Mental health promotion in schools: A comprehensive theoretical framework

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Recent decades have seen a rise in mental health problems among children and adolescents. Despite a proliferation of studies describing effective school-based mental health programs, reviews of current research in this field suggest a strong lack of consensus concerning the definition of school mental health and its constructs. In the present paper, we set out to fill this gap via a two-step process: first, we offer a critical overview of recent research around the concept of school mental health; second, we propose a comprehensive theoretical framework for researchers, practitioners, and policy-makers involved in mental health promotion and school prevention programs. The proposed framework comprises three key domains: the first two, cover the promotion of social and emotional learning and resilience, while the third concerns the prevention of behavioural problems.

Keywords: school mental health; social and emotional learning; resilience; social, emotional, and behavioural problems, theoretical framework

Introduction

Background

Mental health is defined as a "state of well-being in which every individual realizes his or her own potential, copes with the normal stresses of life, works productively and fruitfully, and is able to make a contribution to her or his community" (WHO, 2005, p.12). It is viewed as a dimension of overall health that spans a continuum from high-level wellness to severe illness (WHO, 2013). The promotion of mental health consists of any action taken to create living conditions and environments that support mental wellness and allow individuals,

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families, groups or communities to adopt and maintain healthy lifestyles fostering optimal emotional functioning and social inclusion (O'Reilly et al., 2018).

Over the past twenty years, mental health difficulties among children and adolescents have been on the increase worldwide, becoming a leading cause of disability (WHO, 2003). The incidence of diagnosable mental, emotional, or behavioural disorders is now estimated at between 10% and 20% among school children (Erskine et al., 2015; Ford et al., 2003; Gore et al., 2011; WHO, 2015). Mental health difficulties can manifest as either externalizing or internalizing problems (Boylan et al., 2012; Stone et al., 2015). The most common externalizing problems, from preschool age onwards, include disruptive behaviour issues, attention deficit hyperactivity disorders (ADHD), oppositional defiant disorders, and conduct disorders (Tremblay et al., 2004). The predominant internalizing disorders include depression, anxiety, panic disorder, mood disorders, social phobia, specific phobias, and obsessive-compulsive disorder (Baranne & Falissard, 2018; Ogundele, 2018). Data collected over the last decade indicate that self-harm, suicidal attempts, eating disorders, depression, and addictive disorders are growing problems among young people (Burstein et al., 2019; Keyes et al., 2019; Twenge, 2020; Twenge et al., 2018). Depression is the third leading cause of death among adolescents in the USA and Europe (WHO, 2018).

Mental health difficulties have a significant adverse impact on different aspects of children's and young people's development, contributing to poor school adjustment, reduced concentration, and problems in achievement and social relationships (Cavioni & Zanetti, 2015; Cefai et al., 2014; Cullinan & Sabornie, 2004; Macklem, 2011; Ornaghi et al., 2016; Tempelaar et al., 2014; Thorlacius & Gudmundsson, 2019). Mental health issues are also associated with poor school attendance, suspension, and early school dropout (DeSocio & Hootman, 2004).

Given these alarming statistics, for three decades now, the mental health of children and adolescents has been assigned priority status within the global child health agenda (Palfrey et al., 2005; Patton et al., 2012). As early as 1986, in the Ottawa Charter for Health Promotion, the WHO (1986) identified children's and adolescents' mental health as a key area of public concern, towards which policy-makers needed to target their actions. Based on this, subsequent WHO policy documents (e.g., 1996; 2001; 2003; 2005) flagged the key role of the education sector in addressing children's and young people's mental health needs. WHO recommends that schools function as one of the primary mental health support systems for students, enabling the planning and implementation of a broad spectrum of mental health actions that encompass promotion, prevention, intervention, and rehabilitation (WHO, 2000; 2005; 2007). In 1995, the WHO's Global School Health Initiative (WHO, 2000) emphasized the importance of focusing on and enhancing the psychosocial environment in schools with a view to fostering emotional and social well-being.

The following sections review the recent research on the promotion of mental health in schools, formulating an innovative school mental health framework that is intended to offer a comprehensive and conceptually broad guide to researchers, practitioners, and policy-makers involved in planning and evaluating sustainable school mental health programs for students and teachers.

