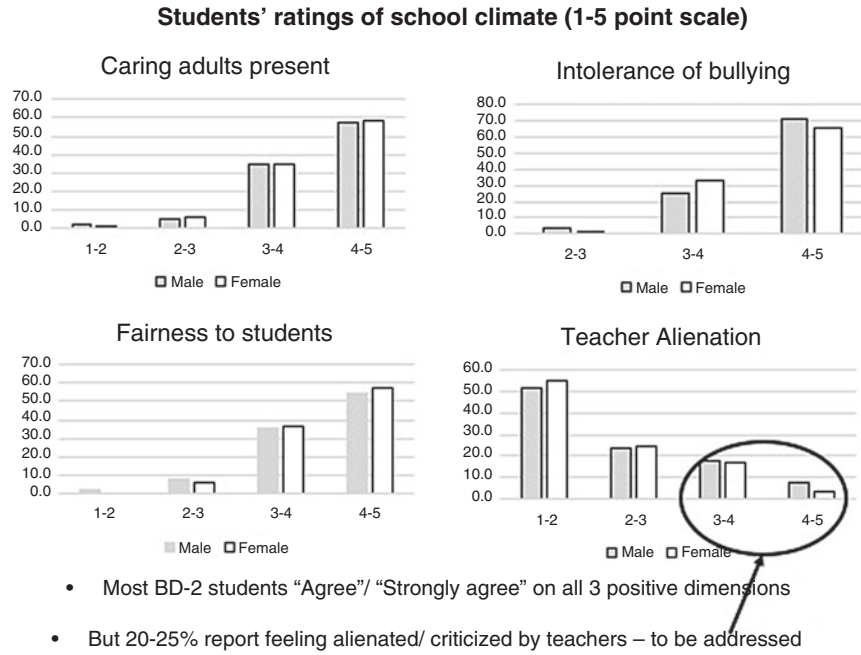

Fig. 23.1 Sample slide from a presentation to School X showing distribution of students' ratings on four critical aspects of school climate, indicating one that needed to be addressed

adjustment before and after presentation of our survey findings to stakeholders, preliminary descriptive data provide room for cautious optimism. In Fig. 23.2, for example, we show the proportion of youth falling above clinical cutoffs for scores on the Youth Self-Report in one school assessed during 2016 (second column), along with rates in other similar schools and in national norms (7%). These findings were part of the overall presentations that the first author delivered to faculty as well as parent groups. Following both sets of presentations, Luthar met with senior administrators, advisors, and students, and all collaboratively pinpointed specific aspects of school climate that most urgently warranted change. The following year – as administrators reported that many of these changes had been put in place – we were invited back to reassess the same school, and as shown in Fig. 23.2, 2017, rates of clinically significant problems in the school (shown in the first set of columns) were uniformly lower.

Another important direction, also consistent with central guidelines from resilience research, is that we are focusing on tending the adults who are responsible for taking care of these highly stressed children. In a Special Section of the journal *Child Development* spanning 11 sets of authors studying different types of adversities, the single strongest common message, in terms of what should be top priorities in interventions, was to ensure the well-being of adults in significant caregiving roles (Luthar & Eisenberg, 2017). Thus, in our own research, we have tested a 3-month support-based intervention, called Authentic Connections Groups, with white-collar professional mothers who served significant additional caregiving roles in their professional lives as health-care providers (physicians, nurse practitioners, and physicians' assistants), at the Mayo Clinic in Arizona. Results showed significant improvements across multiple aspects of psychological functioning as well as cortisol, with effect sizes in the moderate range, and gains still stronger 3 months after the intervention (Luthar et al., 2017).

In addition to working with mothers in HAS communities, the next logical group for us to work with was K-12 teachers, counselors, and administrators. These adults, like physicians, are at very high risk for burnout; thus, we recently

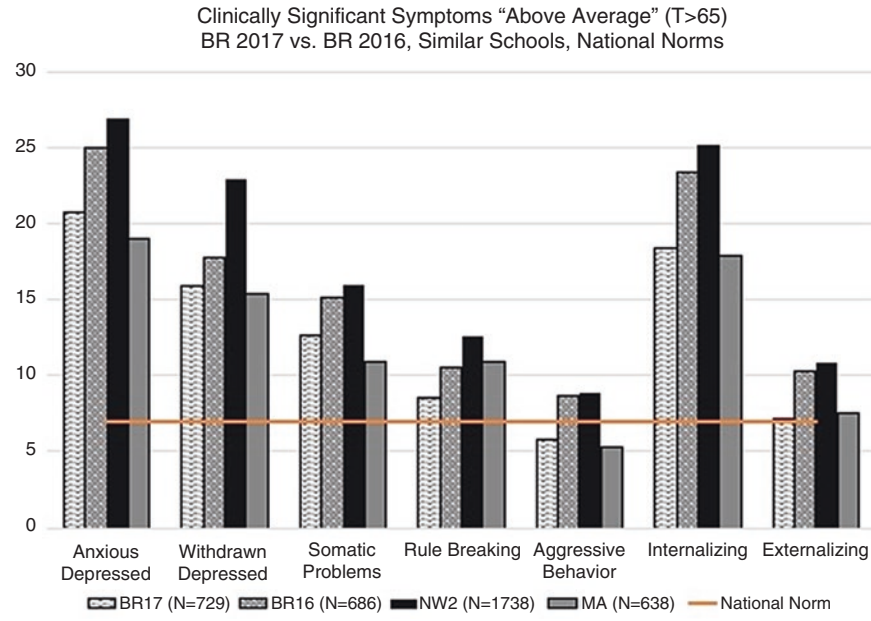

Fig. 23.2 Rates of clinically significant symptoms in one school (BR) in 2 consecutive years and comparative rates with similar schools and national norms

brought the groups to an elite boarding school in the Northeast. The first round of groups were, again, very successful; as in the Mayo healthcare providers' groups, average ratings on the question, "Would you recommend these groups to others like you?" received a rating of 9.8 of 10, and not a single participants elected to drop out of the program prior to completion. Aside from the quantitative data, qualitative data highlight the critical need for such support for these overextended "first responders" to the distress of many (see bit.ly/ACGroups). At the time of writing this chapter, a second round of groups is well under way at the same school.

