Critical Components for the Successful Implementation of Mental Health Promotion Programs in Secondary Schools: A Scoping Review

By

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Abstract

The alarmingly high number of mental health challenges in Canadian adolescents continues to be a cause of concern for educators, health care providers, and related stakeholders (CMHA, 2019). Although recent shifts in supporting mental health have transitioned from a targeted, problem-focused approach to a more universal, positive view of mental health, mental health promotion has yet to be systematically implemented in Canadian schools. This may be attributed to educators not having a clear and practical framework to facilitate implementation (CMHA, 2019). The purpose of this research is to compile available evidence on mental health promotion programs in schools and determine the critical components necessary for school stakeholders when implementing a universal (whole-school) mental health promotion program. Using four databases (MEDLINE, Embase, PsychInfor, and ERIC) a search was conducted for 'mental health promotion in schools for adolescents', focused on peer reviewed research-based publications on comprehensive (or universal) programs (or interventions) that support the implementation of mental health promotion in schools. A total of 10 studies were included in the final review. The results indicated that a 'one-size-fits-all' implementation framework to mental health promotion programs in secondary schools may be unrealistic; however, there are specific implementation criteria that will contribute to the overall effectiveness of implementation. These include: (a) student as change agents, (b) school-specific autonomy, (c) demonstrated administrative leadership, (d) dedicated champion to engage school staff, (e) community support, (f) evidence, (g) professional development, (h) time, (i) funding and project supports, (j) readiness and prior community connectivity, (k) focus on staff development, (l) context and structure, and (m) district-lead support. Additionally, teacher wellness, positive leadership and collaboration between health and education sectors were highlighted as significant factors in

school-based mental health promotion. The results from this study illustrate that mental health promotion in schools may be most successful when programs are implemented using a top-down, bottom-up approach. The approach should be created and driven by centralized leadership, yet providing schools the autonomy to move forward based upon building stakeholder consensus and culture at a grassroots level. Given the current state of mental health in Canadian adolescents and the opportunity that schools have in public health promotion, all decision-making stakeholders should narrow their focus to how these programs can be systematically implemented.

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Glossary of Terms

Term	Definition
A priori	Criteria for inclusion and exclusion of data need to be set before the search. (JB1, 2021)
Adolescence	The period following the onset of puberty during which a young person develops from a child into an adult. Adolescence is a crucial period for developing and maintaining social and emotional habits important for mental well-being. (WHO, 2021)
Comprehensive School Health (CSH)	A whole-school framework that aims to build healthy school communities that supports student holistic health and supports students in reaching their full potential as learners. (Alberta Health Services, 2021)
Covidence	Covidence systematic review software, Veritas Health Innovation, Melbourne, Australia. (Covidence, 2021)
Mental health (MH)	A positive concept – The capacity of each and all of us to feel, think, and act in ways that enhance our ability to enjoy life and deal with the challenges we face. (Alberta Government, 2017)
Mental health promotion (MHP)	Aims to develop positive mental health among all individuals and communities through a combination of targeted and universal interventions across the life course. (CMHI, 2019)
Mental illness (MI)	Alterations in thinking, mood, or behaviour associated with significant distress and impaired functioning in one or more areas such as school, work, social or family interactions or the ability to live independently. (Alberta Government, 2017)
Protective factors	Characteristics associated with a lower likelihood of negative outcomes or that reduce a risk factor's impact. Protective factors may be seen as positive countering events. (CMHI, 2019)
Resilience	Refers to the capacity of an individual to cope successful with stress-related situations, overcome adversity and adapt positively to change. (MHCC, 2013)
Social-Emotional Learning (SEL)	Social and emotional learning (SEL) is the 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, 2021)

Strengths-based approach	Strategies that create a welcoming, caring, respectful and safe learning environment and aim to build resilience, social-emotional learning (SEL) and recovery. (MHCC, 2013)
Targeted programs	Interventions that address specific concerns in specific populations of children are vital to mental health efforts in schools. (MHCC, 2013)
Universal programs	Emphasis is on building capacities and competencies for wellbeing for an entire community, rather than focusing on illness and its risk factors. (MHCC, 2013)

Prologue

Not long ago, I had my third child. A third *boy* to be exact. Parenting has provided me with a wealth of both positive and negative emotions; however, after some daunting complications near the end of my most recent pregnancy, I experienced an entirely new emotion. Anxiety. As it is our body's natural defence against perceived threats and/or harm, most people have experienced feeling anxious at some point in their life. While these situations are uncomfortable, they are typically more severe for those who suffer from an anxiety disorder. I have always empathized with those affected by mental illness; still it was difficult to fully understand the feelings they were experiencing. As health is a complete state of mental, physical, emotional, social, and spiritual health and not merely the absence of disease or infirmity (World Health Organization [WHO], 2021), my entire being was affected by this disorder. Over the past year, and learning to cope with unfamiliar life changes, I have spent some time reflecting on how these personal experiences could help to positively affect change in someone's life. What protective factors do I possess that have aided in the ability to cope day-to-day? What skills do I wish I had been taught in school that could have better prepared me for dealing with this difficult transition? This encounter has amplified my perspective on the importance for schools to focus on educating the 'whole child'[1]; which ensures that each student is healthy, safe, engaged, supported, and challenged, enabling them to reach their full potential as learners.

This research comes amidst the COVID-19 pandemic and what experts consider to be, "one of the greatest public-health crises our country has ever seen," (Prime Minister Justin

[1] An educational approach that puts student needs first and ensures that every student is safe, respected, cared for, healthy and engaged (Lewallen et al., 2015).

Trudeau, 2020). While experts (Government of Canada, 2021) are uncertain of the long-term psychological impact of COVID-19, factors that are known to increase the risk of developing a mental health concern include going through a traumatic life experience and/or lacking meaningful connections/relationships - both of which are likely during a global lockdown. My hope for this research is that educators and policymakers who value whole-child development and specifically mental/emotional well-being, will have a practical piece of literature, one that is descriptive and straight-forward in its delivery, that can be used to successfully implement a universal (whole-school) mental health promotion program.

Chapter 1: Introduction

One in five Canadian children under the age of 18 suffers from at least one mental illness with the majority of mental health problems first being detected during adolescence (aged 10-18 years) (Center for Addiction and Mental Health [CAMH], 2021). These disorders range from those that are highly prevalent but amenable to treatment (such as anxiety and depression) to those that are less common but extremely debilitating and persistent (such as obsessive-compulsive disorder and schizophrenia) (American Psychiatric Association, 2013). Each year, thousands of young people end their lives by suicide, making this the second leading cause of death following motor vehicle collisions in Canadian youth aged 10 to 24 years (CAMH, 2021). Despite the high prevalence of mental illness, and its impact on the lives of children and families, most young people do not seek help or receive adequate timely access to evidence-based mental health services and supports (Kutcher & Wei, 2013). While no one can predict if and when someone might experience a mental illness, comprehensive programs aimed at developing resilience and other protective factors such as autonomy and positive relations, have proven to be effective for an entire population, including those currently facing mental illness (CMHA, 2019). With the continued rise in mental health problems among Canadian youth and the shockingly low percentage of adolescents who actually recognize symptoms and seek help for psychological concerns, universal mental health promotion programs should work in combination with the already existing targeted treatment and prevention programs in assisting to solve Canada's current mental health crisis.

Mental health is described by World Health Organization (WHO) as, "a state of well-being in which the individual realizes her or his 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, 2001, p.1). In this positive sense mental health is the foundation for well-being and effective functioning for an individual and for an entire community. Adolescence is a crucial period for developing and maintaining healthy habits important for mental health. Promoting positive mental health strategies such as healthy sleep patterns, regular exercise, healthy eating, developing coping, problem-solving, and interpersonal skills are critical for experiencing health and wellness benefits during adolescence and are likely to extend into adulthood (WHO, 2021). Given students spend a significant amount of time at school, the school community can be a natural and impactful setting for mental health promotion. Canada's Mental Health Association (2014) has identified school-based mental health programs as a major target of service development in our nation's future system of care. Similarly, the Canadian Policy Network has identified children's mental health (including emotional and behavioural disorders) as the leading return on investment for K-12 education (Roberts & Grimes, 2011). Through the intentional creation of safe, healthy and accepting environments (both physical and social) and planned and deliberate teaching practices, schools provide an ideal setting to promote the health and well-being among students, including mental health (Hills, Dengel & Luban, 2015; Morrison and Peterson, 2013; Ontario Ministry of Education, 2013; Stewart et al., 2004). By focusing on a comprehensive, collaborative, and integrated framework, schools can better address the mental, physical, social and emotional development of all children.

A number of countries including the United States, Australia, the United Kingdom and New Zealand have developed national strategies to promote youth mental health or have begun to create policy frameworks that seek to integrate mental health into whole-school health approaches, however, this has not widely been the case in Canada (Wei, Kutcher & Szumilas, 2011). The vast majority of current best practice mental health programs nominated through a

national scan led by the Ontario Centre of Excellence for Child and Youth Mental Health, mostly focus on target problems and were frequently created in response to identified needs within a school/district (Mental Health Commission of Canada [MHCC], 2012). Weare (2011) adds that mental health issues in schools have mostly been focused on students of lower abilities, or those seen as troublesome or troubled, rather than being seen as relevant to the whole school community, to 'normal' students or to teachers. These 'problem-focused' approaches are faced with numerous shortcomings, including only targeting a small percentage of the overall population and failing to understand and utilize an individual's strengths and protective factors (Alvord & Grados, 2005; Soni & Hameed, 2018). Additionally, this type of approach simply focuses on eliminating the 'problem' and does not guarantee that the child will move towards a healthy developmental trajectory (Roth & Brooks-Gunn, 2003; Soni & Hameed, 2018). Research within health and education domains identify the need and importance of moving beyond a 'problem-focused' approach to adopt a more positive view of mental health (Morrison & Peterson, 2013).

The shift to a more positive view of mental health recognizes an adolescent's state of psychological well-being is not only influenced by the absence of problems and/or concerns in their life but impacted by the existence of positive factors present within their social environment (Morrison & Peterson, 2013). The Public Health Agency of Canada (2006) describes positive mental health as:

> the capacity of each and all of us to feel, think, and act in ways that enhance our ability to enjoy life and deal with the challenges we face. It is a positive sense of emotional and spiritual wellbeing that respects the importance of culture, equity, social justice, interconnections and personal dignity. (p. 2)

While educators cannot and should not attempt to diagnose mental health problems, they can provide an opportunity to create meaningful experiences that will contribute to the development of positive mental health. The promotion of positive mental health emphasizes the importance of developing a universal and comprehensive framework that supports the 'whole' child and includes all members of the school community.

Comprehensive Schools Health (CSH) is a whole-school approach to enhancing both the health and educational outcomes of children and adolescents through learning and teaching experiences initiated in the school (International Union for Health Promotion and Education, 2013). Several terms are used to describe the framework for creating healthy school communities (e.g., Health Promoting Schools [HPS] [Europe and Australia], Comprehensive School Health [CSH] [Canada], Coordinated School Health [CSH] [United States]). Common to all of frameworks, however, is their whole-school approach aimed at building healthy school communities that support students holistic health and the quest for students to reach their full potential as learners (Joint Consortium for School Health, 2013). The Alberta Government states that "to be most effective, promoting mental health should be part of a whole-school approach, providing education to children, youth and their families, creating partnerships with community agencies, creating positive school environments and policies that support mental wellness" (Government of Alberta, 2021, para. 7). A whole-school approach recognizes that all aspects of the school community impact students' mental health and well-being, and that learning and mental health are inextricably linked (Edmonton Catholic Schools, 2018). This process relies on policies, funding and other resources, professional development and training, and coordination and collaboration among various education, health care, social services, justice and other sectors. While it seems many school jurisdictions have worked hard to create mental health initiatives

supporting a CSH approach (e.g., Edmonton Catholic Schools: Mental Health Strategic Plan, 2017-2018; Edmonton Public Schools: Navigating Mental Health, 2019; Healthy Child Manitoba, 2018; Ontario Ministry of Education, 2013), there is a disconnect between how schools should be addressing mental health and what is actually being done. If we want to break the stigma associated with mental health - that only certain 'kinds' of people develop mental disorders - schools need a more holistic, comprehensive and universal approach.

The Canadian Mental Health Association (2021) reports that in the K-12 context, the normative scenario is one in which mental health promotion is done with limited funding and without formal research support. Schools often lack the necessary resources to adequately train, supervise and support staff; to implement strategies that would assess and improve service quality; and to document outcomes, which can support sustainability and influence policy. Although government support of a CSH framework as the most effective mental health promotional strategy is encouraging, there is limited understanding of the complex processes involved in the implementation of a whole-school approach to mental health promotion. Thus, the purpose of this research is to: (a) conduct a scoping review of mental health promotion programs in secondary schools, (b) based on the results of the scoping review determine the critical components necessary when implementing a whole-school approach to mental health promotion, and (c) identify any gaps in the literature to help inform school stakeholders for future studies and practical application.

Chapter 2: Literature Review

Overview

The purpose of this chapter is to provide a review of relevant literature on the mental health of adolescents and how it is currently supported and implemented within schools. Initially, the concepts of mental health promotion in schools will be unpacked, followed by a descriptive review of the relevant research supporting this topic. An explanation of the current mental health status among adolescents will be provided along with an understanding of why this unique stage in life is an ideal time to implement mental health promotion in schools. The role of schools in mental health promotion is also discussed with a focus on promotion vs prevention strategies. In addition, the essential elements of school-based mental health promotion are addressed, highlighting the value of whole-school approaches. Comprehensive school health is reviewed as a recommended framework for implementing school-based mental health promotion. Finally, this literature review highlights the disconnect between what experts agree is needed within schools to address youth mental health concerns and what is actually taking place.

Mental Health - Developing a Common Language

Depending on the source, the concept of mental health has been linked with a variety of definitions, trailing with a list of synonyms and individually constructed meanings. Traditionally, mental health was implicitly defined as the absence of a mental illness (Wells, Barlow, & Stewart-Brown, 2003). Mental illness is recognized as alterations in thinking, mood or behaviour associated with significant distress and impaired functioning in one or more areas such as school, work, social or family interactions or the ability to live independently. More recently, however, the term mental health is distinct from (yet interrelated with) mental illness and it is highlighted

as an integral determinant of health (WHO, 2021). The Public Health Agency of Canada (PHAC) (2006) has adopted a broad, holistic definition stating:

> mental health is the capacity of each and all of us to feel, think, and act in ways that enhance our ability to enjoy life and deal with the challenges we face. It is a positive sense of emotional and spiritual well- being that respects the importance of culture, equity, social justice, interconnections and personal dignity (p. 3).

Mental health is often referred to as having the capacity to be able to successfully adapt to the challenges that life creates for people (Teen Mental Health.org, 2021). In order to adapt to these positive and negative challenges, the brain needs to apply all of its capacities such as: emotions, cognition/thinking, signaling functions and behaviours. Over time, as we grow and develop through experience and exposure, the brain learns how to apply these capacities and we are able to take on more and more challenges and become successful in dealing with them (Teen Mental Health.org, 2021). With this in mind, this study recognizes mental health as a positive concept and one that moves beyond the traditional definitions of prevention and treatment of mental disorders to a universal, proactive and promotional focus (PHAC, 2016).

Mental Health Among Adolescents

Early child and youth mental health promotion in Canada has received considerable attention in recent years, given that the majority of mental health problems have their onset during childhood or adolescence (MHCC, 2013). Not only do these experiences cause difficulties at their onset, but they can also disrupt important life transitions, delay achievement of developmental milestones, and be burdensome throughout one's lifespan (Ratnasingham et al., 2012). Adolescence is a stage of life (10-19 years of age) characterized as a period of social and developmental turmoil as youth try to negotiate several challenges, including transition into

multiple social roles from the limited and dependent roles of childhood and simultaneous formation of distinct identities (Malla et al., 2018). Young people aged 15 to 24 are more likely to experience mental illness and/or substance use disorders than any other age group with 70% of mental health problems having their onset during childhood or adolescence (Youth Mental Health Canada, 2021). During the last decade, data indicates that issues such as 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). Among Canadian youth, 10-20% are affected by mental illness and after vehicle accidents, suicide is the second leading cause of death for people aged 15-24 (CMHA, 2021). Given this, there exists an immediate need for Canadians to focus on youth mental health.

Adolescents and Brain Development

Mental health issues can have many causes ranging from biological (e.g., chemical changes in the body) to environmental (e.g., stressful life events). During adolescence the brain undergoes a significant period of growth and development, which will continue into early adulthood. Typical adolescent behavioural changes such as limited attentional capacity, lack of motivation without immediate reward, and negative risk taking are all a direct result of changes happening in the brain (Teen Mental Health.org, 2021). This means that during secondary school, students are passing through a vulnerable time of neurodevelopment that can have a serious impact in all aspects of their life - both positive and negative (Meldrum et al., 2009).

While the biological, genetic, and demographic factors such as age, gender and ethnicity are important determinants of mental health, mental health promotion tends to focus more on modifiable factors that can be altered to improve mental health and wellbeing and reduce the likelihood of becoming mentally ill (Watson & McDonald, 2016). Among these modifiable

factors are protective and risk factors for mental health that operate at individual, social (family and community), and structural and environmental levels. Protective factors enhance positive mental health and reduce the likelihood that a mental illness will develop. Risk factors, on the other hand, increase the likelihood that mental health problems and disorders will develop and may also increase the duration and severity of mental illness (Watson & McDonald, 2016). While no formulas exist for predicting if an individual will become mentally unwell at some point during their lifetime, experts have determined that people are better equipped to deal with problems or significant life transitions if risk factors are reduced and protective factors are strengthened (Government of Canada, 2021).