School mental health: terms and approaches

Although the concept of school mental health dates back to the early 1900s, as reflected in the publication of the first recorded scientific paper on the topic, entitled "Mental Health of School Children" (Anonymous, 1906), efforts to define mental health in schools continue to be hampered by a lack of precise terminology and the absence of universal agreement on the meaning of school mental health.

One explanation for this phenomenon is that a number of related terms – such as "social and emotional learning", "social and emotional education", "moral education", "life skills", "emotional literacy", "emotional intelligence", or "character education" – are used alternatively to "mental health" in educational contexts (Cavioni et al., 2017; Cefai et al., 2018b; Cefai & Cavioni, 2014; Elias et al., 2008; O'Reilly et al., 2018; Weare, 2004; 2010; Weare & Nind, 2011). This makes it all the more important to define what is specifically understood by school mental health. The Wisconsin Department of Public Instruction has proposed that mental health in school includes "practices to address the continuum from high-level emotional wellbeing to significant student mental health challenges. School mental health addresses all aspects of social-emotional development of school-age children including wellness, mental illness, substance abuse, and effects of adverse childhood experiences" (2015, p.3). Similarly, for Cefai and Cooper (2017), mental health promotion in schools "is related to positive mental health and reduced internalized and externalized conditions, such as anxiety, depression, substance use, violence, and antisocial behaviour" (p. 3).

Another reason for the lack of shared terminology is that researchers have tended both to emphasize the multi-dimensional nature of school mental health, which encompasses a range of approaches and developmental contexts, and to adopt a holistic view of schools themselves (Weare, 2004). For example, the so-called "whole-school approach" acknowledges that all aspects of the school community have an impact on students' mental health and recognizes the importance of engaging the collaboration of students, families, school staff, community, and stakeholders (Graetz et al., 2012; Weist, & Murray; 2008).

The need for a comprehensive framework

Missing, however, is a comprehensive theoretical framework that clearly delineates the concept of school mental health, while addressing the following two key aspects. First, research in the field has identified two complementary lines of intervention in school-based mental health initiatives: programs aimed at enhancing mental health and well-being by fostering social and emotional competencies and resilience skills, and schemes targeting the prevention and relief of mental health difficulties, behavioural issues, and at-risk behaviours (Weare, 2010). Although systematic reviews of intervention suggest that, for maximum efficacy, programs need both to support universal mental health promotion and to address social, emotional, and behavioural problems (Cefai & Cooper, 2017; Weare & Nind, 2011), a comprehensive framework that outlines in detail the specific competences and behaviours targeted by school mental health interventions is still needed.

Secondly, existing definitions of school mental health tend to mainly focus on students' mental health without recognizing the importance of also sustaining the well-being of teachers. Indeed, teachers' own

emotional health needs are neglected or inadequately addressed by the majority of mental health programs (Shelemy, Harvey, & Waite, 2019). Hence, a further aim of the present framework is to specifically include teacher mental health as a key component of a whole-school approach to mental health promotion.

Overview of the theoretical framework

Effective school mental health programs mainly target the promotion of social and emotional learning (SEL) and resilience as well as the prevention of social, emotional, and behavioural difficulties, including risk behaviours (Browne et al., 2004; Cefai et al., 2018a; O'Reilly et al., 2018; Weare, 2010). Therefore, the proposed framework, which is based on existing research on mental health promotion and prevention, represents school mental health as encompassing three major domains. The first two concern the promotion of protective factors in mental health, specifically, social and emotional learning (SEL) and resilience, while the third is the prevention of social, emotional, and behavioural problems.