Closing Comments: Why Enhanced Attention to HAS Youth?

In closing our discussions on future directions, we address the question of why researchers, educators, or policy makers should devote attention to the problems of youth in HAS contexts – who after all are mostly from well-educated, white-collar professional families and thus ostensibly have access to mental health care. To put it plainly first and in self-referential terms, we reiterate that these are *our* children about whom we are speaking. Second and more importantly, it is unconscionable for us to deliberately disregard any group of children that is known to be statistically at risk, notwithstanding all the resources to which they are assumed to have easy access. Given the evidence that has been accumulated over two decades and the seriousness of problems reported, it is incumbent to understand what makes for this risk, to whom it generalizes and who is relatively untouched, and what tends to both exacerbate and alleviate this risk. Third, we must not lose sight of the fact that those HAS youth who are able to achieve positive states of development may be in a position to make important societal contributions dedicated to the well-being of others. Aside from previously described interventions via parents, peers, and schools, positive youth development experiences (e.g., mentoring) can provide youth a sense of purpose, focused on promoting the welfare and well-being of others, and making contributions to society (see Liang et al., in press).

Finally, from a practical standpoint, it is clear that these youth will disproportionately hold

positions of power in the next generation, and their trajectories of adjustment and value systems will shape future norms and mores in education, politics, and business (Luthar, 2017; Luthar et al., 2013). Early trajectories of "gaming the system" can pave the way to serious white-collar crimes. Unhappiness and loneliness, as well as high envy of others, can accentuate personal acquisitiveness as opposed to philanthropy and doing for the greater good. At an individual level, serious depressive episodes during adolescence connote elevated risk for recurrent episodes later in life. Prolonged feelings of stress can affect not just psychological well-being but also physical health and, naturally, productivity at work (Monroe, 2008). Frequent substance use starting in middle school is linked with high risk for addiction in adulthood. For all of these reasons, we would do well to take very seriously the costs, short-term and long-term, for individuals and for society, of the rampant "I can, therefore I must" way of life that pervades the milieu of HAS communities across the country.

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24 Implementing Emotional Intelligence Programs in Australian Schools

Con Stough and Justine Lomas

Abstract

This chapter provides a brief description of our programmatic work measuring and developing emotional intelligence in schools. The Salovey and Mayer model of emotional intelligence is used as as a framework for the development of assessment measures and our development programs with schools. We provide a brief historical background of our work which allows readers to understand the programmatic nature of our research which has led to the development of scales for adolescents and then primary school children, research establishing the validity of the scales, and the development of age-related programs to improve emotional competencies, wellbeing and other psychological and scholastic variables. Our development programs now referred to as Aristotle EI (see Aristotle-Ei.com for a more complete and up-to-date description) are currently being used in schools across Australia and New Zealand.

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Introduction

Swinburne University has been working closely with schools for the last decade to (1) develop measures of emotional intelligence that provide scores for children and adolescents on four dimensions of emotional intelligence (a common language throughout the whole school), (2) conduct published research showing that emotional intelligence predicts a wide range of scholastic variables that are important (e.g. scholastic performance, well-being, bullying, coping, classroom behaviours, leadership and sporting performance) and (3) develop specialised programs that improve emotional intelligence in teachers children and adolescents. In terms of the last goal, developing social-emotional competencies in school children and adolescents is an important goal for Australian schools, and there is a lack of empirical studies assessing this aim. In this chapter we outline the Salovey and Mayer model of emotional intelligence which we use as a starting point in all of our development work (e.g. test construction as well as program development). This is followed by a description of our scales which are commonly used with our EI development programs as well as several validity studies that report on the predictive validity at the subtest level for each of these scales in terms of key scholastic outcomes (e.g. bullying, scholastic performance, behaviour, etc.). We then complete the chapter by discussing two evidence-based

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programs that are now known under the Aristotle EI umbrella. The first is a comprehensive 10-h program for teachers which has been validated in Australia and Canada to improve emotional intelligence and well-being and to decrease occupational stress. The second is a series of emotional intelligence programs specifically focused on improving emotional competencies outlined in the Salovey and Mayer model for primary and secondary school children. In order to develop measures that are compatible with school curricula and settings, we initially established a group of partner schools in Australia and New Zealand to construct, implement and revise specific age-related emotional intelligence programs. Many of these programs have only recently been completed adapted following feedback from our partner schools. The first mainly qualitative stage of evaluation is mostly complete for these programs. Larger quantitative evaluation is currently underway in terms of changes in EI and other key variables due to the programs.

Overview of the Chapter

We start this chapter with a brief description of the Salovey and Mayer model of emotional intelligence applied to schools which establishes the framework for much of our research and development work. We also provide a brief historical background of our work which allows readers to understand the programmatic nature of our work describing early research on the construct in adults to the development of scales for adolescents and then primary school children, to research establishing the validity of the scales to the current development of age-related programs to improve emotional competencies, well-being and other psychological and scholastic variables. Our development programs now referred to as Aristotle EI (see Aristotle-Ei.com for a more complete and up-to-date description) are currently being used in several schools across Australia and New Zealand.