Mental Health Promotion

Mental health promotion (MHP) cultivates positive mental health in individuals and communities through a combination of targeted and broad interventions across the life course, in communities, workplaces, and schools (CMHA, 2019). It is distinct from (but intersects with) prevention, which focuses on reducing the symptoms and rates of mental illness, and instead aims to build individual skills, supportive environments, and community resilience, all of which contribute to developing mentally healthy societies (WHO, 2005). MHP is unique in that rather than focusing on deficits and needs, it emphasizes the values inherent in optimal mental health and aims to achieve wellness for an entire population by enhancing access to mental health determinants, strengthening protective factors, and mitigating risk factors (Pape, 2006; WHO, 2021). Mental health is multifaceted, and experts agree that effective promotion not only requires a focus on individual and population health but also an attentiveness to the social systems that ultimately impact health (Murphy et al., 2015). MHP corresponds well with social ecological models of health promotion (Aston, 2014; McLeroy et al. 1988). These models reflect the

multidirectional complexity and dynamic interplay among factors operating within and across respective levels from macro (societal) through micro (individual) (Canadian Institute for Substance Use Research [CISUR], 2011). Social ecological models are useful in MHP as they highlight the fact that an individual's mental health is a complex interaction of personality characteristics and the unique social circumstances (including the protective and risk factors) an individual faces (Lee & Stewart, 2013). The model respects that interventions can be made at a variety of points to strengthen mental health and reduce or remove risk factors, and that complementary activity on several fronts (protective factors) can produce greater combined benefits than initiatives concentrated only on one level or area. As such it calls for interdisciplinary collaborative efforts to adequately address the diversity of issues that bear on the health of a community of people (CISUR, 2011).

MHP efforts aim to develop positive mental health among all individuals, not just those affected by mental illness. The MHP framework presented by the CMHA (2019) encompasses two important principles: (a) mental health and physical health are co-constitutive and (b) mental health and mental illness exist along a continuum. In the first principle, poor mental health is a risk factor for chronic physical conditions, people with serious mental health conditions are at high risk of experiencing chronic physical conditions, and people with chronic physical conditions are at risk of developing poor mental health. The second principle is illustrated on what Keyes (2007) named as the "two continua" or complementary model of mental health, in which, "the absence of mental illness does not imply the presence of mental health, and the absence of mental health does not imply the presence of mental illness," (Keyes, 2007, p.5). Keyes (2002) coined the term "flourishing" to describe individuals with optimal mental health. These individuals frequently exhibit several signs of positive functioning (e.g., emotional

wellbeing: positive effect, life satisfaction; psychological well-being: self-acceptance, positive relations with others, personal growth, purpose in life, environmental mastery, autonomy; and social well-being: social contribution, integration, actualization, acceptance and coherence) regardless of mental illness. Those who exhibit low levels of positive functioning he described as "languishing." By focusing efforts solely on prevention and reducing the active cases of people living with mental illness, we are unlikely to positively affect change in a broader sense and create mentally healthier populations.

Positive Mental Health in Schools

Schools have been identified as "a unique setting where the greatest number of children and youth can be accessed and supported" (Morrison & Kirby, 2010, p. 17). With students spending a significant amount of time at school, educators (and policy makers) have an opportunity to impact the mental well-being of a large percentage of children and youth (CMHA, 2019). Research identifies the importance of mental health to learning, as well as to students' social and emotional development (Kirby & Keon, 2006; Mcfarlane, 2005; Morrison & Kirby, 2010). Students who experience positive mental health are resilient and better able to learn, achieve success and build healthy relationships. Given the important relationship between positive mental health and academic success, schools have an important role in nurturing students' positive mental health and well-being (Alberta Government, 2017; CMHA, 2019; Healthy Child Manitoba; Ontario Ministry of Education, 2013). Through the intentional creation of welcoming, caring, respectful, safe and healthy school environments (both physical and social) and through meaningful teaching practices, students' positive mental health can be supported (Sulz et al., 2020).

School-based Mental Health Promotion

The promotion of health and well-being - with an overarching emphasis on physical health - has long been a goal of education policies across Canada (PHE Canada, 2021). However, it was only until recently that school districts started implementing whole-school mental health programs/initiatives (Wei & Kutcher, 2011). Traditionally, mental health programs or services identified within schools, focused on remediating problems and addressing risk for those with identified mental health, behavioural problems or who were considered at greatest risk of developing these (Morrison & Kirby, 2010). In contrast, school-based mental health promotion differs in both focus and implementation. With a focus on positive, asset-building approaches and a comprehensive, coordinated, and collaborative action to change the psycho-social environment of an entire school, in addition to taught curriculum that promotes students' mental health; school-based mental health promotion seeks to provide a service to a greater percentage of the school community outside of those individuals currently living with a mental illness (Rowlin, 2007).

There are many differences among the current programs concerning school-based mental health (Wells et al., 2003). Wells et al. (2003) highlights that many schools use a pyramid of intervention approach (sometimes called response to intervention or multi-tiered supports) to address student learning and social-emotional needs. This approach offers a systematic way of providing a continuum of supports that range in type and intensity, depending on the individual needs of students. Student needs can shift and change over time and context, therefore supports and interventions must also be fluid and flexible. A pyramid of supports is typically based around three levels of supports and interventions. Specialized Supports and Services (Tier 3) programs involve children who are already showing signs of mental health problems and require

intensive or individualized supports; Targeted (Tier 2) programs are focused on those who are considered to be at increased risk of developing mental health problems, and Universal (Tier 1) programs aim to improve the mental health of the entire student body. Tier 2 and Tier 3 were identified by Wells et al. (2003) as mental illness prevention, and Tier 1 as mental health promotion. Essentially, MHP seeks to shift the focus from the prevention of specific problems to a more positive, holistic view of child and youth development. MHP concerns the whole-school and the strategies put in place create welcoming, caring, respectful and safe learning environments for a diverse range of students (Alberta Education, 2017). This is often referred to in the literature as a 'strengths-based approach.'

Strength-Based Approach

Strength-based theory is derived from research in several fields, including education, psychology, social work, and organizational theory and behaviour (Lopez & Louis, 2009). A strengths-based approach to education is a general philosophy of teaching and learning that "represents a return to basic educational principles that emphasize the positive aspects of student effort and achievement, as well as human strengths" (Lopez & Louis, 2009, p. 1). Instead of employing the traditional mental health model in schools which focuses on problems and recovery in students with mental illnesses; a strength-based approach encourages educators to acknowledge that every student has a unique set of strengths and abilities that he/she brings with them to the learning environment. Lopez and Louis (2009) proposed that education aimed at developing strengths should consist of measuring strengths and positive psychological outcomes; individualizing the learning experience to the needs of the student; creating positive support networks; and applying and developing strengths. Passarelli, Hall & Anderson (2010) utilized a strengths-based approach in the delivery of an international adventure education course designed

for college students aged 19-22 years. Their results suggested that using a strengths-based approach in outdoor and adventure education was found to improve outcomes such as personal development, personal relationships and resiliency. Similarly, Hodges and Clifton (2004) reported that strengths-based learning was associated with improvements in engagement, direction, hope, subjective well-being, and confidence in college students. By highlighting the positive attributes of every child and structuring experiences that are welcoming, safe and inclusive, a strengths-based approach allows students to see opportunities, hope and solutions, rather than problems and hopelessness (Alberta Government, 2017; CMHA, 2019). A strengths-based approach focuses on three main competencies: (a) building resiliency, (b) enhancing social-emotional learning (SEL), and (c) supporting recovery.

Resiliency

Resiliency refers to the capacity of an individual to cope successfully with stress-related situations, overcome adversity and adapt positively to change (Stewart et al., 2012). Risk factors for students are diverse: challenging temperaments, low socioeconomic status, limited reliable housing, failed educational experiences, limited community resources, transience, maltreatment, violence, chemical dependency, etc. (Hunter, 2012; Public Health Agency of Canada [PHAC], 2006). Educators cannot control the unique backgrounds and experiences of their students; however, they can structure learning environments that support resilience by enabling students to develop the skills and attitudes needed to help buffer against negative life experiences. For example, Stewart et al. (2012) found that the school environment makes a major contribution to the development of psychological resilience in children. The schools that rated more highly on ‘health promoting school’ (HPS) attributes and principles - including, shared decision-making and planning, community participation, a supportive physical and social

environment, good school-community relations, clearly articulated health policies and access to appropriate health services - were associated with higher self-ratings of resilience in the students. The authors concluded that schools employing the HPS approach are linked not only to the development of student resilience but also to important protective factors and the overall school environment.

The WHO (2012) suggests that students with positive mental health are more resilient and they possess a special set of protective factors that enable them to handle different situations without becoming overwhelmed. Schools provide an opportune platform for children to build these protective factors while minimizing the associated risk factors. Donnon and Hammond (2007) conducted a study based on strength research that examined the presence of protective factors and level of bullying behaviour, acts of aggression and vandalism. They found that there was a significant negative correlation with the number of self-reported protective factors or strengths and acting out behaviour. The results showed that the greater number of protective factors, the less likely were the youth to engage in acting out behaviour (Donnon & Hammond, 2007). Furthermore, in a subsequent study it was found that the greater number of protective factors and strengths, the greater the engagement in constructive behaviours such as helping others, good health, volunteering, leadership, resisting danger and delaying gratification (Donnon, 2007). Thus, increasing the number of protective or strong positive inter-actions in a young person's life may help develop a more resilient mindset. Figure 1 provides a more comprehensive understanding of these specific features.

Figure 1

Protective and Risk Factors that Affect Mental Health

	Protective Factors are conditions or attributes that protect mental health	**Risk Factors** (or adverse factors) that may threaten mental health
Individual Attributes	• Positive sense of self, confidence • Ability to solve problems and manage stress or adversity • Communication skills • Physical health and fitness	• Negative sense of self • Emotional immaturity and limited ability to manage stress and solve problems • Difficulties communicating • Chronic health condition or frequent illness • Substance abuse
Social Circumstances	• Social support of family and friends • Healthy family interactions • Physical and economic security • Scholastic achievement	• Loneliness, bereavement • Neglect, family conflict • Exposure to violence or abuse • Low income and/or poverty
Environmental Factors	• Equality of access to basic services • Social justice and tolerance • Social and gender equality • Physical security and safety	• Limited access to basic services • Injustice and discrimination • Social and gender inequality • Exposure to war or disaster

Note: Figure taken from *Working together to support mental health in Alberta schools* (Alberta Government, 2017)

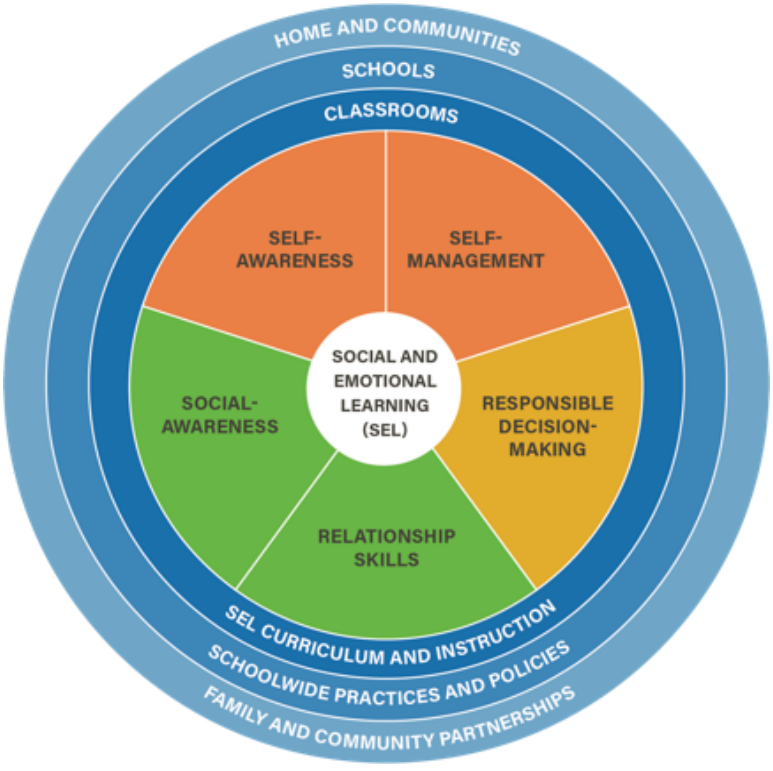
Social Emotional Learning (SEL)

SEL is the process of developing students' knowledge, attitudes and skills to manage emotions, build healthy relationships, set goals and make decisions (CASEL, 2015). Being that students come to school with a varying degree of social-emotional skills, educators are tasked with the opportunity to attend to this area of development. CASEL has identified five core competencies that make up SEL: self-awareness, self-management, responsible decision-making, relationship management and social awareness (2015). Figure 2 illustrates the CASEL framework to SEL. Through well designed, well-implemented SEL programs, students can become more resilient individuals which in turn has shown to result in experiencing positive

mental health (Durlak, 2011). MindMatters is an example of a national SEL initiative in Australia that operates in secondary schools and aims to foster the social and emotional skills young people require to meet life's challenges. MindMatters is a whole school approach to mental health promotion that aims to: (a) distribute quality mental health education resources, (b) provide curriculum and professional development programs which are appropriate to a wide range of schools, students and learning areas, (c) trial guidelines on mental health and suicide prevention, and (d) encourages the development of partnerships between schools, parents, and community support agencies to promote the mental wellbeing of young people (Wyn et al., 2000).

Figure 2

S*ocial and Emotional Learning Framework (CASEL, 2015)*



Recovery

Finally, supporting recovery in mental health refers to living a satisfying, hopeful and contributing life, even when faced with mental illness. Recovery is not about getting rid of mental health problems but seeing beyond them and fostering individual strengths, abilities, and dreams. Recovery is a guiding principle to mental health promotion and there is evidence to suggest that skills such as self-discovery, resilience, and social-emotional growth are positively affected when the paradigm shifts from a focus on the illness to living fully and well-being (Jacob, 2015). While the recovery process typically targets those individuals currently facing mental health issues; if structured positively with protective factors such as hope, self-determination and responsibility as the focus, recovery-oriented approaches have the ability to extend mental health promotion through a continuum of supports (MHCC, 2016).

Whole-School Approach - Comprehensive School Health (CSH)

Research has consistently shown that health and education are connected (Basch, 2011). Children and youth cannot achieve their fullest potential as learners if their physical, mental, intellectual or emotional health is compromised. Similarly, learning has a positive influence on students' health – both in the short – and long-term (Alberta Government, 2017). The WHO recognizes the need for education and health to work together to develop a healthy community. A healthy school community provides a setting that students feel safe, accepted and confident to take action and generate positive change (WHO, 2001). A framework that focuses on the connection between education and health through the development of a healthy school community is Comprehensive School Health (CSH). CSH is an internationally recognized whole-school, health-promoting, framework that supports improvements in students' educational outcomes while addressing school health (including mental health) in a planned, integrated, and

holistic way. This whole-school approach recognizes that all aspects of the school community impact students' mental health and well-being, and that learning and mental health are inextricably linked (ECSD, 2018). CSH addresses four distinct but related components – social and physical environment, teaching and learning, policy, and partnerships and services – that when harmonized can support students to realize their full potential as learners. The social and physical environment describes the quality of (a) the relationships and emotional well-being of personnel in the school, and **(b)** the physical spaces in the school, such as buildings, equipment, and outdoor areas. The teaching and learning component is not about "teachers" and "students" but about teaching and learning opportunities, both inside the classroom and out, that help to build knowledge and skills to improve health and well-being. School policies refer to provincial, district, school, or classroom policies, rules, procedures and or codes of conducts at all levels that help to shape a caring and safe school environment and promote student health and well-being. Finally, partnerships and services describe the connections between the school and the community, including parents, other schools, community organizations and health professionals (Alberta Health Services, 2021).

CSH stems from work done in the 1950s by the World Health Organization's (WHO) Expert Committee on School Health Services (Alberta Health Services, 2021). The Ottawa Charter for Health Promotion was created in the 1980s and provides the basis for the CSH approach (WHO, 2021). At present, the CSH approach or similar approaches are supported within many countries, including Canada, the United States, Australia, and multiple European nations. Several terms are used to describe a similar approach for creating healthy school communities: CSH (Canada), Health Promoting Schools (HPS) (Europe and Australia) and

Coordinated School Health (USA) (Alberta Health Services, 2021). All are based on the Ottawa Charter for Health Promotion and include the same principles (WHO, 2021)

Studies have shown that a comprehensive school health (CSH) approach can provide an effective framework for implementing health promotion in schools (Alberta Government, 2021). For example, Fung et al. (2012) found that in 2010 relative to 2008, students attending APPLE Schools (an Alberta-based CSH Program) were eating more fruits and vegetables, consuming fewer calories, were more physically active and were less likely to be obese. Similarly, Vander Ploeg et al. (2013) demonstrated the positive changes over a two-year course in the amount of physical activity of students enrolled in a CSH school during and outside of school hours. With the amount of positive data available on CSH, it should be recognized as an essential component to public health with its potential to contribute to child health in the short term and chronic disease prevention in the long term (Veugelers & Schwartz, 2019).

A mentally healthy school is one that adopts a whole-school approach to mental health and well-being. It is a school that helps children flourish, learn and succeed by providing opportunities for them, and the adults around them, to develop the strengths and coping skills that underpin resilience. Adopting this approach advocates that schools should tackle mental health and well-being through their behaviour policy, curriculum design, care and support for young people, as well as staff, and engagement of parents (O'Reilly et al., 2018). Despite the outlined benefits of this approach, and the now decade-plus long development in health promoting schools, mental health promotion programs have yet to be systematically implemented in schools (CMHA, 2019).