Figure 1 provides a graphic summary of the theoretical framework, representing the three domains of school mental health, the associated developmental settings (family and community), and the overarching role of policy-making. In the next sections of the paper, we more fully describe the framework by discussing the three major domains in relation to mental health outcomes and the different developmental systems. For each of the domains, we also summarize the main theoretical constructs reviewed, together with a list of key target skills and behaviours for both students and teachers (Table I, Appendix).
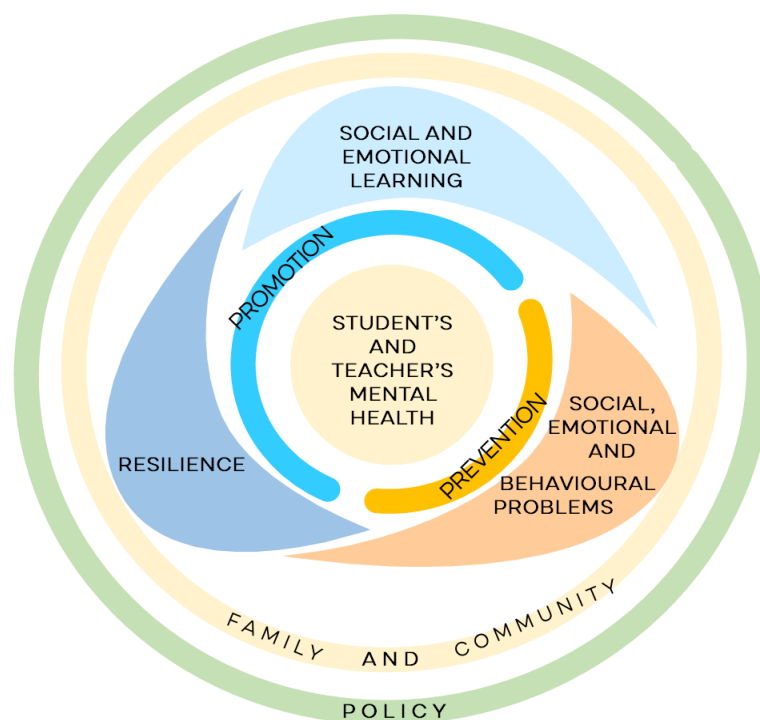

Figure 1. School Mental Health Theoretical Framework
(Cavioni, Ornaghi, & Grazzani)

Promotion of social and emotional learning

Numerous large-scale reviews and meta-analyses on the impact of SEL programs carried out in United States and in Europe and mainly delivered by trained teachers in partnership with mental health professionals (Franklin et al., 2012) have pointed up the twofold benefits of intervention: students participating in such programs display enhanced social and emotional competencies (e.g., social skills, positive attitudes towards self and others, positive social behaviours) and reduced internalizing and externalizing problems compared to control groups of peers (Cefai et al., 2018a; Corcoran et al., 2018; Durlak et al., 2011; Payton et al., 2008; Zins & Elias, 2007).

More specifically, research has documented a significant positive impact of SEL programs on students' behaviour from kindergarten up to high school including improved social-emotional competences across the five SEL competencies (CASEL, 2013), enhanced self-esteem and connection to school, better classroom behaviour, improved academic motivation and performance, as well reduced conduct problems, bullying and aggression and less emotional distress such as stress, anxiety and depression, (Catalano et al., 2002; Conley et al., 2015; Durlak & Wells, 1997; Sklad et al., 2012; Taylor et al., 2017; Tobler et al., 2000; Wiglesworth et al., 2016; Ura et al., 2019).

While the impact of SEL programs on students has been well documented (Weare, 2004; 2010; Weare & Nind; 2011), little attention has been paid to the impact of SEL on enhancing teachers' social and emotional skills. Research by Jennings & Greenberg (2009), who applied the CASEL competencies model (Durlak et al., 2015), suggested that socially and emotionally competent teachers are better at understanding and managing their own and others' emotions, display stronger relationship-building capability, and report higher self-efficacy in teaching. These competencies are in turn positively associated with greater work satisfaction and reduced stress and burnout (Jennings et al., 2017; Jennings & Greenberg; 2009).

Promotion of resilience

Research has identified resilience as a complex construct resulting from a dynamic relationship between risk and protection factors (Benard, 2004; Luthar & Cicchetti, 2000; Ungar, 2012; 2018). Studies conducted in educational contexts have been focused on how personal and social protective factors can help the mental health of both students and teachers (Cowen et al., 1997). Among such factors, resilience is a key protective capacity that contributes to maintaining positive mental health and preventing and mitigating mental health problems during childhood and adolescence (Dray et al., 2015; Kessler et al., 2008). Children with higher levels of resilience are less prone to mental health problems such as depression and anxiety disorders (Hjemdal et al., 2007; Hjemdal et al., 2011).