Background

EI is a form of social intelligence that enables individuals to recognise and effectively deal with their own and other emotions (Mayer, Salovey, & Caruso, 2004). EI is broadly defined as an individual's proficiency in the adaptive, efficient and constructive use of emotional information (Mayer et al., 2004) and more specifically as comprising the understanding, expression, recognition, management, control, utilisation, comprehension and cognitive use of emotional information (Luebbers, Downey, & Stough, 2007). The conceptualisation of EI as a form of intelligence follows from the logic that one's emotional state and understanding convey important information regarding their relationships with others and the environment (Mayer et al., 2004). Moreover, emotional information helps to provide meaning and emotional valence to an individual's interpersonal and environmental relationships (Luebbers et al., 2007). In turn, higher levels of EI have been linked to a myriad of social and emotional outcomes over the past 20 years of research (Stough, Saklofske, & Parker, 2009) across child, adolescent and adult populations.

In their 'ability' model of EI, Mayer et al., (2004) conceptualise EI as distinct set of mental abilities that facilitate the processing of emotional information. These abilities are conceptualised as branches, each of which deal with separate but related aspects of emotional processing and these are the abilities that we have used throughout all of our work: to develop our EI measures for children and to develop activities for the development programs. These abilities are the perception and identification of emotions and the use of emotional information to facilitate thought, emotional reasoning and understanding and emotional self-management. Ability levels are embedded within each of the four consecutive branch levels (see Table 24.1).

In the context of adolescent development, EI has been suggested to be integral for successful social interaction (Romasz, Kantor, & Elias,

Table 24.1 Branch and interrelated abilities of the Salovey and Mayer model of EI

Branch	Ability 1	Ability 2	Ability 3	Ability 4
(I) Perception appraisal and expression of emotion	Being able to identify emotion in one's feelings, thoughts and physical states	The capacity to identify emotions in artwork, language, sounds and others' appearance, actions and vocalisations	The ability to accurately express emotions and express needs relative to one's feelings	Being able to distinguish between accurate and inaccurate and honest and dishonest emotional expressions
(II) Emotional facilitation of thoughts	Use of emotions to prioritise thoughts and cognition by directing attention to important information	To perceive emotions vividly and generate them as aids to memory and judgement	Employing mood swings to adapt one's perspective and thus inspire multiple points of view	Understanding how one's emotional states differentially encourage certain approaches to problems
(III) Understanding and analysing emotions	Ability to label emotions and identify relationships amongst them	Interpret the meanings conveyed by emotions	The ability to understand simultaneous, complex and blended emotions	The ability to recognise foreseeable transitions between emotions
(IV) Reflective regulation of emotion	Being able to stay open to pleasant and unpleasant emotions	Reflectively occupy or disengage an emotion	Reflectively monitor one's own and others' emotions	The capacity to manage one's own and others' emotions

2004), with more highly evolved EI skills serving to enhance emotional awareness, coordinate decision-making and improve conflict resolution and contribute to stable mental health and overall well-being (Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007). Given that the abilities associated with EI develop with age (Luebbers et al., 2007), the developmental nature of the construct provides an avenue for *specific interventions to increase aspects of EI* and in turn for improving outcomes associated with higher levels of EI (in the case of students, improved scholastic outcomes and mental health as well as reduced problematic behaviour and bullying behaviours). Utilising the Salovey and Mayer four branch model of EI, it can be observed that the abilities encompassed at each branch level can be linked to important developmental changes children/adolescents undergo whilst at school and, in turn, how these changes in emotional processing ability contribute to understanding the emotional information and behaviours of peers and teachers during their schooling experience. With regard to each of the four branches:

Branch I Abilities range from the ability to recognise emotions in oneself and others to the ability to discriminate subtle expressions of emotion. Furthermore, these are considered necessary preconditions for further processing of emotional information for use in decision-making and problem-solving, as they represent the basic input processes (Mayer, Salovey, & Caruso, 2005). The ability to effectively express emotions appears to follow a similar developmental progression. Fridlund, Ekman and Oster (1987) observed that the ability to recognise and display facial expressions gradually improves until around the age of 10 years, at which point children and adults are normally equally capable of encoding and decoding facial expressions displaying all major emotion categories.

Branch II Concerns the influence of emotions on cognition and describes emotional events that assist intellectual processing. Branch II entails both the capacity of emotions to assist thinking as well as the generation and optimal utilisation of these emotions to enhance reasoning, problem-solving and planning (Mayer et al., 2005).

Branch III Relates to cognitions about emotions and building a knowledge base of emotional information and experiences which can be accessed for intelligent action. Branch III comprises the capacity to analyse emotions, appreci-

ate their probable trends over time and understand their outcomes (Mayer, Caruso, & Salovey, 1999). The most fundamental competency at this level is the ability to label emotions with words and to recognise the relationships amongst them. As this ability develops, the individual is able to recognise groupings of emotions (Ortony, 1990), what emotions convey about relationships and the ways in which emotions can combine.

Branch IV Encompasses the management of emotion and Mayer, Salovey and Caruso (2004) argue that it is integrally involved within the individual's personality such that emotions are managed in the context of the individual's goals, self-knowledge and social awareness. At higher levels of consciousness, emotional construction involves more intentional, extended attempts to understand, define and optimise one's own and others emotional state.

It should be noted that the modules of the Aristotle EI development program and the scales we use to measure EI in children and adolescents (A-SUEIT and SUEIT-EY) are specifically designed to map onto this four branch model (see Table 24.2 later in this chapter for an example of one of our EI programs), with exercises tailored to advance students socio-emotional development by developing specific emotional abilities.