Implementation of Mental Health Promotion in Schools

Universal school-based interventions have great potential to target large populations of young people to promote well-being at a general level (Rowling, 2007). For example, Rowling (2007) found that students in a secondary school community demonstrated positive changes in mental well-being when mental health was promoted using a universal, whole-school, approach. This finding was consistent with Weare and Murray (2014) who found that a multi-dimensional and integrated whole-school approach is needed for mental health promotion to be effective and to create positive change in the well-being of young people. Systematic reviews of school-based mental health frameworks suggest that, for maximum efficacy, programs need to be universal and address the social-emotional needs of a diverse range of learners (Cefai & Cooper, 2017; Weare & Nind, 2011). For example, Cefai & Cooper (2017), authors of "Mental Health Promotion in Schools: Cross-Cultural Narratives and Perspectives" capture the views and experiences of those most directly involved in mental health promotion, such as children and young people, school teachers and parents/carers, in seeking to enhance policy and practice in the area. This book highlights the disconnect of a what ought to be done in schools to support the health of students and what is actually being implemented on the frontlines. While educators cannot and should not attempt to diagnose mental health problems, they have an important role in the promotion of positive mental health at school and in their classrooms (Ontario Ministry of Education, 2013).

The implementation of any initiative within an organization is a process directly related to change and culture (Bridges, 2003). The difficulty with successful implementation, specifically related to universal mental health promotion, is that the process is quite complex. A singular curriculum or (one-off) program promoting mental health will not achieve the objective

of a healthy student and school community; rather, what is needed is a cohesive set of practices, professionals, and institutional commitments. Children and families live within complex systems and including all components in the system is critically important to drive change (PHE Canada, 2014).

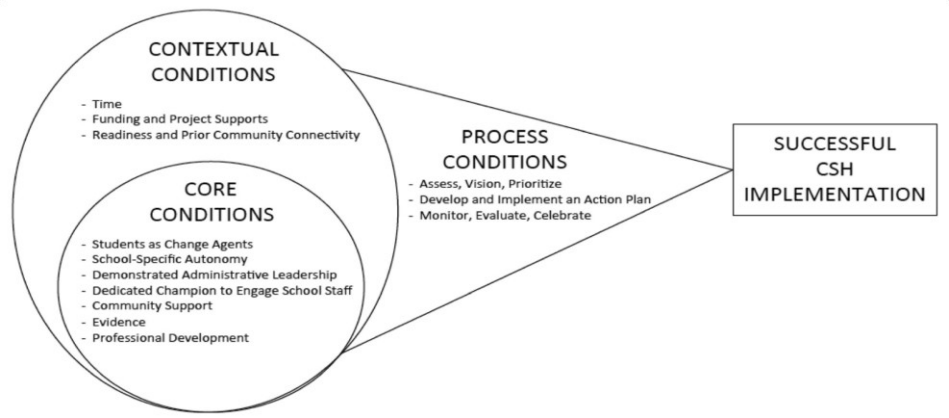
APPLE schools (A project promoted to healthy living for everyone in schools) is an example of innovative school-focused health promotion initiative. The organization is committed to improving the healthy eating, physical activity and mental health habits of students across western Canada. APPLE Schools utilizes a CSH approach and has been recognized internationally as best practice by both the Public Health Agency of Canada's Best Practices Portal and the National Cancer Institute's Research-tested Intervention Programs (Apple Schools, 2021). Other provinces across Canada have also taken action to create similar programs and initiatives that support the implementation of CSH such as Healthy Schools BC, Manitoba Healthy Schools, and Ontario Healthy Schools. Each with a similar mission in school health promotion and a dedicated partnership with the Joint Consortium for School Health. The implementation process is iterative and collaborative and includes 'process conditions' which can be described as: 1. assess, vision and prioritize; 2. develop and implement an action plan; and 3. monitor, evaluate and celebrate.

Although current research and public health agencies across the globe (Alberta Government, 2017; CMHA, 2019, Healthy Child Manitoba, 2018; Ontario Ministry of Education, 2013; WHO, 2021) recommend the potential that schools have in regard to health promotion, and CSH is an evidence-based successful framework, there is limited research available examining the specific conditions contributing to this success, how these conditions work together to facilitate implementation and how best to implement this approach (Storey et

al., 2016). In order to combat this “missing piece”, Storey et al. (2016) conducted a research study to identify the essential conditions of CSH implementation utilizing secondary analysis of qualitative interview data, incorporating a multitude of stakeholder perspectives. A number of themes were identified as essential for successful implementation of CSH. These themes were divided into two categories: ‘core conditions’ and ‘contextual conditions.’ The core conditions identified by Storey et al. (2016) are factors that were emphasized across all stakeholders as essential for successful implementation. These conditions included: students as change agents; school-specific autonomy; demonstrated administrative leadership; dedicated champion to engage school staff; community support; evidence; and professional development. Contextual conditions were cited to have a great degree of influence on the ability for the core conditions, mentioned above, to be obtained. As such, they acted as important considerations for successful CSH implementation and included: time; funding and project support; readiness; and prior community connectivity (Storey et al., 2016). Together, and in consideration of the already established ‘process conditions’ developed by APPLE Schools (assess, vision, prioritize; develop and implement an action plan; monitor, evaluate, celebrate), these represent essential conditions for successful implementation CSH (Figure 3). Storey et al. (2016) argues that if these essential conditions for successful implementation of CSH are met within a school context then schools will show greater effectiveness in shifting schoolwide culture and improving the health behaviours of children.

Figure 3

Essential Conditions for Successful Implementation of CSH (Storey el al., 2016)



Summary of Literature Review

The term ‘mental health’ has become a hot topic in schools over the past decade. Mental health is mentioned everywhere from school district strategic plans (ECSD, 2019; EPSB, 2019) to social media campaigns (e.g., Bell Let’s Talk). In reality, mental health is more than just a trendy buzzword and describes the capacity of each and all of us to feel, think, and act in ways that enhance our ability to enjoy life and deal with the challenges we face (Public Health Agency of Canada, 2019). Mental health is a positive concept and one that moves beyond the traditional definitions of prevention and treatment of mental “disorders” to a universal, proactive and promotional focus. Mental health is complex and is recognized by the WHO as a multidimensional construct (2020). This simply means that it is made up of a number of separate but related ideas. For example, some of the underlying constructs that contribute to positive mental health include psychological concepts like meaning and purpose in life, resilience, positive emotions, satisfaction with life, mindfulness, relationships, social and emotional skills, creativity, gratitude, optimism, goal setting and attainment, leadership skills, etc. (Alberta

Education, 2017). By analyzing these positive attributes of mental health, researchers have developed many evidence-based ways of teaching people how to cultivate these skills and improve their psychological wellbeing over time. When practised regularly, these resources serve as a protective buffer against mental illness, stress and burnout (Alberta Education, 2017; Durlak et al., 2011).

Schools provide an ideal setting for promoting mental health and developing the "protective factors" that have been shown to create positive wellbeing (CMHA, 2019). There is growing evidence on the impact of promoting health and wellbeing in schools as healthy students are better learners and more likely to be successful in life (Weare, 2011). CSH has been shown to be an effective framework for connecting schools with their community and providing a public health service (Alberta Health Services, 2021). There are many examples showcasing the effectiveness of CSH as a framework for health promotion (Ferland et al., 2014; Fung et al., 2012; Vander Ploeg et al., 2014); however, the majority of these studies highlight the advantage of CSH in promoting the physical dimension of health (e.g., physical activity, nutrition, sleep). Due to the complexity of mental health, there is limited real-world guidance or examples of how the processes for culturally specific programming (e.g., mental health promotion programs) unfold (Bell et al., 2017). This is a significant issue, since lessons learnt about implementation at a practical level are essential for schools.

The challenge for researchers in evaluating the effectiveness of mental health promotion initiatives is to find appropriate methods to track the ways in which schools are transforming CSH principles into practice. For this to occur, an exploration of the processes involved in the implementation of mental health promotion at a school level is critical to our understanding of how schools exert influence on mental health and successfully create positive culture change

(Stewart, 2008). Therefore, the purpose of this research is to: (a) conduct a scoping review of mental health promotion programs in secondary schools, (b) based on the results of the scoping review determine the critical components necessary when implementing a whole-school approach to mental health promotion, and (c) identify any gaps in the literature to help inform school stakeholders for future studies and practical application.

Chapter 3: Methods

Rationale for Scoping Review

Despite the decade-plus long development in evidence-informed mental health strategies and promotional programs, both in Canada and abroad, experts in mental health promotion (MHP) still find that MHP has yet to be systematically implemented in schools the same way that physical health promotion has (e.g., physical education and physical activity). For example, efforts to promote physical health are evident throughout the day in most schools through curriculum (e.g., physical education, health education), recess times, daily physical activity (DPA), intramurals, and even extra-curricular activities (EverActive Schools, 2021; PHE Canada, 2014). In response to this, Edmonton school districts (e.g., Edmonton Public School Board [EPSB]; Edmonton Catholic School District [ECSD]) released their own versions of mental health strategic plans. These strategic plans were constructed following the release of the *Working Together to Support Mental Health in Alberta School* (2017), a resource created by the Alberta Government that schools can use for planning and implementing mental health strategies, action plans and/or initiatives. This resource is based on implementation science and brings together all of the latest research in Canadian mental health. Both EPSB and ECSD documents highlight the urgency of tending to the mental health needs of all students using a positive, comprehensive, framework; yet there lacks any school-based evidence of best practice approaches that schools can use for successful implementation. Consequently, experts at the Canadian Mental Health Association (2019) note that the absence of effective mental health promotional programs in schools is a direct result of educators not having an easily understood and practical framework to facilitate implementation.

Given this observation, a scoping review of the literature to identify successful school-based mental health promotion interventions and their respective implementation frameworks would be of immediate interest and application to multi-level stakeholders. A scoping review has the potential to provide school administrators and teachers with evidence-informed practices to guide their efforts in supporting the mental health of their students. Further, the results from a review of the conditions necessary for successful implementation may be of interest to educational leaders (e.g., superintendents), governing officials (e.g., Alberta Education), post-secondary teacher educators, and researchers interested in the promotion of positive mental health in schools. While scoping reviews in the field of physical education have been completed with much success with regards to providing an overview of the available research evidence, there has not been a scoping review completed on MHP in schools (Robinson et al., 2018; Gilles et al., 2020). Thus, the purpose of this research is to: (a) conduct a scoping review of mental health promotion programs in secondary schools, (b) based on the results of the scoping review determine the critical components necessary when implementing a whole-school approach to mental health promotion, and (c) identify any gaps in the literature to help inform school stakeholders for future studies and practical application.

Methodological Approach

Although there is no universal definition of this emerging methodology, there is a consensus about common elements of scoping reviews. At a general level, scoping reviews aim to map literature on a particular topic and explore the underpinnings of a research area, as well as identify and clarify the key concepts, theories, sources of evidence and gaps in the research (Arksey & O'Malley, 2005; Davis et al., 2009; Daudt et al., 2013). Unlike traditional systematic reviews, this scoping review is meant to provide a "snapshot of a particular topic" (Booth et al.,

2012, p.19) rather than a critical assessment of research quality. As McEvoy et al. (2015) suggested in their recent scoping review of physical education teacher educators, “this is not to say that [scoping] reviewers do not value research quality, rather the purpose is one of charting, not evaluating” (p. 163). Due to this, an assessment of methodological limitations or risk of bias of the evidence included within a scoping review is generally not performed (unless there is a specific requirement due to the nature of the scoping review aim) (Khalil et al. 2016; Peters et al. 2015). Rather, scoping reviews are used for synthesising research evidence and existing literature within a given topic and best designed for researchers who want to:

1. Examine the extent, range and nature of research activity by mapping fields of study where it is difficult to visualize the range of material that might be available;
2. Determine if a full systematic review is feasible, relevant or even necessary
3. Summarize and disseminate research findings to support policy makers, practitioners and consumers who might otherwise lack time or resources to undertake such work themselves; and
4. Identify research gaps in the existing literature. Identifying research gaps may be in addition to the other three reasons listed above; however, it is important to note that identifying gaps in the literature through a scoping study will not necessarily identify research gaps where the research itself is of poor quality since quality assessment does not form part of the scoping study remit. (Arksey & O’Malley, 2017).

This research is focused on number three and four - summarizing, disseminating and identifying research gaps - what Arksey and O’Malley (2017) describe as the main reasons for

completing a scoping study. These were chosen due to the nature of the topic and the intended purpose of this study: to determine the critical components necessary when implementing a whole-school approach to mental health promotion. At this time, it was not of interest to (a) examine the range and nature of research activity in the area of interest or (b) determine if a systematic review is necessary. In the following section, the specific stages of the scoping review framework will be described with examples of how they were utilized in this research study.

Methodological Framework

Arksey and O'Malley (2005) framework for conducting a scoping review guided this research. This framework was chosen because of its success with previous research studies in the field of physical education (Gilles et al., 2020; Robinson et al., 2018) as well as its' ability to summarize the research in a clear, comprehensible, format. Scoping reviews aim to map the key concepts underpinning a research area and can be undertaken as stand-alone projects in their own right (Arksey & O'Malley, 2005). A scoping review was used for this research because the goal was to provide an overview of the available research on mental health promotion in secondary schools and with that, identify the factors critical for successful implementation. The purpose of this research was not to answer one specific research question, but rather summarize the available research in a comprehensible format and identify any gaps within the literature. Arksey and O'Malley (2005) identify five (with an optional sixth) stages necessary when completing a scoping review. These stages are:

Stage 1: Identifying the research question.

Stage 2: Identifying relevant studies.

Stage 3: Study selection.

Stage 4: Charting the data.

Stage 5: Collating, summarizing and reporting the results.

Optional Stage: Consultation Exercise.

By using this approach, researchers are able to document their process and findings in sufficient detail, increasing the methodological rigour and reliability of the study. Within this specific study, Arksey and O'Malley's (2005) methodological framework, Stage 1 to Stage 5 were employed, and each stage will be discussed fully in the following subsections.

Stage 1: Identifying the Research Question

Stage one of Arksey and O'Malley's (2005) framework is focused on identifying the research question. A scoping review is a rigorous process with a purpose that is different from systematic reviews in that it does not focus on a narrowly defined question, but addresses broader topics (Arksey & O'Malley, 2005).

In Stage 1 of Arksey and O'Malley (2005) stages of a scoping review, a research question is identified after completing a thorough investigation of the literature. In this research, it was identified that what was missing was not more quality research on 'what' or 'why' to promote mental health in schools, rather, 'how' it could successfully be implemented. If the literature review presented findings of lacking research on the feasibility, meaningfulness, effectiveness, prognosis, risk, etc. of mental health promotion in schools, then a systematic review approach would have been more suited. However, the inadequacies lie in the identification of certain characteristics/concepts involved in the implementation process of mental health promotion in schools; therefore, mapping, reporting and/or discussion of these specific characteristics/concepts through a scoping review was a more sound approach. The research question of this scoping review identified after a comprehensive review of the literature, is:

What are the critical components required to ensure the successful implementation of universal (whole-school) mental health programming in secondary schools?

Stage 2: Identifying Relevant Sources of Evidence

Stage two of Arksey and O'Malley's (2005) framework is focused on identifying relevant sources of evidence. As previously indicated, the purpose of a scoping review is to be as comprehensive as possible in identifying primary studies and reviews suitable for answering the central research question. Decisions have to be made at the outset about the search strategies, the types of sources, the coverage in terms of time span and language and the country of origin. With the assistance of a research librarian at the University of Alberta, a comprehensive search was conducted on May 29, 2020 in the Ovid platform of the four following databases: MEDLINE, Embase, PsycInfo, and ERIC. The databases were chosen because they encompass a comprehensive catalogue of education, physical education, and health education literature. The scope of the review was identified as 'mental health promotion in schools for adolescents.' As such, the search strategies incorporated as many relevant keywords and controlled vocabulary within this topic as possible. For example, the following words were included in the search: "mental health or wellbeing or wellness"; "promotion or treatment or program or intervention or workshop or campaign"; "whole child"; "social emotional learning"; "pubescent or juvenile or teen or youth or young adult or adolescent or high school or junior high or secondary school or middle school"; "whole school or school wide"; universal program"; and "strength-based". No language or date limits were applied. The four databases retrieved a total of 9023 results, and they were subsequently imported into Covidence, a web-based screening tool. With the help of the Covidence duplicate removal function, 5957 unique references remained for the initial title and abstract screening phase. Google Scholar was also searched to see if additional publications

may be identified. The first 200 results from Google Scholar were evaluated for inclusion. Finally, the bibliographies from included studies were also reviewed for any additional sources of relevance meeting the search criteria. For the full-text search strategies, refer to the Appendix.

Stage 3: Study Selection

Stage three of Arksey and O'Malley's (2005) framework is to determine the relevant studies for review. As with all well-conducted reviews, an a priori (Table 2) protocol must be developed before undertaking the scoping review. Meaning that criteria for inclusion and exclusion need to be set ahead of time. This is important as it pre-defines the objectives, methods, and reporting of the review and allows for transparency of the process (Arksey & O'Malley, 2005). The protocol should detail the criteria that the reviewers intend to use. This criterion includes: (a) the identification of relevant evidence ("inclusion criteria"), (b) the initial screening process and (c) the excluded sources of evidence ("exclusion criteria") (Joanna Briggs Institute [JBI], 2021).

The 'inclusion criteria' of the scoping review details the sources that will be considered for inclusion. This guide will provide readers a way to clearly understand what is proposed by the reviewers and, more importantly, a guide for the reviewers themselves on which to base decisions about the sources to be included. The 'exclusion criteria' of the scoping review helps to set limits, based on the specific research question, to ensure that only relevant material is included.

The initial screening process focused on suitability for consideration. That is, only English peer reviewed research-based publications that focused on comprehensive (or universal) programs (or interventions) that support the implementation of mental health promotion in schools were considered. During this initial review, two reviewers, myself and my supervisor Dr.