Studies on the effectiveness of resilience-enhancing school-based programs and interventions have reported various positive outcomes in children and young people such as improved resilience outcomes, stress management, coping skills, social and emotional competence and learning interest and decreased anxiety,

depression and risk-taking behaviour (Cefai et al., 2018b; Fenwick-Smith et al., 2018; Meschke & Patterson, 2003; Twum-Antwi et al., 2019, Ungar, 2018).

Only in recent years have researchers investigated teachers' resilience with a view to identifying the factors that enable them to achieve school goals and maintain well-being, despite environmental stressors and recurring challenges and setbacks at work (Brunetti, 2006; Patterson et al., 2004). This has led to the identification of a range of individual characteristics (such as self-efficacy, strong intrinsic motivation to teach, and coping strategies) and contextual protective factors (including receiving support from colleagues and school administrative staff) that help teachers to deal with challenging situations and successfully maintain job satisfaction and commitment to their profession (Beltman et al., 2011; Cefai & Cavioni, 2014).

Prevention of behavioural, emotional, and social problems

Social, emotional, and behavioural difficulties comprise a broad spectrum of behaviours that school children can develop to varying degrees, and that may be either internalizing (directed at the self), or externalizing (directed at the external environment) (Achenbach et al., 2017; Cooper, 2017). In schools, interventions to prevent behavioural, emotional, and social problems usually target such conditions as depression, anxiety, social withdrawal, substance use, self-harm, rule-breaking, delinquency and aggressive behaviour (Anderson et al., 2018; Cooper & Jacobs, 2011).

Interventions may be implemented at the universal level, that is to say, with all students, or at the targeted level, with students at particular risk of developing, or already manifesting, mild mental health difficulties (Weare, 2010). Recent studies suggest that universal preventive programs are perceived as less stigmatizing (Fisak et al., 2011). Furthermore, similar effect sizes have been observed for both universal and targeted prevention programs, indicating that there is a need for both universal preventive interventions complemented with targeted interventions (Ahlen et al., 2015; Waldron et al., 2018; Weare & Nind, 2011). In particular, systematic reviews of universal programs in children and adolescents demonstrated significant reductions in internalizing mental health problems such as stress, anxiety and depression symptoms (Feiss et al., 2019; Lowry-Webster et al., 2001; Lowry-Webster et al., 2003; Waddell et al., 2007). Similarity, studies on the effectiveness of prevention programs for externalizing problems documented significant reductions in targeted behavioural issues, with effects lasting through one-year follow-up (Durlak & Wells, 1997; Greenberg et al., 2001; Waddell et al., 2007; Wilson, et al., 2003).

Despite the increasing number of preventive programs for students, few intervention studies have specifically targeted teachers' mental health difficulties. Most of those that did were designed to reduce stress and risk of burnout by introducing cognitive-behavioural techniques or relaxation strategies. For instance, Leung and colleagues (2011) found that a brief cognitive-behavioural training program significantly relieved stress and strain amongst the participating teachers. In another more recent study, lower anxiety and stress and increased overall mental well-being were observed in a group of teachers who practiced yoga, as compared to a control group (Telles et al., 2018).

Developmental systems: family, community, policy

This framework acknowledges the importance of collaboration between the developmental systems (Bronfenbrenner, 1979) – namely family and community – that play an active role in fostering school mental health It also emphasizes the need for strong cooperation with a wide range of policy-makers to guarantee the sustainability of mental health promotion in schools. Research has documented the limited effects of intervention at follow-up when no provision is made for long-term sustainability after initial investment and rollout (Askell-Williams, 2017; Askell-Williams et al., 2013). Sustainability over the longer term is best accomplished via strategic collaboration with policy-makers to upscale mental health programs to wider contexts. Programs need to be linked to existing mental health education policy and supported by local, national, or international policymakers to have the best likelihood of producing lasting results.

Conclusion

The aims of this paper were to examine the existing research on school mental health with a view to contributing to conceptual understanding of this construct, and to present a comprehensive theoretical framework for mental health promotion in schools that takes the needs of both students and teachers into account. The proposed framework, which is evidence-informed and comprises three key domains, is based on the existing literature on mental health promotion and prevention among school children and teachers referring to the literature on social and emotional learning, resilience and prevention of social, emotional and behaviour difficulties (e.g., Adelman & Taylor, 2000; Cefai et al., 2018a; Cooper, 2017; Durlak et al., 2015; O'Reilly et al. 2018; Taylor et al., 2017; Ungar, 2012; Weare & Nind, 2011), It identified a set of key skills and behaviours that need to be targeted, for both students and teachers in mental health promotion in school. The framework also advocates for the promotion of teacher wellbeing as a vital component of effective school mental health strategies (Cavioni et al., 2018; Cefai et al., 2015).