The Importance of Developing EI

A large literature has shown that adults and adolescents who have well developed EI are generally more aware of their own emotions and can manage and express those emotions effectively (Mayer et al., 2004; Mayer, Roberts, & Barsade, 2008). These abilities have been shown to be important for success in many aspects of a person's life (Goleman, 2006), particularly in social interactions (Mayer et al., 2004; Schutte et al., 2001). Highly emotionally intelligent people report higher quality of interpersonal relationships than those with less developed EI. It has been observed that individuals with high EI are more likely to report positive relations with others and less likely to report negative interactions with close friends (Lopes, Salovey, & Straus, 2003). The EI literature in adults has repeatedly shown that EI relates to a wide range of important life outcomes including better and *more effective leadership* (Downey, Papageorgiou, & Stough, 2006), *greater well-being* (Lizeretti & Rodríguez, 2011), *satisfaction with life* (Palmer, Donaldson, & Stough, 2002), *better inter-personal relationships* (Aldridge, Afari, & Fraser, 2013), *academic and organisational success* (Downey, Lee, & Stough, 2011; Downey, Lomas, Billings, Hansen, & Stough, 2014) and *lower levels of depression and anxiety* (Downey, Johnston, Hansen, Schembri, Stough, Tuckwell & Schweitzer, 2008; Nolidin, Downey, Hansen, Schweitzer, & Stough, 2013). The concept of EI has already been linked to a number of important life outcomes in adolescents including *scholastic performance* (Downey, Johnson et al., 2008; Furnham, Chamorro-Premuzic, & McDougall, 2002), *deviant behaviour* (Petrides, Frederickson, & Furnham, 2004) and *the ability to cope with stress* (Downey, Johnston, Hansen, Birney, & Stough, 2010). Thus, the development of the abilities intrinsi-

Table 24.2 How the Year 4 Aristotle activities map onto the Salovey and Mayer four branch model

Emotional ability	Expressing emotions/ emotional awareness	Understanding the emotions of others	Emotions in thoughts	Emotional management and control
Activity	1. Emotions vocabulary	1. Emotional perspectives	1. Bucket fillers	1. Detaching from emotions
	2. Paint my emotions	2. Meet the *thought thug*	2. Emotions vocabulary: thoughts	2. Emotional regulation through storytelling
	3. Emotions and my body	3. Taming your thought thug	3. Emotional road signs	3. Cooling down
	4. Emotions and physicality	4. Positive self-talk	4. Emotional combinations	4. Staying open to emotions
	5. Emotional expression		5. Emotions writing	5. Emotions crossword

cally linked to EI offers immediate and longer-term benefits. Immediately and beyond improved EI, transfer effects may be seen related to socio-emotional outcomes (interpersonal skills/relationships) immediately impacting their quality of life and schooling. Additionally, the development of EI and the socio-emotional skills it encompasses may also serve as both a prophylactic (Downey, Johnson et al., 2008) for developing an affective disorder (depression) and also provide enhanced emotion-processing skills that could contribute to improved higher education or workplace performance in the future (Downey et al., 2011). Given the important implications of EI development, we have developed research collaborations with more than 20 Australian schools across all sectors and locations to (1) *develop reliable measures of EI in younger people*, (2) *determine the relationships between EI and scholastic variables* and (3) *develop theoretically driven intervention programs to improve EI*. Our current studies aim to assess the degree of efficacy of our different program and chart the impact of EI development upon Australian primary and secondary school students over time in relation to EI, behaviour and scholastic outcomes.

Initial Research at Swinburne on Emotional Intelligence

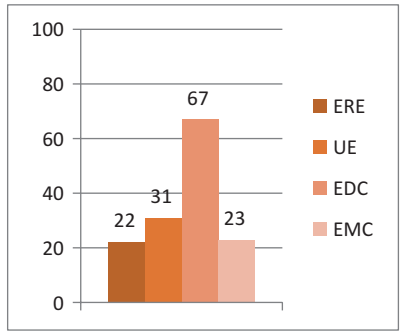
Swinburne University has had a long history of research on emotional intelligence (EI) first starting with studies examining the reliability and validity of current assessments such as the MSCEIT (Palmer, Gignac, Manocha, & Stough, 2005), the Bar-On EQi, (Ekermans, Saklofske, Austin, & Stough, 2011; Palmer, Manocha, Gignac, & Stough, 2003), TAS-20 (Gignac, Palmer, & Stough, 2007), Schutte (Gignac, Palmer, Manocha, & Stough, 2005) and other scales. After the development of the GENOS EI scales (earlier versions were previously known as the workplace Swinburne University Emotional Intelligence Test), Swinburne conducted many studies examining the relationship between workplace variables and self-report emotional intelligence. These studies showed that emotional intelligence measured by the GENOS EI/workplace SUEIT scale was highly correlated to many important workplace variables such as leadership (Downey et al., 2006; Gardner & Stough, 2002; Palmer, Walls, Burgess, & Stough, 2001), trust (Downey, Roberts & Stough, 2011) and even workplace presenteeism (Wan, Downey, & Stough, 2014).

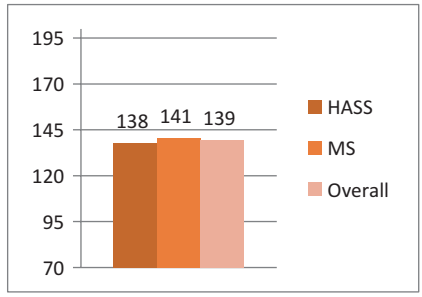
Research and Development Activities Specifically on Emotional Intelligence for Schools

Over the last decade, Swinburne has had more of a focus on research and development of emotional intelligence within primary and secondary school settings. The first phase was in the development of school-based measures of EI. For instance, work on adolescent EI was greatly assisted by the creation of the Adolescent SUEIT (A-SUEIT). The A-SUEIT measures four dimensions of EI (emotional self-awareness and expression, understanding the emotions of others, emotional decision-making and managing and controlling emotions). The A-SUEIT has both self-report and peer report versions as well as standardised reports using percentiles based on more than 20,000 adolescents in Australia, New Zealand and some other countries. Figure 24.1 describes a typical case study that might be used within a school setting in which EI (top left) is integrated into discussions about scholastic success (bottom) and IQ (top right). Figure 24.1 shows a page from a typical EI report from the A-SUEIT.