Lauren Sulz scanned the evidence (individually) to determine suitability for inclusion. Both reviewers were aware that mental health promotion in schools is described in a variety of ways. For example, terminology such as 'social-emotional learning (SEL)', 'resiliency', 'strengths-based', 'mental-health literacy (fitness)', 'positive psychology' and/or 'mental health prevention' could all be used to describe mental health promotion programs in schools. Reviewers were also aware that by using 'school' as a terminology in the search criteria, any and all types of schooling (e.g., university, pre-K, speciality, etc.) would be retrieved. This research specifically focused on the implementation of whole-school mental health promotion in K-12 schools and more explicitly, adolescent-aged (12-18 years) students or secondary schools. Finally, this scoping review was concerned with the critical components necessary for the *implementation* of universal (whole-school) mental health programs, not necessarily on the results of the given programs.

To ensure that only relevant research was further examined, the reviewers (myself and Dr. Sulz) also included specific exclusion criteria. Any publications that implemented targeted interventions for a specific population (e.g., high-risk, persons already diagnosed with a mental disorder, gender or ethnicity specific) were excluded as well as those that focused on other areas of health promotion such as physical activity, nutrition and sleep, rather than specifically on mental (or emotional) health. Appropriate research methodologies included those that were experimental/empirical (including pilot studies, controlled trials, and randomized controlled trials) as well as those that were descriptive or qualitative in nature. Those that did not include in-school interventions (e.g., community, before-school, or after-school interventions) or did not target adolescence were also excluded. It should be noted, here, that some of the literature identified for final review included interventions that targeted both elementary- *and* secondary-

aged students. The reason for this was that some of the interventions including secondary-aged students were conducted in schools that also housed elementary-aged students (e.g. K-12 schools). To narrow the research even further, we only included evidence from Canada, the United States, Australia, New Zealand, and the United Kingdom. Given that North American education systems work largely with local schools and teachers in these Western contexts, we chose to limit the extent of the search to these demographics. Finally, the reviewers limited the year of publication to '2010' to focus their inquiry on the most recent data. It is important to be aware that reviewers went from 120 sources with the potential of data extraction to seven (with the remaining three sources identified in the google scholar search). The main reason for this was the narrowing of research to Canada, United States, Australia, New Zealand and the United Kingdom. For a more thorough investigation of mental health promotion in secondary schools (which was outside the scope of this dissertation), it would be of interest to examine the data from sources in Canada and internationally. For an overview of the eligibility criteria refer to Table 1. A PRISMA flow diagram was created on a drawing app to depict the flow of information through the different phases of the scoping review. It maps out the number of records identified, included and excluded, and the reasons for exclusion (PRISMA, 2021). For the detailed breakdown of criteria at each stage, refer to Figure 4.

Table 1

Eligibility criteria

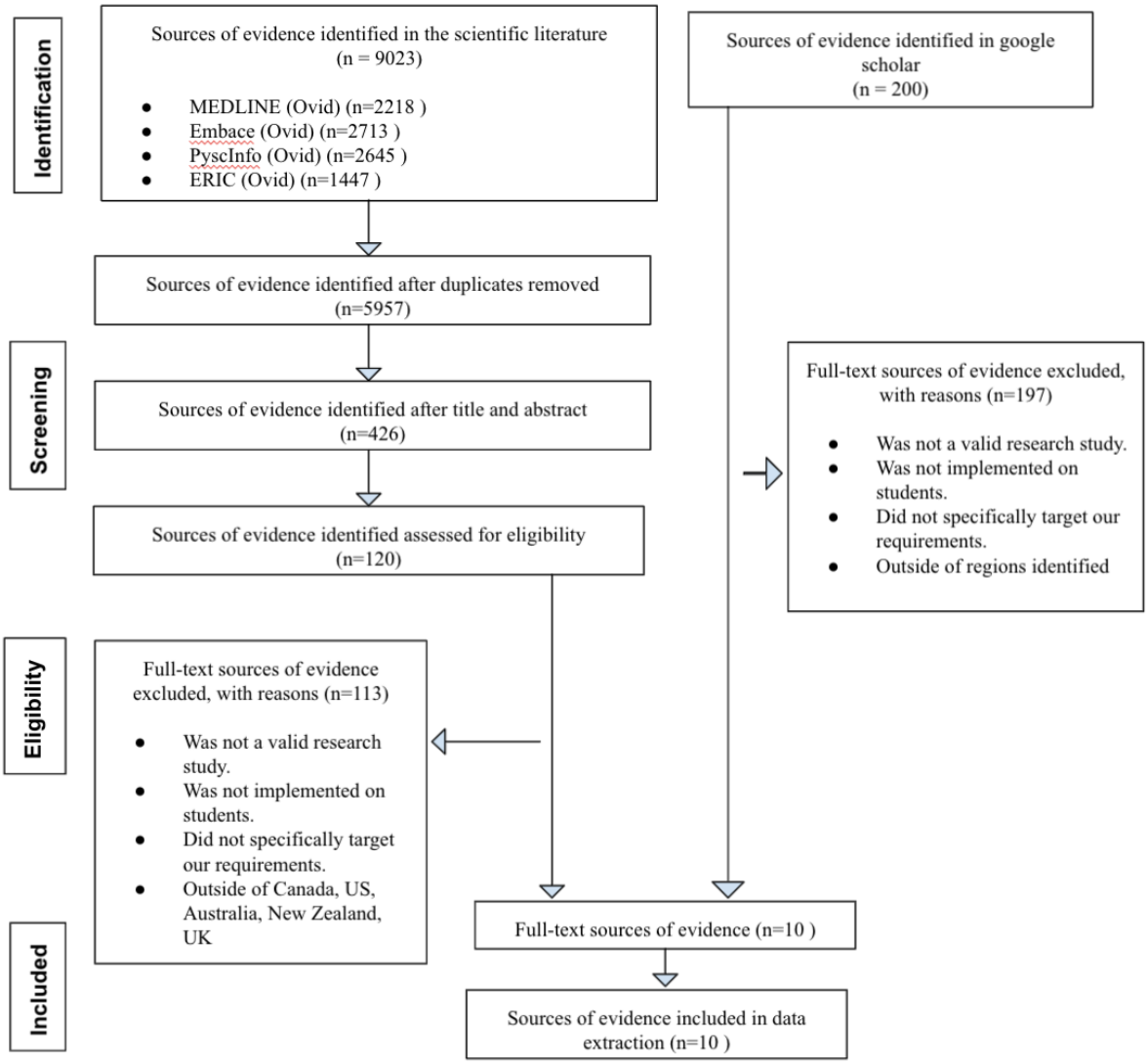
Inclusion Criteria	**Exclusion Criteria**
Published after January 1, 2010	Published before January 1, 2010
Available in English	Unavailable in English

Table continued on next page.

North America, Australia, New Zealand, and the United Kingdom	Outside of North America, Australia, New Zealand, and the United Kingdom
Peer-reviewed, research-based publications	Not a research publication
Universal, whole-school, mental (or emotional) health promotions programs	Targeted interventions for a specific population
Middle School, Junior High School, High School, and Secondary School	Other schools outside of these areas (elementary, post-secondary, pre-K)
Mental (or Social-Emotional) Programs	Focused on other areas of health promotion (physical activity, nutrition, sleep, etc.)

Figure 4

PRISMA flow diagram



Stage 4: Charting the Data

Stage 4 of the Arksey and O'Malley (2005) framework involves charting key items of information obtained from the primary research papers being reviewed. Charting is a technique for synthesizing and interpreting qualitative data and involves sorting material according to key issues and themes (Arksey & O'Malley, 2007). Three standardized tables were developed and used to extract the data and reviewed by Dr. Sulz for relevance and appropriateness. Table 2

illustrates a *sample* of the first extraction table, using an example study, that was created to provide an overview of the context and focus of each research study. This table included: (a) title, (b) author(s), (c) year, (d) research study details, (e) participants, (f) context, (g) intervention title, (h) intervention description, and (i) notable results. Although the focus of this scoping review is not concerned with the outcomes/results, an overview of notable results were included in the data extraction. By doing so, readers have a clear overview of the success (or lack of success) of the intervention. Table 3 provides a *sample* of the second data extraction table that was developed using Storey et al. (2016) essential conditions for the implementation of CSH. The decision to chart the data using the essential conditions was based on the advice of experts (CMHA, 2021; Government of Alberta, 2021; WHO, 2021) who suggest that CSH is the preferred framework for the implementation of universal (whole-school) mental health promotion. By doing so, I could determine if the essential conditions identified by Storey et al. (2016) were replicated in real-life studies of successful mental health promotional programs (or if the complexity of mental health programming required something different). A third extraction table was created to chart any 'other conditions' found in the evidence that were not already mentioned by Storey et al. (2016).

Table 2

Intervention Context and Focus

Study	Title	Author(s)	Year	Study Details	Participants	Context	Intervention Title	Intervention Description	Notable Results
1	Supporting systemic social and emotional learning with a schoolwide implementation model	Duncan C. Meyers, Celene E. Domitrovich, Rawan Dissi, Jordan Trejo, Mark T. Greenberg	2018	Intervention; United States *Half of the participating schools were randomized to receive the *School Guide* implementation model, while the other half received standard support for PATHS without the *School Guide.*	900 Educators; over 2000 students	28 Title 1 public Elementary Schools in a large urban school district - primarily Hispanic (62.90%) and Black (34.37%)	The *CASEL Guide for Schoolwide Social and Emotional Learning* (referred to as the *School Guide*)	The components of this model, which include the action of a school-level team, are based on implementation science research and best practices in educational reform which have identified organizational factors that influence the attitudes and practices of staff and teachers, school climate, and student achievement.	Schools had an average of 8.00 core members on the SEL Leadership Team during Year 1 and 8.24 core members in Year 2. 79% percent of schools involved had administration support. Overall, there was a substantial amount of coaching support provided by the SEL coaches. The rubric ranked 6 key activities of the implementation model (vision, resources and needs, professional learning, evidence-based program, integration, continuous improvement) and all six improved substantially over the two-year implementation process. The increase in the rubric ratings demonstrates the strengthening capacity of participating schools to carry out the School Guide Implementation model and indicates that improvements in important areas of schoolwide SEL can be accomplished.

Table 3

Essential Conditions Necessary for CSH Implementation found in Whole-School Mental Health Programs

Study	Core Conditions: **1 – Students as change agents** **2 – School-specific autonomy** **3 – Demonstrated administrative leadership** **4 – Dedicated champion to engage school staff** **5 – Community support** **6 – Evidence** **7 – Professional Development**	**Contextual Conditions:** **8 – Time** **9 – Funding and Project Supports** **10 – Readiness and Prior Community Connectivity**
1	1. No mention of students as change agents. 2. Coaches held monthly meetings to help meet individual school goals. Each school (through the SEL Leadership Team) conducted a needs and resources assessment to customize implementation. This needs and resource assessment also helped in developing a strategy of support once the coach transitioned off at the end of their two-year involvement. 3. All principals were invited to attend the training and were given a manual on how to successfully integrate PATHS into the school. 4. Each school designated one staff member to serve as a PATHS lead who was the point-person in each school. The lead had responsibilities on top of attending the training. 5. After developing a schoolwide SEL vision statement (created by the SEL Leadership Team), it was shared to the larger school community to get feedback and promote buy-in. 6. Use of a coaching log to track any and all support provided. As well, the use of a schoolwide planning and implementation rubric that was used to self-assess during the fall of Year 1 to guide planning and set priorities. 7. All classroom teachers participated in two days of training from a certified PATHS trainer. A professional learning session of the *School Guide* was provided at each school. In addition, there was a SCHOOLWIDE "SEL 101" professional learning session. An additional School Guide tool was used to promote awareness that all adults in the school can promote SEL by modeling social-emotional competence in all interactions.	8. Monthly team meetings over two years (approximately nine each year) with the SEL leadership team. The SEL coach (hired by CASEL) co-facilitated the meetings. The meetings were held after hours, but members were paid the district's standard non-instructional hourly rate to attend any meetings held after school. 9. CASEL supported the school's that used this implementation model. 10. As part of the implementation strategy, a needs and resource assessment was conducted.

Stage 5: Summarizing the Results

Stage five of the Arksey and O'Malley (2005) framework includes a descriptive summary of the charted results from Stage 4 to present findings. The elements previously described in the eligibility criteria (Table 1) were used to guide the study selection for this scoping review. After a thorough investigation of the available literature, 10 studies were chosen for the final review and data extraction. To ensure the comprehensiveness of this review, the data extracted from the identified studies describes: (a) the context and focus of each research study, (b) the essential conditions necessary for the successful implementation of comprehensive school health interventions as described by Storey et al. (2016), and (c) 'other conditions' necessary for successful implementation not already mentioned in Storey et al. (2016). To help summarize the results from the scoping review further, a Frequency Table was created to give readers a clear summary of what conditions were identified the most often in the reviewed literature. Identifying the conditions that were most cited within the literature provides readers with a descriptive overview of how mental health promotion programs are currently being implemented in secondary schools. The conditions were then ranked based on the number of times they were quoted in the studies; the levels ranged from a high level of importance (70-100% of the studies), moderate level of importance (40-60% of the studies), or low level of importance (less than 40%). Table 4 provides an example of the Frequency Table that was created to help summarize the results.

Table 4

Frequency Table

Implementation Components	Citation Frequency (# of studies the component was cited) (%)	Level of Importance (High, Moderate, Low)
Students as Change Agents	*X*	*X*
School-Specific Autonomy		
Demonstrated Administrative Leadership		
Dedicated Champion to Engage School Staff		
Community Support		
Evidence		
Professional Development		
Time		
Funding and Project Supports		
Readiness and Prior Supports		
Other Conditions?		

Chapter 4: Results

Overview

The purpose of this study was to conduct a scoping review of the available literature on the implementation of whole-school mental health promotion programs in secondary schools and identify any gaps in the literature to help inform school stakeholders for future studies. A total of 10 studies were included in the final scoping review. The results from this research will be presented in four sections. First, an overview of the studies from the scoping review will be presented. A number of variables and components were closely considered. These included intervention design, context and notable results. The details of these components are presented in Table 5. Second, the implementation details were described using the essential conditions necessary for successful CSH implementation (as discussed in Storey et al., 2016). This allowed for a clear comparison of what Storey et al. (2016) describes as the essential conditions for successful CSH implementation and the conditions necessary when implementing universal mental health promotional programs. The CSH essential conditions were separated into core conditions and contextual conditions to further understand the implementation details. Table 6 presents the findings from the studies reviewed as they relate to the essential conditions necessary for successful implementation of CSH. Third, identified are 'other conditions' apart from the core and contextual conditions and summarized these results in Table 7. The 'other conditions' section was included in the results of this scoping review as there were a number of components outside of Storey et al.'s *essential conditions* that were deemed relevant in the implementation process of universal mental health promotion in secondary schools. Finally, the number of times each condition was found was investigated within the studies to provide readers

with a descriptive overview of how mental health promotion programs are currently being implemented in secondary schools. The results of this section are presented in Table 8.

Research Demographic Information and Study Intervention Context

In the following section, I will provide an overview of the intervention focus, targeted population, and school context of the 10 reviewed studies. All 10 studies focused on the implementation process and employed a universal, as opposed to a targeted, approach in their framework. Of these, five were implemented in a single school (Aidman & Price, 2018; Bell et al., 2017; Halliday et al., 2019; Kutcher & Wei, 2013; Stillman et al., 2018) and five were implemented in more than one school (Anwar-McHenry et al., 2016; Hamedani & Darling-Hammond, 2015; Hudson et al., 2020; Kenziora & Osher, 2016; Meyers et al., 2018). The methodologies of the studies included case-studies, participatory action research (PAR), process evaluation, randomized controlled trials (RCT), and mixed-methods approaches. In five of the 10 sources, the mental health promotional programs were referred to as social-emotional learning (SEL) (Aidman & Price, 2018; Hamedani & Darling-Hammond, 2015; Kenziora & Osher, 2016; Meyers et al., 2018; Stillman et al., 2018), Kutcher and Wei (2013) referred to the Pathway to Care Model, Stillman et al. (2018) focused on Emotional Intelligence (EQ), Anwar-McHenry et al. (2016) utilized the Mentally Healthy Schools Framework, Hudson et al. (2020) used a mindfulness-whole school approach (M-WSA), and Halliday et al. (2019) focused on positive psychology and education. Three of the 10 studies had support through the Collaborative for Academic, Social and Emotional Learning (CASEL) (Kenziora & Osher, 2016; Aidman & Price, 2018; Meyers et al., 2018); however, each unique source utilized its own framework for implementation. Of the 10 studies reviewed, six were conducted in the United States (Aidman & Price, 2018; Bell et al., 2017; Hamedani & Darling-Hammond, 2015; Kenzoria & Osher, 2016;

Meyers et al., 2018; Stillman et al., 2018), two were administered in Australia (Anwar-McHenry et al., 2016; Halliday et al., 2019), one was completed in the United Kingdom (Hudson et al., 2020), and one in Canada (Kutcher & Wei, 2013). Six of the 10 research studies were conducted in public schools (Aidman & Price, 2018; Halliday et al., 2019; Hamedani & Darling-Hammond, 2015; Kenziora & Osher, 2016; Kutcher & Wei, 2013; Meyers et al., 2018), while Anwar-McHenry (2016) included 11 public and two private secondary schools, Stillman et al. (2018) was independent, Hudson et al. (2020) was an academy, and Bell et al. (2017) was a charter school. While this research was primarily focused on mental health promotion in secondary schools, many of the studies involved interventions that were implemented across a K-12 context. For example, Meyers et al. (2018), Kenziora & Osher (2016), Anwar-McHenry et al. (2016), and Hudson et al. (2020) were done in a K-12 setting, Aidman & Price (2018) was completed in a middle school (grades 6-8), Stillman et al. (2018) and Bell et al. (2017) in K-8 schools, Kutcher and Wei (2013) with grade 10 students exclusively, Halliday et al., (2019) with grade nine students exclusively, and Hamedani and Darling-Hammond (2015) in a high school (grades 9-12). The results from this section are highlighted in Table 5.