Finally, the authors make the case that school mental health programs should involve the family and community as well as policymakers, with a view to building a comprehensive care system in which mental health promotion and prevention strategies are integrated with one another and delivered as a key component of the school curriculum (Cefai et al., 2018a). In many instances, schools have largely been invited to participate in fragmented programs, without being offered an adequate grounding in how these programs might be incorporated into overall school organization (Adelman & Taylor, 2000).

The framework presented here has been devised to encourage researchers, practitioners, and policy-makers to design evaluate comprehensive school mental health programs that simultaneously promote both SEL and resilience, as well as targeting the prevention of behavioural issues in both students and teachers, within a whole school approach to mental health promotion.

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Appendix

Table I - Framework for school mental health: Constructs, domains, targeted skills and behaviours

Constructs and theorists	Domains	Target skills and behaviours	
		Students	Teachers
Social and emotional learning (SEL) SEL is the process through which children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. SEL includes five core competencies: self-management, self-awareness, self-management, social awareness and responsible decision-making (Elias et al., 1997; Durlak et al., 2015).	**Promotion of social and emotional learning**	• Self-awareness: identifying and labelling emotions, self-esteem, self-efficacy, self-confidence • Self-management: emotion regulation, motivation, goal setting, optimism • Social awareness: perspective-taking, empathy, valuing diversity • Relationship skills: communication, conflict management, social engagement, relationship building, cooperation, teamwork, prosocial behaviour, asking for help • Responsible decision-making: identifying, analysing, and evaluating problems, assuming ethical responsibility, complying with rules (Durlak et al., 2015; Payton et al., 2008; Zins, et al., 2004)	• Self-awareness: valuing own strengths, self-confidence, and self-belief • Self-management: emotion regulation and stress management, motivation, enthusiasm, optimism, motivation, goal setting • Social awareness: perspective-taking, empathy, valuing diversity. • Relationship skills: building support and relationships, communication, conflict management, social engagement, teamwork, prosocial behaviour, asking for help. • Responsible decision-making: identifying, analysing, and evaluating problems, assuming ethical responsibility (Beltman et al. 2011; Jennings et al., 2017; Jennings & Greenberg; 2009).
Resilience Resilience is the dynamic "capacity, processes, or outcomes of successful adaptation in the context of significant threats to function or development" (Masten, 1994; 2011; Rutter, 1999) In children, it includes the ability to deal with adversity and setbacks, rejection, family conflict, loss, bullying and	**Promotion of Resilience**	• Dealing with personal, familial, or social transitions and changes • Dealing with bullying and cyberbullying • Dealing with academic difficulties • Dealing with negative peer pressure • Dealing with loss and bereavement • Dealing with chronic diseases and disabilities (Cavioni et al., 2018; Cefai, 2008; Cefai et al., 2015).	• Tenacity, perseverance, persistence • Sense of humour • Flexibility • Willingness to take risks and to accept failure • Coping skills • Self-care skills • Stress and frustration management (Beltman et al., 2011; Mansfield et al., 2012).

conflicts, life changes and transitions (Cefai et al., 2015).			
Social, emotional, and behavioural problems This category includes different types of challenging conduct that fall outside behavioural norms (Achenbach et al., 2017; Cooper, 1999; 2017)	**Prevention of social, emotional, and behavioural problems**	• Disruptive behaviour, violence, and delinquency • Oppositional behaviour • Impulsivity • Hyperactivity • Depression • Anxiety • Social withdrawal • Self-harm and suicide risk • Eating disorders and unhealthy diet • Addictions and gambling • Substance use • Risky sexual behaviours • Driving-related risks (Anderson et al., 2018; Browne et al., 2004, Greenberg et al., 2001; Lowry-Webster et al., 2001; Lowry-Webster et al., 2003; O'Reilly et al., 2018)	• Depression • Anxiety • Stress • Emotional exhaustion • Physical distress • (Jennings et al., 2017; Telles et al., 2018)