Research on the Adolescent SUEIT

The A-SUEIT has been used in more than a dozen studies in Australian schools. Research has shown that scores on the A-SUEIT predict several important scholastic outcomes. These include bullying and victimisation (Lomas, Stough, Hansen, & Downey, 2012; Schokman et al., 2014), scholastic success (Downey, Lomas,





PE	EN	AH	MA	BS	BC
B	B-	C	C+	C	B

ERE- Emotional Self-Awareness and Expression

UE- Understanding the Emotions of others

EDC- Emotional Reasoning

EMC- Emotional Management and Control

Fig. 24.1 The use of EI data from the Adolescent SUEIT in case studies. ERE- Emotional Self-Awareness and Expression, UE-Understanding the Emotions of others, EDC- Emotional Reasoning, EMC-Emotional Management and Control

Billings, Hansen, & Stough, 2014; Downey, Mountstephen, Lloyd, Hansen, & Stough, 2008) and problem-solving ability (Downey et al. 2010) amongst other scholastic variables. Interestingly using a similar scale more suitable for adults, two studies were published in clinical samples showing lower emotional intelligence. In the first a study by Downey, Johnson et al. (2008), clinically depressed patients (as assessed by a psychiatrist using the DSM-IV criteria) reported significant lower scores on all EI dimensions. There were small and clinically insignificant differences between depressed patients in a current depressive episode as compared to previously clinically depressed patients who were no longer in a depressive episode. This finding suggested that significantly lower EI may be a precursor to clinical depression, and this is a finding that is particularly poignant for schools. In the second study by Nolidin, Downey, Hansen, Schweitzer and Stough (2013), a similar finding was found in patients with social anxiety. Again, raising the

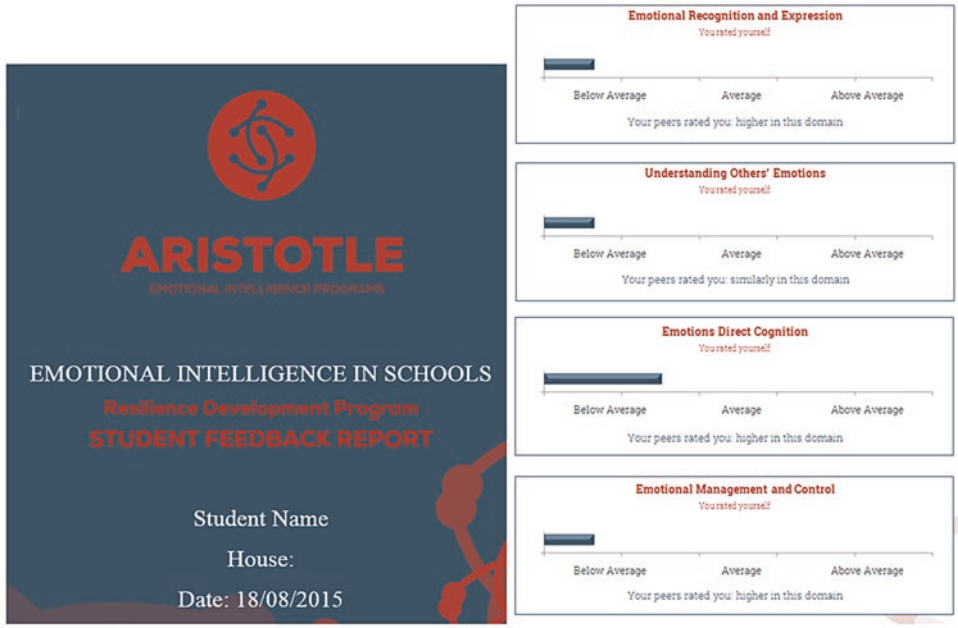


Fig. 24.2 Example of a self/peer EI report for adolescents using the Adolescent Swinburne University Emotional Intelligence Test (A-SUEIT)

issue of whether very low EI in children and adolescents could lead to later life clinical problems. In summary the Adolescent SUEIT is a cost-effective and reliable scale that appears to predict several key scholastic variables. Identifying deficits in EI in adolescents at an early age may be important for schools. Figure 24.2 shows part of an example report from the A-SUEIT which is used in schools in Australia and New Zealand.

Measuring Emotional Intelligence in Primary School Children

More recently research on EI has been assisted by the development of the Swinburne Emotional Intelligence Test-Early Years (Lloyd, 2012; SUEIT-EY), a scale specifically designed for children from grade 2 to 6 in Australia (approximately 7–11 years of age). This scale is still being revised and improved for reliability and validity. However, the original scale has been shown to predict GPA even in grade 5 school students (Billings, Downey, Lomas, Lloyd, & Stough, 2014). The SUEIT-EY differs from the A-SUEIT and other self-report measures of EI in so far as it is specifically designed for younger or primary school children and it is both a self-report and ability-based measure (Lloyd, 2012; Lloyd et al., in press). To our knowledge, this is one of the first scales to include both self-report and ability-based questions specifically designed for younger children. Figure 24.3 presents an example ability question from the scale. To be consistent with the Salovey and Mayer model, the SUEIT-EY also assesses the same four dimensions of EI (emotional self-awareness, understanding emotions, emotional reasoning and managing emotions). Therefore, the use of the A-SUEIT for adolescents and the SUEIT-EY for primary school children allows a school to use the same model of EI, i.e. the same four dimensions in terms of an EI language within a school. It also enables a deeper knowledge of EI within schools.