Table 5

Intervention Context and Focus

Study	Title	Author(s)	Year	Study Details	Partici-pants	Context	Intervention Title	Intervention Description	Notable Results
1	Supporting systemic social and emotional learning with a schoolwide implement ation model	Duncan C. Meyers, Celene E. Domitrovi ch, Rawan Dissi, Jordan Trejo, Mark T. Greenberg	2018	Interventio n; United States *Half of the participatin g schools were randomize d to receive the *School Guide* implement ation model, while the other half received standard support for PATHS without the *School Guide.*	900 Educator s; over 2000 students	28 Title 1 public K-12 Schools in a large urban school district - primarily Hispanic (62.90%) and Black (34.37%)	The *CASEL Guide for Schoolwide Social and Emotional Learning* (referred to as the *School Guide*)	The components of this model, which include the action of a school-level team, are based on implementation science research and best practices in educational reform which have identified organizational factors that influence the attitudes and practices of staff and teachers, school climate, and student achievement.	Schools had an average of 8.00 core members on the SEL Leadership Team during Year 1 and 8.24 core members in Year 2. 79% percent of schools involved had administration support. Overall, there was a substantial amount of coaching support provided by the SEL coaches. The rubric ranked 6 key activities of the implementation model (vision, resources and needs, professional learning, evidence-based program, integration, continuous improvement) and all six improved substantially over the two-year implementation process. The increase in the rubric ratings demonstrates the strengthening capacity of participating schools to carry out the School Guide Implementation model and indicates that improvements in important areas of schoolwide SEL can be accomplished.

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Study	Title	Author (s)	Year	Study Details	Partici-pants	Context	Intervention Title	Intervention Description	Notable Results
2	Challenges and solutions in the implement ation of the School-Based Pathway to Care Model: The Lessons from Nova Scotia and Beyond	Stan Kutcher and Yifeng Wei	2013	Interventio n study; Nova Scotia, Canada	Grade 10 students (and their classroo m teachers) ; male and female	Rural Nova Scotia High School	*School-Based Pathway to Care Model*	It addresses pathways into and through the most appropriate mental health care as well as the linkages amongst various components necessary for successful implementation of that pathway by identifying key stakeholders and describing key functional components, such as capacity building through training, and integration of health and human services providers both within and external to the school setting.	Student Results: Quantitative data indicated that mental health knowledge increased significantly, immediately after the curriculum delivery, but this was not retained at the 3-month point. Qualitatively, a number of themes were produced through student focus group discussions. Suggestions for improvement centered around involving more parents and teachers (school community) in the information; more digital resources and interactive classroom activities; and finally, using examinations to approach Mental Health Curriculum with the same diligence as other subjects. Teacher Results: Quantitative data indicated that both teachers' and "go-to" educators' knowledge increased significantly and persisted over the 3-month period. Suggestions for improvement centered on more in-depth training and community involvement. Process Results: The number of referrals did not significantly increase; however, the quality of the referrals increased (referrals were judged to be "more appropriate for mental health services). As well, both school and mental health clinic staff reported improved working relationships.
3	Social emotional learning in high school:	MarYam G. Hamedani and Linda	2015	Multi-method, multiple case study.	Fenway High School - 320	Three urban high schools - Fenway	There was not one specific intervention used with the schools	n/a	Schools involved in the study had stronger persistence, academic outcomes, and graduation rates than other schools serving similar students in their districts.

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Study	Title	Author (s)	Year	Study Details	Partici-pants	Context	Intervention Title	Intervention Description	Notable Results
3 cont…	how three urban high schools engage, educate, and empower youth	Darling-Hammond		Schools were chosen with already explicit, well-established, school-wide focus on social emotional learning and social justice education.	students (Female - 53%, Male - 47%); El Puente Academy for Peace and Justice - 219 students (Female - 53%, Male - 47%); International School of the Americas - 465 students (Female - 60%, Male - 40%)	High School (Boston, MA), El Puente Academy for Peace and Justice (Brooklyn, NY), and International School of the Americas (San Antonio, TX). The school sites represent a range of socio economic, racial, and ethnic diversity among the student communities.	involved. Schools were selected for this research using a rigorous screening procedure that involved: nomination by a panel of experts in the fields of social emotional learning and social justice education, strong academic performance and attainment outcomes compared to each school's district, and a selection interview with school leaders and teachers to confirm an **explicit, well-established, school-wide focus on social emotional learning** and social justice education.		
4	Promoting children's and	Kimberly Kenziora	2016	United States; CASEL	Students from K-12	The CDI was launched	CDI - The Collaborating	The Collaborating Districts Initiative (CDI) attempts to address fragmentation by	There was no "one-size-fits-all" approach to implementation. Two districts chose to implement SEL

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Study	Title	Author (s)	Year	Study Details	Partici-pants	Context	Intervention Title	Intervention Description	Notable Results
4 cont…	adolescents' social and emotional development: district adaptations of a theory of action	and David Osher		launched the CDI in the winter of 2010-11 school year with three districts (Cohort 1); five additional districts joined the CDI in 2011-12 (Cohort 2). This research employs qualitative (interviews and document review) and quantitative (analysis of data from surveys and educational record) methods.	(elementary - high school). Four districts have between 37,000 and 49,000 students; the next three districts are larger: 63,000 to 86,000 students; and one district has roughly 400,000 students.	with three school districts that form cohort 1 in 2011 and five districts that form Cohort 2 in 2012. All eight districts composing the CDI are moderate-to-large urban districts, implementing the initiative in 56 to 154 schools.	Districts Initiative	shifting the focus of SEL implementation from schools to whole districts. The CDI aligns SEL with district policies, integrates it with academic instruction, and makes it an essential part of the work of education instead of an add-on. The goal is to make SEL systematized into the district's ongoing efforts - rather than a particular evidence-based program. Districts used a "theory of action" to guide the CDI requirements for district-wide implementation of SEL.	through the established district structure of "vertical teams" (a high school and its feeder elementary and middle schools). Three districts used a phased approach recognizing the importance of time in building capacity and SEL culture within schools. Three other districts focused on implementation of evidence-based programming (ie. *PATHS, Responsive Classroom, Caring School Communities*, and *Second Step*) at the elementary level.
5	Social and emotional learning at the middle	Barry Aidman & Peter Price	2018	Case-study; as a participating school in	Middle School (grades 6-8) -	Clear Stream Middle school -	A participating school in the CDI The district	While all schools within the River School District were sanctioned to	After 6 years of implementation, SEL is now part of the campus culture. In addition, the impact of the formal SEL lessons has served as a catalyst for

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Study	Title	Author(s)	Year	Study Details	Partici-pants	Context	Intervention Title	Intervention Description	Notable Results
5 cont…	level: one school's journey			a larger research study conducted using the CDI.	more than 900 students.	within the River School District located in the southwest United States. The River School District was a part of the CDI (Collaborating Districts Initiative)	adopted Second Step as an evidenced-based SEL curriculum	implement SEL into their school's vision, Clear Stream Middle School became a model school with its' leadership decisions. The initial implementation of explicit instruction in the timetable was piloted by three teachers (as directed by the principal) and due to the success was later implemented campus-wide in the fall.	faculty conversations about the significant influence of ADULT social and emotional skills on campus. SEL has even become integrated into the hiring process for new teachers and staff.
6	Strengthening social emotional learning with student, teacher, and schoolwide assessments	Susan B. Stillman, Paul Stillman, Lorea Martinez, Joshua Freedman, Anabel L. Jensen, Cherilyn Leet	2018	Case-study approach to examine the experience at the school from 2012-2015	An independent K-8 school in California that serves 190 students.	An independent K-8 school in California that serves 190 students.	The Six Seconds Emotional Intelligence Model and Benchmark Assessment Tools Other assessment reports: Educational Vital Signs Brain Talent Profile (adult and youth) Brain Brief Profile (adult and youth)	A school used assessment data to build positive school climate and strengthen the EQ of students and all community members. Assessment results guided curriculum development and classroom management. School leaders used the data to enhance individual success, enrich classroom practice, and provide a strategy for schoolwide improvement.	This independent school in California embraced EQ as one of its core pillars, initiated a process to integrate SEL into their educational program following the Six Seconds benchmarks for SEL integration, and utilized assessments to support the implementation.
7	Promoting universal psychologi	Patrick B. Bell, Heather L.	2017	A Mixed-Methods,	An open-enrollment charter	Of the 457 students, 96% were	An SEL-specific consultation model comprising	The focus of this study attempted to address the task of engaging	By using this approach, one overarching theme was that the school action research team felt a sense of

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Study	Title	Author (s)	Year	Study Details	Partici-pants	Context	Intervention Title	Intervention Description	Notable Results
7 cont…	cal well-being in an urban U.S. public school using a culture specific, participatory action research approach to consultation	Larrazolo & Bonnie K. Nastasi		participatory action research (PAR) design. Southern, United States.	school serving K-8 - 457 students, 23 teaching staff.	African American and 4% were Latino American. Of the 23 instructional staff, 18 of the 23 were European American. Six of the classroom teachers were in their first year of teaching and the remaining were in their first five years of teaching. There is one principal and three middle-level administrators.	processes from four existing models that targeted universal programs, cultural specificity, and data-based problem solving: Nastasi et al's (2004) Participatory Culture-Specific Intervention Model, Hess et al's (2012) public health problem-solving model for schools, the NSCC's (2007) school climate reform model, and Devaney et al's (2013) social and emotional learning implementation cycle.	stakeholders (admin, teachers, parents, students) to investigate and acknowledge the need for, and then co-construct, reform initiatives that address SEL and school climate. The first author developed an Integrated, Universal Social-Emotional Focused School Reform Cycle ("SEL Cycle") which includes actions that permeate every stage as well as a nine-stage sequence of activities.	potent optimism and empowerment in their role as change agents and in having created an actionable plan. While challenges to implementation were evident, the SEL Cycle has fostered a change in attitudes among stakeholders at the school to continue its drive toward SEL programming.
8	Implementing a Mentally	Julia Anwar-McHenry,	2016	A process evaluation was	Participants ranged	11 public schools (eight	The Act-Belong-Commit Mentally Healthy Schools	The Mentally Healthy Schools Framework was developed to promote	The majority of schools felt the program was implemented successfully with the more intensive

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Study	Title	Author (s)	Year	Study Details	Partici-pants	Context	Intervention Title	Intervention Description	Notable Results
8 cont…	Healthy Schools Framework based on the population wide Act-Belong-Commit mental health promotion campaign - A process evaluation	Robert Jonh Donovan, Amberlee Nicholas, Simone Kerrigan, Stephanie Francas, and Tina Phan		conducted consisting of six-monthly activity reports from 13 participating Western Australian schools.	from K-12 across 13 schools in Western Australia. Semi-structured interviews were conducted with key school contacts at nine schools.	secondary and three primary) and two private secondary schools located in Western Australian schools.	Framework as well as partnerships with the MindMatters and KidsMatter Primary (curriculum)	positive mental health using the Act-Belong-Commit message in a school setting. Based on learning from the evaluation of school mental health promotion interventions available at the time, the Mentally Healthy Schools Framework sought to increase knowledge and skills of school staff to create mentally healthy school environments, change student/staff behaviour and attitudes with respect to mental health and mental illness, strengthen community links with the school, enhance meaning and purpose of activities and events in which the students already participate, and increase student connectedness to, and teacher morale within, the school.	implementation facilitated by a proactive and enthusiastic school "champion" who had influence over other staff, and who did not have too many other competing priorities. Factors inhibiting implementation included a lack of effective time management, lack of whole school commitment, and evaluation demands.
9	Factors affecting the implementation of a whole school mindfulness program:	Kristian G. Hudson, Rebecca Lawton and Siobhan Hugh-Jones	2020	A longitudinal qualitative study underpinned by a framework analysis	The participants for the study were 15 school staff, including 2 head	Two of the five participating schools were comprehensive schools (state	The participating schools implemented a mindfulness, Whole School Approach (M-WSA). The researchers used a framework known	The M-WSA is a mindfulness in schools program using a whole school approach. This specific study utilized the funding from Headstart (the aim of which was to build the resilience of young people to mental	The most essential construct was school leadership. It strongly distinguished between high and low implementation schools and appeared inter-related with many other distinguishing constructs.

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Study	Title	Author (s)	Year	Study Details	Partici-pants	Context	Intervention Title	Intervention Description	Notable Results
9 cont…	a qualitative study using the consolidated framework for implementation research			methodology. Five schools in the Cumbria region of the UK (north of England).	teachers. Although, there were five participating schools from K-12 in total (approx. 4500 students)	funded and controlled by the local authority), two were academy schools (state funded but free of local authority controls), and one was a school for students with special needs.	as the Consolidated Framework for Implementation Research (CFIR) to capture the implementation determinants of a mental health intervention in a school setting.	health difficulties). The CFIR is a comprehensive, organizing taxonomy of operationally defined constructs that may impact the implementation success of complex programs. The CFIR defines five domains (intervention characteristics, outer setting, inner setting, characteristics of individuals and process), each with constructs and some sub-constructs which can affect implementation success. The authors chose this framework for studying implementation success as it appeared well suited to answering their research questions given its' focus on implementation at multiple levels (individual and organizational) across five domains.	
10	Understanding factors affecting positive education in practice: an Australian case study	Amber J. Halliday, Margaret L. Kern, David K. Garrett & Deborah A. Turnbull	2019	A mixed methods approach to examine the effectiveness of an evidence-informed positive	Grade 9 students aged between 13 and 16 years (180 students).	A secondary public school in Australia	Positive Education Pilot Program (PEPP). The Framework used to assess the implementation was an 'Organizing Framework' using	Activities included in the PEPP were derived from positive psychology and prevention, emphasizing the conditions and behaviours that help people to feel good and function well. The PEPP was considered an "integrated model" of	Recipient outlook, organizational support, stakeholder input, and provider enthusiasm and understanding were all thought to impact program outcomes. Findings from the study suggest the PEPP was not related to increases in well-being or resilience, yet may have buffered students from declining mental health during the year.

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Study	Title	Author(s)	Year	Study Details	Partici-pants	Context	Intervention Title	Intervention Description	Notable Results
10 cont…				education pilot program (PEPP) delivered within an Australian public high school			implementation science.	universal mental health intervention, providing a greater theoretical breadth and blending the strengths of multiple disciplines. The 'Organizing Framework' consists of five categories of determinants that impact implementation success within a school context: provider, recipient, intervention, organization, and contextual.	

Core and Contextual Conditions

A focus of this work was to determine the essential conditions necessary for successful implementation of mental health promotion programs in secondary schools. Understanding and promoting positive mental health in schools is a shared responsibility of parents, educators and community partners and best promoted through a comprehensive and whole-school approach. For that reason, I compared the results of the studies identified in the scoping review with the findings from Storey et al. (2016) in which the authors identified essential conditions for the implementation of CSH to achieve changes in school culture and improvements in health behaviours of students. The essential conditions identified by Storey et al. (2016) were categorized as core conditions and contextual conditions. Core conditions included: (a) students as change agents, (b) school-specific autonomy, (c) demonstrated administrative leadership, (d) dedicated champion to engage school staff, (e) community support, (f) evidence, and (g) professional development. Contextual conditions included: (a) time, (b) funding and project supports, and (c) readiness and prior community connectivity.

Of the 10 studies identified within the scoping review, only one study mentioned all seven core conditions for successful CSH implementation (Anwar-McHenry et al. 2016). Six studies mentioned six of the seven core conditions (Aidman & Price, 2018; Bell et al., 2017; Kutcher & Wei, 2013; Halliday et al., 2019; Hudson et al., 2020; Meyers et al., 2018), Kenziora & Osher (2016) cited five of the seven, and Hamedani and Darling-Hammond (2015) and Stillman et al. (2018) voiced four of the seven. With regard to the contextual conditions, Kenziora & Osher (2016) and Meyers et al. (2018) quoted all three conditions as necessary, Kutcher and Wei (2013), Hamedani and Darling-Hammond (2015), Anwar-McHenry et al. (2016), and Aidman and Price (2018) mentioned two of the three as essential, and Halliday et al.

(2019), Hudson et al. (2020), Stillman et al. (2018), and Bell et al. (2017) communicated that only one of the three contextual conditions were significant. The data related to the core conditions, the three additional contextual conditions as well as the additional conditions are described in detail below.

Core Conditions

Findings related to the core conditions illustrated that five of the 10 studies did not mention the importance of students as change agents (Aidman & Price, 2018; Hudson et al., 2020; Kenziora & Osher, 2016; Kutcher & Wei, 2013; Meyers et al., 2018), five did not quote a dedicated champion to engage the school staff (Bell et al., 2017; Halliday et al., 2019; Hamedani & Darling-Hammond, 2015; Kenziora & Osher, 2016; Stillman et al., 2018), three did not acknowledge demonstrated administrative leadership (Halliday et al., 2019; Hamedani & Darling-Hammond, 2015; Kenziora & Osher, 2016), and one did not cite evidence as an essential component of implementation (Hamedani & Darling Hammond, 2015). School-specific autonomy, community support, and professional development were highlighted in all ten of the included studies.