In summary the use of both A-SUEIT and the SUEIT-EY allows for the economical, reliable and valid measurement of EI in children and adolescents. This information can be used to better understand the functioning of the child or adolescent, to identify current problems and weakness

Fig. 24.3 Example item from the Swinburne University Emotional Intelligence Test-Early Years (SUEIT-EY)

in terms of emotional processes and competencies and to gauge changes in EI over time. These tests are of course only two of many possible scales that could be used in schools. For adult assessment of EI, there are a multitude of scales. However, for children and adolescents, the range is considerably more limited. The selection of scales to measure EI for a school should be based on a range of variables including validity and reliability but also ease of use and translation of information as well as costs and availability. Many EI scales and in particular scales for younger children and adolescents are in early stages of development compared to scales for adults or the workplace or even scales for cognitive intelligence (IQ). Over the next decade, it is reasonable to expect new school-based EI measures as well as revision and improvements in reliability and validity of current scales.

Aristotle EI Programs for Children and Adolescents

The Aristotle EI Development Program

Over the past 5 years, our team has been constructing and revising programs to develop emotional competencies across several school years. Currently the Swinburne Aristotle suite of programs includes development programs for years 1, 4, 5, 6, 7, 10 and 12. We hope to complete the remainder of the year programs and to complete speciality development programs (autism resources, boarding house program and outdoor adventure/camp programs) by the end of 2019. All of our program activities map on one of the four key EI competencies outlined by Salovey and Mayer in Fig. 24.1. One of the first EI programs which may be useful to outline was the Year 4 program. The program has four or five activities that teach students the four main EI competencies (see Table 24.2).

The program itself is easy to administer (as reported by teachers), is fun to complete and embeds the construct of EI in all activities. Importantly Year 4 teachers provided substantial input into the design and implementation of the program in its construction in 2012 and its pilot in 2013/2014 so that it could be best translated from its theoretical, empirical and academic foundations into an easy-to-use and practical intervention. In 2013/2014 the program was piloted at the Anglican Church Grammar School in Brisbane. Seventy Year 4 students completed the SUEIT-EY before and after the 20-week EI intervention. A change of nearly 23% was observed in overall EI scores with the biggest change observed in understanding and managing emotions.

The following sections provide information on our EI development programs.

Resources

- Feedback reports: Personalised reports for students that explain the behaviours associated with each EI dimension, the importance of these behaviours as well as self-report and peer ratings data to identify areas of relative strength and opportunity for development.
- Program manuals: All inclusive, these manuals are designed to support teaching staff to deliver EI lessons throughout the school year with the support of lesson outlines, background information and suggestions to help tailor the content to their specific class group. Importantly, the manuals are provided in a fully editable format to allow teaching staff to adjust aspects of the lessons to make them as relevant, engaging and effective for their class group as possible.
- Program materials (posters, cards, book lists, PowerPoint, etc.).
- Student workbooks: These serve to limit time taken on classroom administrative tasks such as writing out reflection questions and providing notes and handouts specific to each lesson. Upon completion of each program, the student workbooks also serve as a personalised reference for students as they tackle future challenges equipped with the EI learnings and strategies acquired in previous years.
- Supplementary manuals (e.g. understanding data): Another support resource for staff, this assists school teaching staff, counsellors, psychologists and aides.
- Workshops/parent letter templates.

These resources have been designed with the following considerations in mind:

- School staff are busy! Not every teacher is trained in psychology, and so many terms and strategies may be new to staff invited to deliver the programs. Ample detail regarding how different strategies work, research behind the lesson content, worked examples and suggestions as to how to lead class discussions about specific topics (including questions and suggested answers) are provided to support teaching staff as much as possible.
- Every teacher, student and classroom is different; vocabulary, priorities, interests, challenges and teaching styles all vary from person to person so it is vital that the structured programs also include sufficient flexibility to allow for these differences to be accounted for and embraced. This is vital to ensure participants get the most out of the program but also can assist to gain staff buy-in and autonomy.

Approach

We prefer a whole-school approach and as such prefer to work with schools that are committed to the long-term goal of developing emotional intelligence in both students and staff. As such our preferred relationship with a school is to work closely with each school to assess emotional intelligence, to help teachers understand the assessments and to train teachers so that they can administer the programs that we have available. Developing emotional intelligence across the whole school requires time and effort by both Swinburne and the school involved. We encourage staff to become experts in emotional intelligence not only in order to administer the various programs but to be able to role model emotionally intelligent behaviours to their students.

Our approach has focused on lower-order competencies involving emotions that are thought to lead to higher-order behaviours and abilities. At a developmental level, emotional intelligence represents the fundamental building blocks for higher-order behaviours.

Goals

Using the four branch scientific model of emotional intelligence as a strong basis for the assessments and all of the programs, students who participate build their emotional intelligence competencies starting from the most basic skills and working towards the more complex skills as they progress through the modules. The different programs work together to continue to build emotional intelligence competencies as students get older. Each program is relevant for the age in question and builds important outcomes for each year. For instance, the Year 10 program builds emotional competencies to improve stress man-

agement and resilience as they progress to Year 11 and 12 studies. The Year 8 program builds emotional competencies to improve mental health. Each program is based on fun activities which are highly relevant to that age as well as providing a common language across the entire school. We also train teachers to understand emotional intelligence data from assessments and to use these assessments to better understand their students and to ensure that students with low emotional intelligence are identified and developed.

Time

Each program requires between 9 and 16 lessons of approximately 45 min in length. The lessons are administered by classroom teachers who are trained by Swinburne. Currently Swinburne is engaging with schools who value emotional intelligence assessment and development.

EI Development Programs for Teachers

A systematic program to build EI and resilience and to reduce occupational stress in teachers was developed and tested with the cooperation of several Department of Education schools in Victoria by Hansen, Gardner & Stough (2007). Since then the program has been modified and expanded and has been used across other occupations. The efficacy of the 10-h program has been reported by Hansen, Gardner, and Stough (2007), and the results are diagrammatically presented in the figures below (Fig. 24.4a–f). The figures show that the program improved several key emotional intelligence dimensions as well as psychological and physical strain which are key variables directly underpinning occupational stress. The design of this study utilised all participants as

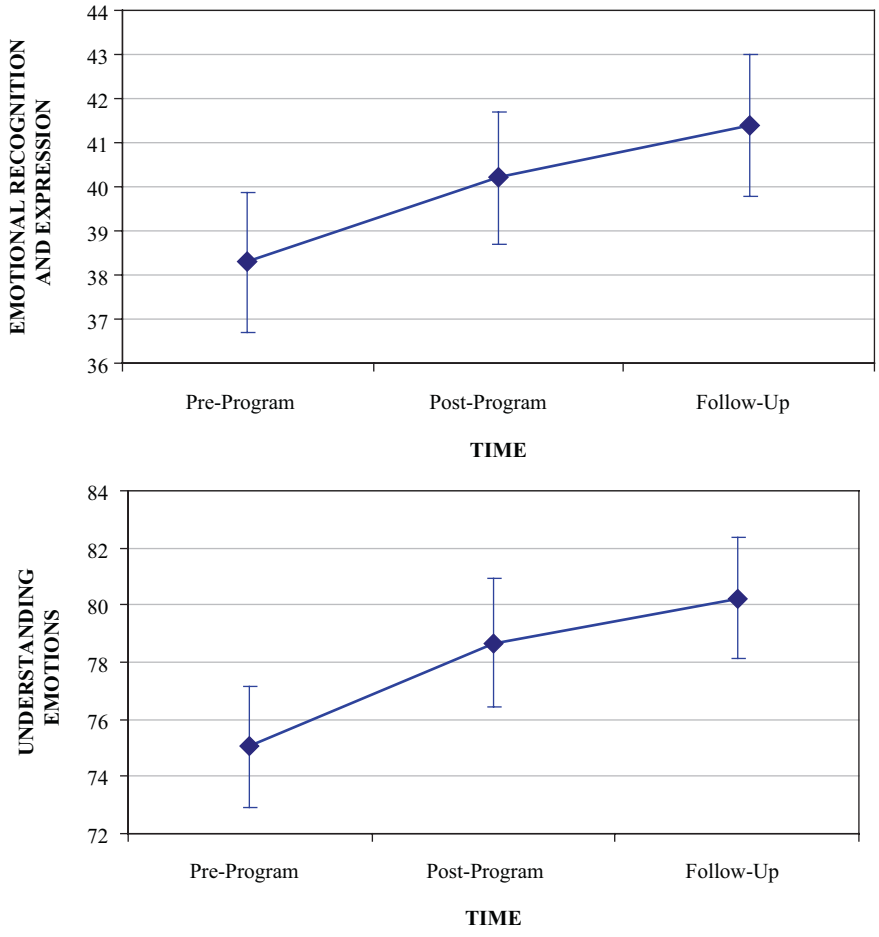


Fig. 24.4 (**a**–**f**) Changes in EI and other key variables due to the teacher stress/EI program

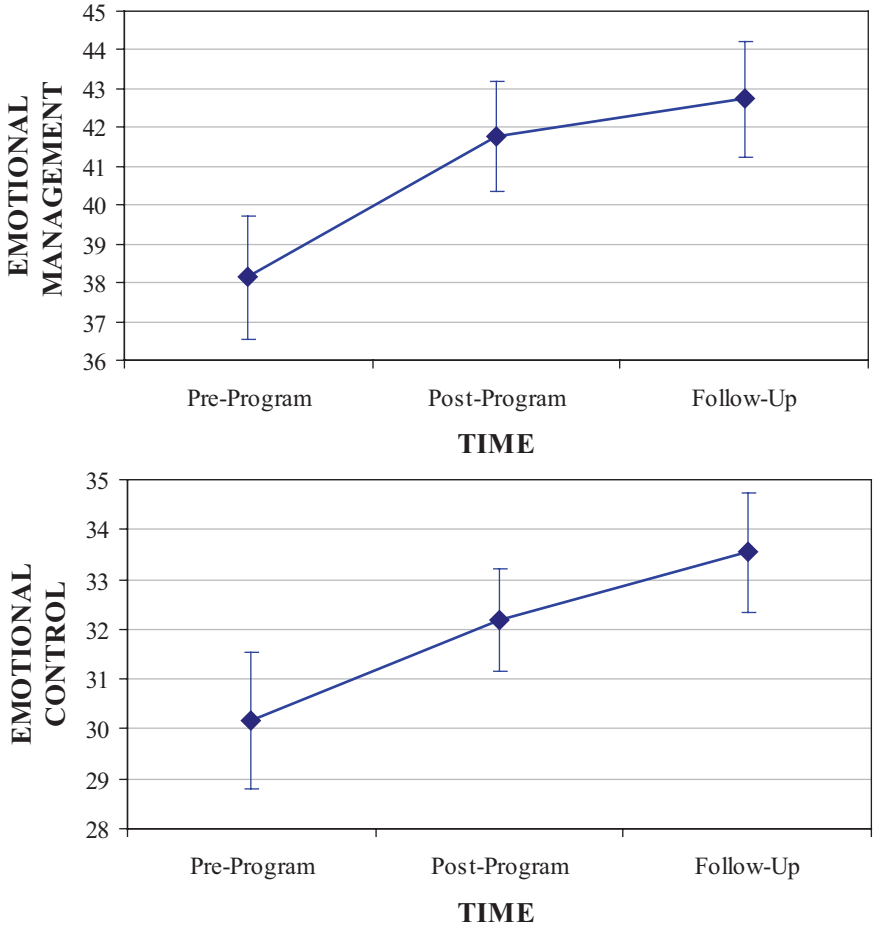


Fig. 24.4 (continued)