Students as change agents. Students as change agents refers to students being at the heart of the intervention and the reason for implementation of CSH (Storey et al., 2016). Five of the 10 interventions mentioned the impact of having students involved in the implementation process (Anwar-McHenry et al., 2016; Bell et al., 2017; Halliday et al., 2019; Hamedani & Darling-Hammond, 2015; Stillman et al., 2018). Of the five that mentioned students as change agents, only two involved the students explicitly in the design and delivery (Halliday et al., 2019; Stillman et al., 2018). For example, student input was gathered alongside other school community members in the planning phase of the mental health initiative. In the remaining three

studies, students were viewed as important stakeholders in the effectiveness of the implementation of universal mental health programs. While their input was not utilized in the initial vision and design of the school's intervention, students were seen as essential drivers of culture change within a school community. For example, Stillman et al. (2018) used assessment data to build a positive school climate and student EQ scores were foundational to how SEL was implemented within the school. Student input was not used to explicitly to design the SEL intervention; however, the student results were needed in order to effectively guide the individualized instruction they received. This independent school initiated a process using a Six Seconds benchmarks framework for SEL integration and utilized the student (and teacher) assessments to support the implementation. Bell et al. (2017) used peer mediation as a programming idea to operationalize the school's goal. Although students were not a part of the school's action research team (SART) where the brainstorming and needs assessment took place, they were still actively involved in the implementation of the school's overall goal. The majority of the data collected indicated the importance of establishing a committee of 'champions' to promote the mental health message. Surprisingly, only one of the ten studies noted the value of including students as members of the committee and having the student group responsible for promoting the message (Halliday et al., 2019).

School-specific autonomy. In all 10 of the studies reviewed, there was school-specific autonomy observed. School-specific autonomy refers to the customization of the intervention to meet local needs (Storey et al., 2016). In all of the included sources, a needs and resources assessment were conducted prior to the implementation process. The success of the programs was deemed to be a direct result of the flexibility that each school had in delivering a unique approach that fit within school culture. For example, the findings from the majority of studies

indicated that program implementers benefited from the freedom to tailor their implementation to meet the needs of the specific demands of their school community.

Demonstrated administrative leadership. Administrative leadership refers to administration (most notably, the principal) playing an invaluable role throughout the process of implementing CSH, and a key stakeholder in truly being able to facilitate a culture shift within a school community (Storey et al., 2016). Seven of the 10 studies indicated that administrative leadership was essential to successful implementation (Aidman & Price, 2016; Anwar-McHenry et al., 2016; Bell et al., 2017; Hudson et al., 2020; Kutcher & Wei, 2013; Meyers et al., 2018; Stillman et al., 2018). Anwar-McHenry (2016) and Hudson et al. (2020) noted that having a supportive principal for support and approval was the number one distinguishing factor in demonstrating whole school commitment to mental health promotion. Demonstrated administrative leadership differed from passive buy-in from the principal. Rather, they were thought to play an invaluable role throughout the process of implementing whole school mental health promotion, and a key stakeholder in truly being able to facilitate a culture shift within a school community. In Bell et al. (2017), principal commitment was seen as both a stage-specific activity and a goal that permeates at all stages of implementation because of their role in making ongoing, informed, public commitments to SEL to teaching staff and other stakeholders. Two of the three schools that failed to mention administrative leadership as an important factor in implementation were district-lead mental health initiatives and employed “district leaders" (Hamedani & Darling-Hammond, 2015; Kenziora & Osher, 2016).

Dedicated champion to engage school staff. Dedicated champions are staff members within a school that have been chosen to lead a CSH initiative for their abilities to motivate, influence and guide others (Storey et al., 2016). Five of the 10 interventions reported having a single

dedicated champion to engage school staff (Aidman & Price, 2018; Anwar-McHenry et al., 2016; Hudson et al., 2020; Kutcher & Wei, 2013; Meyers et al., 2018). These school leaders ranged from teachers to administrators to mental health specialists within the school. In Anwar-McHenry et al. (2016), the champion was the most commonly mentioned facilitator of successful implementation. Someone who is "enthusiastic, proactive, passionate, and deeply interested in the message" (Anwar-McHenry et al., 2016, p. 566). The source also mentioned the importance of being in a position with influence over other staff and having fewer competing priorities facilitated the impact of these school champions. Hudson et al. (2020) noted that the leaders in more "successful" schools were careful to make sure these appointed staff members had autonomy and decision-making powers. By selecting staff with decision-making power, school leaders created a culture of *shared leadership*. In the schools that did not have one dedicated champion leading the campaign, all five mentioned the importance of a highly skilled team of individuals to support SEL development. Therefore, the schools without one dedicated champion engaging a school community still had a team of champions, each with different roles and responsibilities. Finally, Kutcher and Wei (2013) noted that the importance of having a dedicated champion outside of the administration team is essential for creating buy-in from the rest of the school staff. The importance of SEL had to come from the grassroots as well as supported from the top in order buy-in and acceptance of the project to take place.

Community support. Community support refers to the role that both internal and external partnerships played in alleviating the pressures of implementation and created a 'village' of those supporting CSH (Storey et al., 2016). Community input, involvement and support were mentioned in some capacity within all 10 studies examined. This demonstrates the value of involving as many stakeholders as possible in the overall culture change of a school. Some of the

studies were quite generalized in their description of what community support entailed. For example, statements such as: “Community-based partnerships, projects, and learning opportunities inspire responsibility, engagement and action” (Hamedani & Darling-Hammond, 2015, p.9) or “building community support was key to ensuring the continued focus on SEL programming” (Stillman et al., 2018, p.82) were common across all pieces of evidence. Some schools that used a phased approach to implementation had the advantage of selecting enthusiastic initial implementers who later become champions of SEL in the school who gain the confidence to receive community support and buy-in (Kenziora & Osher, 2016; Kutcher & Wei, 2013). Some of the strategies used for engaging the school community included:

1. Creating an in-school triage team to promote SEL and identify at risk students (universal supports - e.g., Curriculum, information nights, school-wide assemblies; “Go-To” Educators - trusted staff within the school that have easy access to the primary care team, and the primary care team including community physicians, therapists, and others who specialize in mental health disorders) (Kutcher & Wei, 2013).
2. Creating different “launch” events within the school such as school wide assemblies, interactive events and merchandise giveaways to illustrate their commitment to the campaign (Anwar-McHenry et al., 2016).
3. Establishing an organized system of networking and communication with key stakeholders outside of the school community (with the same goal in mind of mental health promotion) (Hudson et al., 2020).

The evidence mentioned both internal and external partnerships as key to successful implementation. The importance of engaging all stakeholders with the same message through

ongoing communication, professional learning, and honest feedback were essential strategies needed for continual success and focus on SEL programming.

Evidence. Evidence refers to data-driven processes and outcomes that are essential for planning, refining, and supporting the implementation of CSH (Storey et al., 2016). All but one (Hamedani & Darling-Hammond, 2015) of the interventions cited evidence as a critical factor for successful implementation. The evidence was used in a variety of ways and was essential for planning, refining, and supporting the implementation of the mental health programs. Any external programs that were adopted within a school, were evidence-informed and evaluated consistently throughout the year. Evidence was also used to create internal programs that were designed to meet the specific needs of the school community. Evaluations and data collection were considered key steps in the implementation process and invaluable for learning and making programs better.

Professional development. In all 10 of the studies reviewed, professional development (PD) (both initial and ongoing) was paramount in informing school members of the project goals and gaining the confidence needed for successful implementation. Storey et al. (2016) describes PD as initial and ongoing staff training to ensure understanding and 'buy-in' of a whole-school project. PD was supported in a variety of ways including initial teaching training to ensure schoolwide understanding and buy-in as well as ongoing PD which demonstrated the school's dedication and commitment to the project. Although every study utilized PD in some form, how each school administered PD was unique to their specific circumstances. For example, a few of the research studies had the funding to train all staff members (during school hours) which allowed for collaborative opportunities, sharing of responsibilities, and empowerment amongst school staff; other schools who lacked project funds encouraged their staff to participate in PD

outside of school hours or only had the funding capacity to train key project leaders on staff. Overall, it was noted in most studies that PD was necessary to ensure a clear understanding of project values and effective implementation.

Contextual Conditions

With reference to the contextual conditions, six did not mention time (Anwar-McHenry, 2016; Bell et al., 2017; Halliday et al., 2019; Hudson et al., 2020, Kenziora & Osher, 2016; Stillman et al., 2018), one did not indicate any funding or project support (Stillman et al., 2018), and one did not comment on the readiness and prior community connectivity (Kutcher & Wei, 2013).

Time. Time (as discussed in Storey et al., 2016) refers to the allotted time dedicated to the CSH project in order for it to be successful. Only four of the 10 interventions reported time as an indicator of successful implementation (Aidman & Price, 2018; Kutcher & Wei, 2013; Hamedani & Darling-Hammond, 2015; Meyers et al., 2018). In the majority of studies reviewed, the success of the projects was not a result of creating additional work for staff on top of their current roles and responsibilities; through the initial PD, staff were able to embed SEL characteristics and (over time) create a positive SEL school culture. While additional or allotted time (outside of school hours) was not mentioned as an indicator of successful implementation, every study reviewed committed time to educate, understand, and eventually apply the skills needed to create positive change.

Funding and project supports. Funding and project supports refers to the support available for the implementation of the CSH project. The majority of the studies (9/10) received some funding and support from external sources. Only one of the 10 interventions failed to mention any sort of funding or support for their SEL implementation (Hamedani & Darling-

Hammond, 2015). The Collaborative for Academic, Social and Emotional Learning (CASEL) was mentioned as a project support in two of the 10 studies (Kenziora & Osher, 2016; Meyers et al., 2018). The CASEL organization was able to support the schools/districts by delivering PD, providing professional support, and giving funding when available. Bell et al. (2017) was funded by the author of the study and Kenziora and Osher (2016) was funded through available district grants. As many of the mental health programs were top-down initiatives, funding was made available by the district and participating schools were supported as such. Stillman et al. (2018) did not mention any additional funding to support mental health promotion was conducted within a private school guided by SEL and Emotional Intelligence (EQ). It was assumed by the reviewers that the students in this particular private school paid tuition and any school wide initiative such as SEL was supported through these funds. Although funding and project support was only explicitly discussed as a key driver to successful implementation in one of the 10 interventions (Anwar-McHenry et al., 2016), it was implicitly determined by the reviewers that the financial support schools received greatly facilitated successful implementation.

Readiness and prior community connectivity. Readiness and prior community connectivity refer to stakeholders having an understanding of CSH and the reason for its existence as this knowledge will build competency and increased ownership and enthusiasm over a project (Storey et al., 2016). All but one (Kutcher & Wei, 2013) of the 10 interventions reviewed mentioned readiness and prior community connectivity as a fundamental component of project implementation. Bell et al. (2017) mentioned that a key element of the SEL Cycle was to create buy-in from the community and ensure all stakeholders felt connected with the decision to implement SEL in the school's culture. Halliday et al. (2019) alluded to the fact that structures need to be in place (and staff need to be bought-in) before implementation in order to succeed.

Half of the studies (5/10) specifically highlighted the importance of completing a needs and resource assessment prior to implementation (Anwar-McHenry et al., 2016; Halliday et al., 2019; Kenziora & Osher, 2016; Meyers et al., 2018; Stillman et al., 2018). Hudson et al. (2020) expressed the importance of individuals feeling understood, confident and connected with the project in order to ensure competency, ownership and enthusiasm in promoting and implementing key ideas. Kenziora et al. (2016) discuss cultivating commitment and organizational support was a requirement in the implementation process as well as a "SEL needs assessment" of existing programs, practices, and policies. Overall, readiness and prior community connectivity presented itself as a fundamental component of successful implementation.

Table 6

Essential Conditions Necessary for Implementation of CSH found in Whole-School Mental Health Programs

Study	Core Conditions: **1 – Students as change agents** **2 – School-specific autonomy** **3 – Demonstrated administrative leadership** **4 – Dedicated champion to engage school staff** **5 – Community support** **6 – Evidence** **7 – Professional Development**	**Contextual Conditions:** **8 – Time** **9 – Funding and Project Supports** **10 – Readiness and Prior Community Connectivity**
1	1. No mention of students as change agents. 2. Coaches held monthly meetings to help meet individual school goals. Each school (through the SEL Leadership Team) conducted a needs and resources assessment to customize implementation. This needs and resource assessment also helped in developing a strategy of support once the coach transitioned off at the end of their two year involvement. 3. All principals were invited to attend the training and were given a manual on how to successfully integrate PATHS into the school. 4. Each school designated one staff member to serve as a PATHS lead who was the point-person in each school. The lead had responsibilities on top of attending the training. 5. After developing a schoolwide SEL vision statement (created by the SEL Leadership Team), it was shared to the larger school community to get feedback and promote buy-in. 6. Use of a coaching log to track any and all support provided. As well, the use of a schoolwide planning and implementation rubric that was used to self-assess during the fall of Year 1 to guide planning and set priorities. 7. All classroom teachers participated in two days of training from a certified PATHS trainer. A professional learning session of the *School Guide* was provided at each school. In addition, there was a SCHOOLWIDE "SEL 101" professional learning session. An additional School Guide tool was used to promote awareness that all adults in the school can promote SEL by modeling social-emotional competence in all interactions.	8. Monthly team meetings over two years (approximately nine each year) with the SEL leadership team. The SEL coach (hired by CASEL) co-facilitated the meetings. The meetings were held after hours, but members were paid the district's standard non-instructional hourly rate to attend any meetings held after school. 9. CASEL supported the school's that used this implementation model. 10. As part of the implementation strategy, a needs and resource assessment was conducted.
2	1. No mention of student-involvement outside of student focus group discussions post implementation to discuss thoughts. 2. There was no “best” application model - The flexibility for each school to choose the components that they wish to or have the ability to apply was key.	8. Time was provided to all educators responsible for delivering content as well as the "Go-To" Educators. 9. Financial support for the research, authorship and/or publication was received through Sun Life Financial; The T.R.

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Study	Core Conditions: 1 – Students as change agents 2 – School-specific autonomy 3 – Demonstrated administrative leadership 4 – Dedicated champion to engage school staff 5 – Community support 6 – Evidence 7 – Professional Development	Contextual Conditions: 8 – Time 9 – Funding and Project Supports 10 – Readiness and Prior Community Connectivity
2 cont…	3. The principal was a key member on the implementation team of the program. 4. "Go-To" Educators - school staff (could be more than one….) known to principals, whom student frequently go to when they need help or advice. This part is unique in that these school staff are uniquely placed to identify students at high risk for having mental disorders if they are trained to do so. 5. An in-school triage process for identified students was created. Therefore, the model resembled 1.) Universal supports (e.g. mental health curriculum to gr. 10 students; information nights through parent/family engagement). They did not discuss school-wide assemblies or presentations as a means to providing mental health literacy - simply through the gr.10 curriculum and website. 2.) "Go-To" Educators within the school to refer to someone in the school who has easy access to the primary care team (e.g. learning coach). 3.) Primary care team including physicians that specialize in mental health, illness and disorders. Local mental health care providers were brought together at the "Go-To" Educator training to identify strategies to facilitate linkages between the school and providers. Parents/family engagement was an important component and communication might differ at different sites. The team provided information on the school website, created fact sheets to email to parents, along with three information sessions at three sites within the school's catchment area. 6. Both qualitative and quantitative techniques were used in the evaluation. 7. Teacher training for curriculum delivery - approximately 8 hours; "Go-to" educator training.	Meighan Family Foundation; The IWK Health Center; The Dalhousie Medical Research Foundation; The Katheryn H. Weldon Charitable Foundation and the Department of Psychiatry; Dalhousie University; the IWK Foundation. 10. No mention of readiness and prior community connectivity.
3	1. While not explicitly discussed as an implementation method; student voice and community involvement was key to success. Student community, voice and agency were fostered through school traditions, rituals, clubs, and activities. 2. There was not "one right method" to delivering and embedding SEL culture within the schools. Each school was unique in their approach. 3. No mention of explicit administrative leadership as a must at each school. 4. No mention of a "dedicated champion" within the school; however, the school's all had counseling staff who worked closely with teachers, administrators, and families, to support ALL students' psychological health and well-being and were central to the life and culture of	8. Teachers are given time to develop skills needed to apply adequate SEL to students (and each others). 9. No mention of direct funding that school's received to implement SEL into school culture. 10. The school's involved have been embedding SEL strategies into their school's culture for many years (both explicitly and implicitly) and as a result, the school community as a whole was involved and engaged.