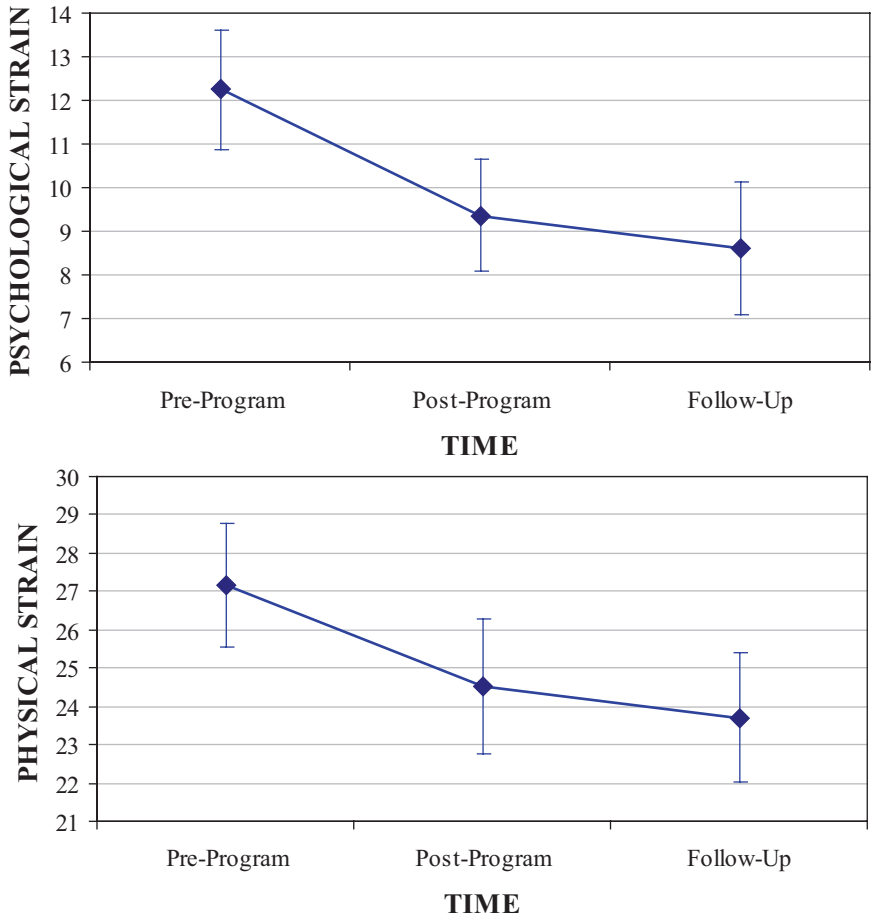


Fig. 24.4 (continued)

their own control by employing a wait-list control which is commonplace in clinical studies evaluating program efficacy.

This program was subsequently adapted and evaluated for efficacy for pre-service teachers in Canada by Saklofske and colleagues (Veseley, Saklofske, & Nordstrokke, 2014; Vesely, Saklofske, Vingilis, & Leschied, 2018). Using a different methodology, participants were directly compared to participants in a control group who did not participate in the program. They reported results similar to Hansen et al. (2007) in terms of the efficacy of the program. We conclude that the program is an efficient, easy-to-use, cost-effective and most importantly an efficacious intervention to improve EI and well-being and reduce stress in teachers. The skills taught in this program are ideally suited to teachers starting a career in teaching. Therefore, we suggest that it is routinely adopted in either the training of teachers at tertiary education level or it is implemented for new employees in a school. This would help to reduce the high proportion of teachers who find the profession too stressful and leave within the first year as well as improve each teacher's ability to model emotionally intelligent behaviours within the classroom.

Summary

Over the last decade Swinburne has been engaging key schools in Australia and New Zealand to understand (1) how to measure emotional intelligence in schools, (2) whether emotional intelligence predicts key scholastic variables and (3) to develop programs to boost emotional competencies which in turn have been hypothesised to improve resilience, well-being and scholastic performance and to reduce problematic behaviours such as bullying and aggressive behaviours and mental health problems. Our group has published more than a dozen key articles demonstrating the importance of EI for scholastic outcomes. These studies have been greatly facilitated by the development of tools to measure the four EI competencies in both primary school children and in adolescents. These scales also provide an opportunity for schools to identify children and adolescents who have deficits in emotional processes at the earliest developmental stage possible. In terms of development programs, there is still much work to be done. Our teacher EI/stress/resilience program appears to be efficacious and easy to administer. It should be utilised to help boost emotional intelligence in teachers at the earliest stage in their careers. In terms of the Aristotle programs for children and adolescents, we have created a large suite of coherent age-appropriate activities to boost emotional competencies. This is a work in progress, but importantly we have several large-scale studies underway assessing the efficacy of our newly developed EI programs. Initial research indicates that they are useful tools for schools to improve emotional intelligence and other variables. Swinburne is committed to this area of research and development and plans to continue to build effective EI programs and work with schools in this area. Emotional intelligence programs are important new tools for schools to build the next generations of our community. Understanding how to work with schools to do this has been one of the most important lessons for us over the last 5 years. Theoretically sound but impractical development programs will not be utilised by schools over a longer period of time. Therefore, it is vital to develop key partnerships with schools who have an interest in developing evidence-based theoretically sound programs for their pupils.

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Correction to: Qualities of Teacher Effectiveness in Delivering School-Based Mental Health Programs: The Relevance of Emotional Intelligence

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The book was inadvertently published with an incorrect spelling of the author's name in Chapter 10 as Eveyln Vangelis whereas it should be Evelyn Vingilis.

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Index

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