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3 cont...	the school. 5. Community-based partnerships, projects, and learning opportunities inspire responsibility, engagement, and action. 6. No mention of school's using "evidence-informed" practices. 7. Each school works to provide professional development, collaborative opportunities, and shared leadership structures to empower and support school staff.	
4	1. No mention of students as change agents. 2. Districts assess their existing SEL-related programs, practices, and policies and the needs of students, families, and practitioners, which allows a district to build on existing strengths, align previously isolated programs and practices, and plan to address identified needs. 3.No mention of required administrative leadership. In this case the "leaders" of the initiative were district leaders. 4. The article discusses "highly skilled and capable staff" to support SEL development. Not one person. 5. Community input and involvement are key requirements of CDI. 6. Evidence-based SEL programming as curricular requirements, data-informed SEL practices, followed by ongoing evaluations and data collection. 7. CASEL provides PD consultation to the districts followed by quality SEL professional learning to schools. Ongoing professional development and job-embedded support as well as attention to the organizational factors that enhance or impede adoption, effective implementation, and scale up.	8. The CDI District Theory of Action is not intended to be another "add-on" to what schools and districts are already doing. It is an action to embed SEL into the programs, initiative and curriculum that schools are already doing. As a result, besides the ongoing commitment to professional learning, there was no mention of additional time provided. 9. CASEL supported the districts involved in this study. In addition, there were grants that supported the CDI. 10. This was a requirement of the Theory of Action. "Cultivate commitment and organizational support for SEL" in addition with a "SEL needs assessment" of existing program, practices, and policies.
5	1. No mention of including students as change agents. Rather just as a community member in the implementation process. 2. Clear Stream (while a member of the CDI) clearly demonstrated school-specific autonomy when making decisions about how to best implement the SEL programming. Although they were part of a larger vertical-team (of nine elementary schools, two middle schools, and one high school). 3. "Because the principal understood that faculty support is necessary for any change effort to be successful, the program was initially piloted at the campus level with three	8. Campus teacher facilitators received time (and were paid a stipend) from the local campus budget. They worked alongside the SEL coaches from the district office to support the program. 9. This program was funded through their district through donations and grant money. 10. The school's mission revolved around the needs of the whole child, and campus leaders believed strongly that early adolescents should be exposed to curriculum that is challenging, exploratory, integrative, and relevant, using multiple learning and teaching

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5 cont…	teachers,"(pg.30) 4. Following the pilot program, the principal selected two teachers to serve as campus facilitators. These were in addition to the "district coaches" that CASEL provided as part of the initiative. 5. The school community was engaged through ongoing communication, professional learning, and feedback. 6. The district adopted the evidence-informed program, Second Step as well as ongoing evaluations throughout the year. District and campus leaders encourage ongoing reflection to support continuous program improvement. 7. All teachers received professional learning for the implementation of the curriculum during the advisory block.	approaches that emphasize students' physical, intellectual, moral, psychological, and social-emotional development.
6	1. The results provided from student assessments were foundational to implementation. Although, students themselves did not play a central role in the actual implementation. Their results *guided* how instruction was individualized for them. 2. This was an independent school (with an independent curriculum) 3. Administration played a central role in the process. 4. Not one dedicated champion as the entire school was guided by SEL and EQ as a core pillar to success. Results from EQ testing of educators were used often in decision-making. 5. Community support was key to ensuring the continued focus on SEL programming. 6. The entire program was data driven from assessment results of both students and the entire school community. 7. Professional development was a key driver in success and was ongoing to remain relevant.	8. As this was an independent school's results - there was no mention of additional time being granted for SEL. It was just embedded into their existing curriculum. Finding the time for all of the assessments was an ongoing challenge. 9. No mention of additional funding (outside of possible tuition for enrollment in the school). 10. The assessment tools used in this research highlight the value of assessing needs prior to implementation.
7	1. Peer mediation was used as a programming idea to operationalize the school's goal. 2. Using the CASEL Survey, formative research was collected collaboratively to determine a single SEL or school climate-related area of concern - the team decided it was anger regulation that would be the problem for analysis and program design because it was perhaps a core issue affecting other areas of staff concern (ie. bus behaviour, quality relationships with peers and teachers, sense of safety_. 3. Principal commitment is both a stage-specific activity and a goal that permeates at all	8. Campus teacher facilitators received time (and were paid a stipend) from the local campus budget. They worked alongside the SEL coaches from the district office to support the program. 9. This program was funded through their district through donations and grant money. 10. The school's mission revolved around the needs of the whole child, and campus leaders believed strongly that early adolescents

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7 cont…	stages. Three strategies were used to assist the principal in making an informed, public commitment to the SEL Cycle: 1.) Consultation with the first author to discuss the concept of SEL and the principal completed a pre reading on SEL. The also discussed school-wide PD on SEL Training; 2.) Foster commitment by informing staff of his commitment to initiate the implementation process of SEL in the school, and 3.) Encourage the principal's public commitment to SEL at the school board meeting. 4. Although not one champion in the school (besides the consultant - first author), a school action research team (SART) was created that was comprised of multiple stakeholders (10 total). Three explicit strategies were used to build relationships among the team (essentially providing the team with the tools they needed personally to have strong SEL skills). 5. Evidence was collected to determine a school climate-related area of concern. In addition, the SART and consultant designed a research methodology together. They used qualitative focus groups that would allow for detailed responses from a large sample (36 teacher-nominated students and eight teachers, and six parents). They used this information to develop a culture-specific program pulled from evidence-based theory. 7. All staff received PD on social-emotional curriculum; an SEL-focused teacher-to-teacher mentorship and coaching.	should be exposed to curriculum that is challenging, exploratory, integrative, and relevant, using multiple learning and teaching the community and ensure all stakeholders felt connected with the decision to implement SEL in the school's culture.
8	1. A few schools (not all) noted the value of including students as members of the Act-Belong-Committee and having a student group responsible for promoting the message. 2. As each school has different priorities and needs, the flexibility to tailor their implementation was beneficial for them - especially in the case of minimising the burden on school staff. This need for autonomy was evident during the action planning section of the training sessions as different schools devised significantly different objectives and strategies to achieve the same overall goal of improving mental health and wellbeing. 3. Having a supportive principal was noted as important for support and approval for proposed activities to demonstrate to the whole school community that the school sees mental health as a priority. 4. This was the most commonly mentioned facilitator of successful implementation. Someone who was enthusiastic, proactive, passionate, and deeply interested in the message. This position was often filled by the key school contacts responsible for implementation of the Mentally Healthy Schools Framework. They key contacts ranged from school psychologists,	8. There was no mention of additional time received to be involved in the project. 9. With the support of an Australian Health Promotion Association Graduate Scholarship, a schools project officer was appointed full time for 12 months and part-time for the final six months of the pilot period. Following the promotion of the Framework through education and health promotion organizations, schools were invited to an information session at the Mentally Healthy WA hub in Perth, WA, which included an overview of the Framework, how to apply for funding through the Healthway "Health Promoting Schools" scheme, and case study examples from two Australian schools. 10. As mentioned above, the success of this program relied on

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8 cont…	nurses, student services staff, principals, and teachers. 5. Some schools had a "launch" event of the Act-Belong-Commit program to engage their greater school community and had school wide assemblies or interactive events and merchandise giveaways. The schools that did have these events reported that they were a strong driver for successful implementation. 6. All schools were required to provide regular process data (every six months) to Mentally Healthy WA as a condition of the School Partner Agreement, As schools were free to determine which elements of the framework to implement, and how this would take place, a process evaluation was considered essential for determining how the intervention was being delivered, to whom, and how often. 7. In the Mentally Healthy Schools Framework Handbook, the dedication of sufficient time to work through the handbook with key school contact(s) is required, including clarification of important evaluation requirements and an emphasis on planning and brainstorming to support the development of ideas for implementing changes.	individual schools assessing their school's individual needs and resources before implementation.
9	1. No mention of students as change agents. 2. Schools were not given a plan for HOW to implement the M-WSA. Rather, it was up to their staff and leadership team to decide on the details. 3. This was noted as the number one distinguishing construct between successful and less successful schools. 4. Having a formally appointed internal implementation leaders was another strongly distinguishing construct in the results. Leaders in the more "successful" schools were careful to make sure these appointed staff members had autonomy and decision making power. By selecting staff with decision-making power school leaders created a culture of 'shared leadership'. 5. Network and Communications was another strongly distinguishing construct. More successful schools had more effective networks of communication. Although there was no mention of involving members outside of the school staff (ie. parents, community members, etc.). 6. The program (M-WSA) was an evidence-based mindfulness program and the success of the implementation was being researched using the CFIR. There was no discussion on schools	8. There was no discussion on how each individual school delivered the program (ie. if teachers time was provided, when, etc.). Therefore, time was not discussed in detail. 9. There was no additional funding for delivering the mindfulness program (outside of the UK's National Lottery funded Headstart programme). 10. In the more successful schools, leadership and management reported good understanding of mindfulness and 'believed in it'. Therefore, in order for more successful implementation, it was important that individuals involved understood, felt confident, and believed in the implementation.

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9 cont…	using the data collected to improve implementation. 7. Professional Development (teacher training) was provided to those staff that wanted the mindfulness training (which was free - but done outside of school hours). There was no discussion on how schools provided PD to the rest of the staff (who did not receive the training); however, it was noted in the results that in order for success, the initiative has to be "high profile" - meaning continual teaching training (not a one and done sort of thing).	
10	1. Students were involved in the design and conduct of the intervention. Student input centered on doing more hands-on, interactive, and group activities. A common suggestion by the students was to have less writing and avoid the perception of positive education as "school work". 2. A finding from the research indicated that the fit between the intervention and the recipient mattered. Factors such as need, fit with the organization's mission, timing within the school calendar, and fidelity vs. adaptation were carefully considered prior to delivery. 3. Surprisingly, no mention of administrative leadership as a key factor in this study. 4. 'Pastoral Leaders' were trained (briefly) before the PEPP was delivered to the classes and were therefore the "champions" of the program. There was not one dedicated leader or "champion" in this example. 5. There was mention in the value of input from multiple stakeholders. However, following the implementation, the school was aware of the need to better inform the governing council and parents, such that all stakeholders feel like they have a voice and are well informed of the purpose and process of PEPP. 6. Throughout the implementation of the program, data was being collected to determine the effectiveness of the evidence-informed PEPP as well as the exploration of the factors impacting the planning, delivery, practice, and success of program activities. 7. Minimal training was provided, yet despite the need for greater support, teachers showed enthusiasm, buy-in, and self-reported efficacy prior to PEPP implementation. Despite receiving little training, teachers generally felt confident in leading the PEPP and were open to teaching emotional health and wellbeing concepts and knew the reasons for doing so.	8. There was no mention of additional time provided to those involved. 9. There was no additional funding and/or project supports outside the training of the PEPP for the school. 10. School culture was mentioned as a factor in implementation success/failure. This specific school had been laying the foundation for positive education for quite some time, forming it as part of the school culture, and preparing the community for change to happen. The structures need to be in place (and staff need to be bought-in) before implementation in order to succeed.

Other Conditions

All 10 of the included sources mentioned other conditions (outside of Storey et al. [2016] conditions) that were necessary for successful implementation. These other conditions were well aligned with the four pillars that provide a strong foundation for CSH: (a) social and physical environment, (b) teaching and learning, (c) healthy school policy, and (d) partnerships and services. These other conditions included:

1. Focus on staff development.
2. Context and structure.
3. District-lead support.

Focus on Staff Development. In most of the studies reviewed, positive relationships amongst ALL community members was a key driver of successful implementation. For example, Hamedani and Darling-Hammond (2015) noted that school climate and schoolwide SEL was strengthened when time was dedicated in the school to building positive relationships. A teachers' social and emotional competence as well as their well-being affect classroom management strategies, teacher-student relationships, and their ability to implement SEL programs (Cristovao et al., 2020). If SEL is treated as a priority amongst coworkers at the school, teachers are more likely to model that same behaviour to their students and then students amongst their peers. It creates a cycle of a positive social learning environment. In addition, the physical environment within a school can help to promote positive mental health. Hamedani and Darling-Hammond (2015) mentioned that the explicit environment within a school creates an intentional culture that reinforces the accepted norms and values. Examples include the physical structure of a classroom, the time allocated during the school day to mental health promotion, and the physical structures (posters, artwork, etc.) placed around the school.

Context and Structure. Six of the 10 interventions implemented an evidence-based SEL program in addition with whole-school initiatives (Aidman & Price, 2018; Bell et al., 2017; Hamedani & Darling-Hammond, 2015; Kenziora & Osher, 2016; Meyers et al., 2018; Stillman et al., 2018). As well, all 10 of the studies noted the importance of staff PD. Teaching and learning encompasses formal and informal curriculum, resources and associated activities. The specific mental health curriculum delivered in schools was not treated as "extra work" or an "add-on" to their already assigned curriculums. It was foundational to all decisions and instruction and eventually became embedded in school culture.

District-lead Support. Over half of the interventions (6/10) discussed having district-lead support for the implementation of the project (Aidman & Price, 2018; Anwar-McHenry et al., 2016; Halliday et al., 2019; Hudson et al., 2020; Kenziora & Osher, 2016; Meyers et al., 2018). Of equal importance was the necessity of creating autonomy within the schools to ensure buy-in from staff and students. If the policies, guidelines, and practices set forth by district initiatives support mental health promotion, it encourages school-based leadership decisions regarding SEL to fall in line. Halliday et al. (2019) noted that implementation may be most successful if it is a combination of a top-down, bottom-up approach. Meaning that while it is important for school communities to identify their own needs in order to create autonomy, the initiative may be best reinforced if it is systematically identified as significant and supported as such.

The significance of having partners and community members (outside of the school) was mentioned as essential for implementation. Kenziora & Osher (2016) discussed a district structure of implementation using "vertical teams" (a high school and its feeder elementary and middle schools). The idea is that partnerships are created, and professional development,

resources, and support is shared amongst schools who have a common mission of promoting positive mental health across K-12 education. Kutcher and Wei (2013) focused on how health, education and other sectors need to work together to promote positive mental health. This study identified a pathway of care model that utilized teacher champions, school-based mental health services, community members, and public health services that work as a continuum to support wellness for all.

Table 7

Other Conditions

Study	Other Conditions
1	- The *School Guide* is designed to be used in conjunction with an evidence-based SEL program. All schools were provided with the resources to implement the PATHS curriculum. - The School Guide provided guidelines on how to form an SEL leadership team and to ensure its members are representative of major stakeholder groups in the school (administrators, teachers, student support staff, and parents). Schools determined their membership based on their unique context. On top of the leadership team, and PATHS lead, there were also systems-level coaches (HIRED by CASEL) to support high-quality implementation of the model (approximately 6 hours a month). - A very specific two-year implementation model was established with goals within each year. During Year 1, SEL leadership teams focused on building foundational systems and structures to support SEL. In Year 2, teams focused on improving schoolwide SEL implementation, deepening its integration throughout the school community, and promoting its sustainability beyond the study's funding cycle. - Common integration strategies that were found to help support schoolwide SEL included: identifying teacher practices that support SEL and provide support to monitor the fidelity; sponsoring learning events with non-teaching staff and families to build capacity to promote SEL; and strengthening school climate by focusing on staff working relationships and team building.
2	- Specific mental health curriculum was designed and delivered by trained staff.
3	- Social emotional learning is front and center at each school. It is highlighted in each school's mission and vision, reinforced through each school community's norms and values, and clearly articulated in expectations for students and graduates. - School's foster social emotional learning through an **intentional** culture that socializes both students and adults as community members and fosters effective ways of interacting that are modeled by adults at the school. - Student's psychological needs are not secondary to their academic needs. There is a strong focus on supporting student growth, reflection, resilience, and agency in a space of physical and emotional safety, respect and belonging. - Each school articulates, posts, and promotes a set of comprehensive guidelines for interacting with community members that highlights self-awareness and self-management, social awareness and relationship skills, and responsible decision-making and social responsibility. - A small school environment structurally allows for the opportunity to cultivate close relationships and requires the social emotional skills needed to get along with others. - Their "family" (or academy) structure provide additional opportunities to personalize relationships, foster social responsibility to one's community, and map the developmental journey that students take through each school. - The school's involved used an "advisory" time to implement social-emotional learning curriculum to ensure that all students received direct instruction. - SEL learning is integrated across subject areas within academic understanding as well as through teacher instructional practices (fostering student reflection, resilience, a growth mindset, agency, and empowerment). - Project-based learning was seen as a way to enable students to practice collaboration and relationship skills, promote social awareness and interdependence, and foster community engagement. - Restorative disciplinary practices were used to preserve relationships, foster responsibility, and respect students' dignity.

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Study	Other Conditions
4	- Implementation varied across districts. Two districts chose to implement SEL through the established district structure of "vertical teams" (a high school and its feeder elementary and middle schools). - Three districts used a "phase approach" to SEL implementation. One supported schoolwide implementation in 30 schools and will build districtwide capacity going forward by integrating SEL into curriculum, instruction, and all professional development activities. *The phased strategy being implemented through vertical teams or cohorts has the advantage of selecting enthusiastic initial implementers who can later become "champions" for SEL as well as trying out professional development and implementation materials with a smaller group that can be refined for later and larger groups of implementers. - Three other districts adopted a different strategy of implementing SEL district wide - with a focus on implementation of SEL evidence-based programming at the elementary level (ie. PATHS, Responsive Classroom, Caring School Communities, and Second Step).
5	-A strong SEL program cannot be perceived as merely a top-down edict from the administration. By piloting that program with a small group of teachers and providing an opportunity for open communication, grass-roots support was created within the faculty. - Leadership and Teamwork are ESSENTIAL - everyone must have a clear and aligned philosophy and practice - Funding was key to success. - Explicit instruction of SEL in the advisory schedule was paramount to success. - The program alignment between elementary and middle schools was extremely helpful.
6	- A key piece of this project is the value of "Teacher-First" training. It highlighted the value of teachers (and all school staff) having strong SEL skills in order to successfully implement them. - Another important concept was that SEL was the number one pillar for decision making. It was not treated as an add-on program or extra work for teachers. It was just a part of this special school. It was foundational to all decisions and instruction. Very constitutionalized, systemic, and embedded in the school.
7	-This study provided a real-world illustration of a process and outcomes for engaging stakeholders to select a problem, analyze it in its ecological and culture-specific context, and then co-construct program initiatives that address SEL and school climate. - Something unique about this program was that it was an attempt to embed a SEL program within the culture of the school using four existing models that targeted universal programs, cultural specificity, and data-based problem solving vs. a top-down SEL program that is instructed to implement.
8	-Something unique about this program that created success in the implementation was the "launch event". The launch helped to spread the message to the entire school community whilst publicly asserting that their school was now an Act-Belong-Commit Mentally Healthy School. - Complimentary merchandise was offered to the schools as giveaways and prizes at Act-Belong-Commit activities. The promotional materials "branded" school activities as mentally healthy activities and provided a "subliminal message for the kids".
9	- While administrative support is necessary for successful implementation, something that was important to take away from this study is that *if* administration supports a project, can identify *key* champions in the school, and provide autonomy and decision-making authority to that individual, than they do not have to be spearheading the intervention. However, buy-in from staff is critical in successful implementation. Therefore, before any new intervention takes place, there needs to be a commitment from leadership to provide adequate training and an understanding that this *new initiative* is here to stay, it's not something that's just going to be a 'flash in the pan'. It needs to be part of any school wide decisions, PD, and involve as many members as possible. - Successful implementation of any program takes time! Therefore, if there is a changeover in the leadership team, a priority such as this needs to be discussed at the forefront as one of the school's goals.

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Study	Other Conditions
10	-Having support from your district is important for successful implementation. Implementation may be the most successful if it is a combination of a top-down, bottom-up approach. School's need to have their own autonomy to match their culture and school community, but the initiative may be best supported if coming from the top. - Is an 'advisory' style of teaching the only way for curriculum to be delivered in a secondary school setting?

Critical Components Necessary for Implementation

Within this research, 13 components were part of the implementation strategies within the studies reviewed in the scoping review. Of the components listed, 10 were initially identified as "essential conditions for the implementation of comprehensive school health" in Storey et al. (2016, p.4). I was able to identify three additional components in the literature (focus on staff development, context and structure, and district-lead support) contributing to the overall implementation success. Based on how many of the 10 studies used each component within their MH program, each component was ranked as high level of importance (7-10 of the studies), moderate level of importance (4-6) or low level of importance (less than 4). For example, "students as change agents" was found in five of the 10 studies (Stillman et al., 2018; Anwar-McHenry et al., 2016; Hamedani & Darling-Hammond, 2015; Halliday et al., 2019; Bell et al., 2017) therefore, was ranked as moderate level of importance. Table 8 summarizes the components that were identified as significant to the implementation success of universal mental health programs in secondary schools and displays their citation frequency and level of importance.

Table 8

Implementation Components

Components	Citation Frequency (# of studies the component was cited)	Level of Importance (High, Moderate, Low)
Core Conditions		
Students as Change Agents	5/10	Moderate
School-Specific Autonomy	10/10	High
Demonstrated Administrative Leadership	7/10	High
Dedicated Champion to Engage School Staff	5/10	Moderate
Community Support	10/10	High
Evidence	9/10	High
Professional Development	10/10	High
Contextual Conditions		
Time	4/10	Moderate
Funding and Project Supports	9/10	High
Readiness and Prior Community Connectivity	9/10	High
Other Conditions		
Focus on Staff Development (wellness, relationships, competence)	10/10	High
Context and Structure (scheduling, timetable)	9/10	High
District-Lead Support	6/10	Moderate

Summary of Results

The results from this scoping review were summarized into four sections using tables that captured relevant information on: (a) the context and focus of the whole-school mental health program, (b) the essential conditions necessary for the implementation of CSH (as per Storey et al., 2016), (c) other conditions not mentioned in Storey et al. (2016), and (d) frequency of the implementation components. All studies focused on the implementation process and employed a universal, as opposed to targeted, approach in their framework. The majority of studies were conducted in public, secondary schools in the United States. The terminology used for describing MHP differed across the studies with the majority referring to their intervention as SEL. All of the essential conditions discussed by Storey et al. (2016) were found in some capacity in the studies that were reviewed. In addition to the essential conditions, there were other conditions found to be relevant throughout the implementation process. These other conditions highlighted the importance of staff development (wellness, relationships, competence), context and structure (scheduling, timetabling) and district-lead support. The identified implementation components were then charted on a separate table (Table 8) to provide readers with a clear understanding of what components were quoted as important during the implementation process of whole school mental health initiatives. This research will hopefully help to inform school stakeholders for future studies in the field of mental health promotion in schools. The next section of this scoping review will go through an in-depth exploration of the results and provide meaningful interpretations of why they are important.

Chapter 5: Discussion

The purpose of this research was to conduct a scoping review to compile available research on mental health promotion programs in schools and determine the critical components necessary when implementing a program using a whole-school approach. Using MEDLINE, Embase, PsycInfo, and ERIC, we initially identified 5786 studies. After an extensive and rigorous review and the creation of an a priori, the literature search parameters revealed a total of 10 studies that met the inclusion criteria. The reviewed interventions were all implemented as whole-school projects in a range of school types including public, private, and charter schools across the United States, Canada, United Kingdom and Australia. The methodologies of the studies included case-studies, participatory action research (PAR), process evaluation, randomized controlled trials (RCT), and mixed-methods approaches. The most common terminology used as an intervention was Social-Emotional Learning (SEL) (6/10) followed by others such as Positive Education Pilot Program (PEPP) (1/10), Mindfulness Whole-School Approach (M-WSA) (1/10), Mentally Healthy Schools Framework (1/10), and School-Based Pathway to Care Model (1/10). The results from this section highlight the urgency for Canadian school stakeholders to create more consistency regarding how mental health promotion is conceptualized within secondary schools. Of the 10 studies reviewed, only four were done in secondary schools exclusively (Aidman & Price 2018; Hamedani & Darling-Hammond, 2015; Halliday et al., 2019; Kutcher & Wei, 2013), while the rest were done in K-8 or K-12 settings. Of these research studies, only one was completed in Canada. These results yield the need for not only more Canadian research, but more research on real-life examples of how mental health promotion is implemented in secondary schools. There is also a current gap in the literature with regards to the universality of language and operational definitions supporting MHP in schools.

For example, there were five unique names (SEL, PEPP, M-WSA, Mentally Healthy Schools Framework, School-Based Pathway to Care Model) found in this scoping review representing a MHP school program, which can no doubt create confusion amongst school stakeholders when deciding best practice strategies for MHP in schools.

Further, the results of the studies identified in the scoping review were compared with the findings from Storey et al. (2016) in which the authors identified essential conditions for the implementation of CSH to achieve changes in school culture and improvements in health behaviours of students. The essential conditions identified by Storey et al. (2016) were categorized as core conditions and contextual conditions. Core conditions included: (a) students as change agents, (b) school-specific autonomy, (c) demonstrated administrative leadership, (d) dedicated champion to engage school staff, (e) community support, (f) evidence, and (g) professional development. Contextual conditions included: (a) time, (b) funding and project supports, and (c) readiness and prior community connectivity. Any condition that was found to be relevant in the implementation process, but not previously mentioned by Storey et al. (2016) was included as an "other condition." Finally, to provide readers with an overview of how mental health promotion programs are currently being implemented in secondary schools, I included a frequency table illustrating the number of times each condition was found within the studies. The results from this section indicated that a one-size-fits-all implementation framework to mental health promotion programs in secondary schools may be unrealistic; however, there are specific implementation criteria that will contribute to the effectiveness of the intervention.

It is well-known among public health professionals and educational stakeholders that schools are a crucial forum for promoting adolescent mental health (Center for Disease Control and Prevention [CDC], 2021). Despite this knowledge and the understanding of protective

factors that contribute to positive mental health such as physical literacy, mental fitness, proper nutrition, and social-emotional learning; universal mental health promotion initiatives have yet to be systematically institutionalized in schools (CMHA, 2014). Schools are complex and part of a dynamic system that is influenced by the interaction of numerous factors (Durlak, 1998) that are often overlooked in new programming attempts. If mental health programs are to make a real impact on student behaviour, schools need to do a lot more than simply adding SEL skill-building into their existing curriculum (Van Dusen, 2020). An entire culture change of the whole school community may be needed in order to prioritize mental health. School culture generally refers to the beliefs, perceptions, relationships, attitudes, and written and unwritten rules that shape and influence every aspect of how a school function (Humpries & Burns, 2015). Implementation of programming into a complex system such as a school requires specific criteria to be met in order to create desired culture change.

A number of studies have identified CSH as an effective framework for implementing mental health promotion in schools (Alberta Government, 2021; Edmonton Catholic Schools, 2018; Weare, 2011); yet research is limited on how schools operationalize a comprehensive integrated approach to promoting mental health in children. Storey et al. (2016) uncovered the conditions necessary for successful operation of CSH in relation to a proven best practice model of implementation that has demonstrated positive changes to school culture and improvements in health behaviours. The results from this research highlighted the relevance of utilizing CSH as a framework for universal mental health implementation. The essential conditions identified by Storey et al. (2016) were then used to frame this scoping review to determine what processes are necessary to exert influence on mental health outcomes and create whole-school culture change. The following sections are organized into levels of importance, based on how many of the 10

studies used each component within their MH program (low level of importance – less than four of the 10 studies; moderate level of importance – 4-6/10; high level of importance – 7-10/10). When discussing the components, I am referring to the 13 'critical components' found to be necessary for implementing mental health promotion in secondary schools through a CSH framework. The 13 components combine the essential conditions from Storey et al. (2016) and the other conditions that were found in addition to the Storey et al. (2016) essential conditions.

Low Level of Importance

The following scoping review found that none of the conditions were identified as 'low level of importance'. With this in mind, it can be determined that the "essential conditions" necessary to operationalize CSH at a school level are also identified as necessary to successfully implement universal mental health promotion in schools. Other studies have also utilized some or all of the essential conditions identified by Storey et al. (2016) in the promotion of healthy eating and physical activity. These studies have shown that implementation conditions such as having a school health facilitator (champion), involving all stakeholders within a school community, professional development, and evidence-informed practices are necessary to ensure success (Samdal & Rowling, 2011; Schwartz et al., 2010). For instance, Schwartz et al. (2010) examined the conceptualization, tailoring and implementation of a CSH initiative entitled the APPLE Schools project (Alberta Project Promoting Active Living and Healthy Eating). The results of this study and others (e.g., Samdal & Rowling, 2011) show that some essential conditions must be present in order for health promotion interventions and initiatives within school context to display some effectiveness.

Moderate Level of Importance

Four of the 13 components (31%) were identified as 'moderate level of importance' to the implementation of whole-school mental health programming. These components included: (1) students as change agents, (2) a dedicated champion to engage school staff, (3) time, and (4) district-lead support. Surprisingly, only five of the 10 studies mentioned students as change agents (Anwar-McHenry et al., 2016; Bell et al., 2017; Halliday et al., 2019; Hamedani & Darling-Hammond, 2015; Stillman et al., 2018) and of these, only one (10%) cited the students as members of the initial planning committee (Halliday et al., 2019). This is somewhat contradictory to Storey et al. (2016) who indicated that students are at the heart of leading a CSH approach, and their voices, leadership, and enthusiasm create increased engagement. It is not to say the students were not treated as valuable members of the school community, rather their input was not utilized during the planning and delivery of programming. The studies reviewed may have benefited from involving students more in the implementation process as they can serve as change agents and create buy-in through peer-to-peer interactions and engagement with family members. Research conducted by Sulz et al. (2016) highlighted the benefits of involving students in the process of school change initiatives. Specifically, Sulz et al. (2016) explored the experiences and motivations of students involved in a CSH model aimed at improving the health behaviours of students (e.g., physical activity and healthy eating). Findings showed that school-based health promotion initiatives that allow for, and include, students in the planning and implementation of education change strategies would likely enhance alignment with school needs and student interest and increase sustainability of programming (Sulz et al., 2016). Despite this scoping review only indicating that five of the 10 studies discussed students as change agents, current literature supports the involvement of students in the change process. As a result,

students should be considered an integral component of whole-school mental health promotion initiatives.

A dedicated champion was highlighted as significant in five of the 10 studies (Aidman & Price, 2018; Anwar-McHenry et al., 2016; Hudson et al., 2020; Kutcher & Wei, 2013; Meyers et al., 2018). The studies that failed to mention a dedicated champion within the school, did however mention "leaders" or a "team" with decision-making power. By highlighting just one person as the "champion" (outside of the leadership team) might become a barrier, as buy-in from *all* school staff is crucial for sustainability. Having one facilitator who is enthusiastic, proactive, passionate, and deeply interested in the project is no doubt beneficial; yet, in order to truly shift a school culture, all members of the school community need to play a role (Storey et al., 2016). Schwartz et al. (2010) discusses the importance of having a dedicated "champion" to lead CSH initiatives. APPLE Schools, a school-focused health promotion initiative that utilizes a CSH approach, refers to these "champions" as School Health Facilitators. The facilitators are employed in schools as an integral member of the school staff, and report to the school principal as well as the project administration. The selected facilitators have diverse backgrounds in nutrition, physical activity, education and management underwent a six-week training session prior to being placed. Their role throughout the implementation process was recognized as integral to the overall success of the APPLE Schools Project (Schwartz et al., 2010).

Another implementation component that was categorized as moderate was time. Enough time needs to be dedicated to a project for implementation and success. Interestingly, only four of the 10 studies reviewed mentioned time as a factor for implementation success (Aidman & Price, 2018; Kutcher & Wei, 2013; Hamedani & Darling-Hammond, 2015; Meyers et al., 2018). The reason for this may have been that time was grouped with other components and not

explicitly discussed as essential. For example, professional development and context and structure of mental health programming were cited in almost all of the studies reviewed (10/10 and 9/10). While these factors do not indicate additional time explicitly, it is inferred that additional time was necessary for professional development and timetable adjustments. Sulz et al. (2016) highlighted the importance of time for planning and preparation in a CSH project. The authors concluded that for a CSH programme to be effective, time needs to be allocated to development and implementation, as the new programme is not part of teachers' regular workload (Sulz et al., 2016). The results from the current study indicated that time (on its own) could be removed as an essential condition for successful implementation, as other conditions such as professional development and context and structure imply its value.

Finally, district-lead support was discussed in six of the 10 research studies (Aidman & Price, 2018; Anwar-McHenry et al., 2016; Halliday et al., 2019; Hudson et al., 2020; Kenziora & Osher, 2016; Meyers et al., 2018). This condition was not listed as an "essential condition" for successful implementation of CSH in Storey et al. (2016). However, since this higher-level of support was found in the majority of reviewed studies, it was concluded that it was a necessary factor for implementation success. EverActive Schools (2021), a leader in CSH in Alberta, believes that leadership and support at district and/or provincial/territorial levels sets the tone in order to prioritize CSH on the school agenda and provides opportunities for resources (such as time and funding) to be allocated. Policy development (at the district level) has been deemed by researchers as critical for the implementation success of CSH initiatives (Samdal & Rowling, 2011). An example of a successful district-lead mental health promotion program was the Collaborating Districts Initiative (CDI) (Kenziora & Osher, 2016). The CDI attempts to address fragmentation by shifting the focus of SEL implementation from schools to whole districts. The

goal of the CDI is to make SEL systematized into the district's ongoing efforts - rather than a singular evidence-based program. The studies that mentioned district support saw it as a key factor in successful implementation (Kenziora & Osher, 2016). Therefore, it can be determined that a top-down, bottom-up approach to implementation may be the most effective. In a top-down implementation, the initiative is created and driven by centralized leadership.
When implementation is undertaken from the bottom-up, an institution moves forward based upon building stakeholder consensus and culture at a grassroots level. The results from this scoping review indicate that in order for universal (whole-school) mental health programming to be implemented successfully, the intervention may require both a top-down and bottom-up approach.

High Level of Importance

The results of the scoping review identified nine of the 13 components (69%) as 'high level of importance' to the implementation of whole-school mental health programming. Of the nine components that were listed as 'high level of importance', four were uncovered in all of the reviewed studies. These were: (a) school-specific autonomy, (b) community support, (c) professional development, and (d) focus on staff development (wellness, relationships, competence). School-specific autonomy recognizes that every school is unique and comes with its own set of strengths and barriers prior to implementation (Schwartz et al., 2016). As such, every research study reviewed highlighted the importance of an initial needs assessment prior to implementation. A needs assessment is a systematic process for identifying problems, gaps and opportunities so that an organization or entity can make meaningful improvements (Healthier Generation, 2018). Even the district-lead initiatives encouraged school communities to be flexible in choosing how to implement the program. Ultimately, the goal of every unique

program was to improve the mental health and well-being of a school community. For example, Hamedani and Darling-Hammond explored how: (a) SEL is conceptualized and implemented at three urban high schools, (b) SEL is informed or shaped by a social justice education perspective, (c) these schools practice SEL to meet the needs of their respective urban, diverse student communities and with what results, and (d) does effective SEL practice shape students' educational experiences and provide them with critical psychological resources that foster personal, social, and academic success? The authors concluded that as long as implementers have decision-making power and influence over an entire school community, there is typically no "one right method" to delivering and embedding SEL culture within a school (Hamedani & Darling-Hammond, 2015). Mental health promotion in schools (this includes SEL programs) should be flexible, build on the school's strengths and assets, be tailored on school-specific evidence, and provide a sense of school ownership (Neth et al., 2020). Although flexibility and choice are important concepts to consider throughout the implementation process, finding a balance between autonomy support and competence support is essential. Meaning that, allowing flexibility in design may support the need for autonomy, yet too many options may instead lead to resentment at the effort required in decision-making (Iyengar & Lepper, 2000). Sulz et al. (2016) noted the importance of student autonomy in decisions regarding health promoting school initiatives. Just as it seems imperative for schools to have autonomy when implementing schoolwide programming, Sulz et al. (2016) stated that it seemed "critical that teachers support students' autonomy to effectively involve them in educational change initiatives" (p. 995).

The other three components - community support, professional development and focus on staff development - all emphasize the importance of establishing strong internal and external relationships together with building trust and support of all stakeholders in the school

community. Trusting relationships help school stakeholders build competency, enthusiasm, and ownership, which can lead to a more natural implementation of health promotion (Storey et al., 2016). Professional development was used both prior to and throughout the implementation process in the studies that were reviewed. For example, through CASEL's Collaborating District Initiative (CDI), they provided professional development consultation to every participating district followed by quality SEL professional learning to all schools. CASEL also provided ongoing professional development and job-embedded support to all participating schools (Kenziora & Osher, 2016). This was deemed as necessary for understanding the project and building self-efficacy amongst staff. Sulz et al. (2016) found that low self-efficacy towards implementation negatively impacts teachers' motivation for change. Ongoing professional development is also essential for strengthening the knowledge and skills of implementers and staying fresh and focused throughout the implementation process. Fullan (2007) discussed the importance of competence perceptions. If teachers do not perceive they have competence and the necessary time to implement change, they will not perceive the change as achievable and therefore avoid the situation all together.

One of the factors found to influence the implementation of universal mental health initiatives in schools was staff development. Surprisingly, this was not an essential condition identified by Storey et al. (2016). While many school districts support addressing students' SEL and mental health initiatives, far fewer districts have a significant focus on the mental health of their staff (Sisask et al., 2013). Yet a plethora of research provides a strong rationale for addressing staff well-being. For instance, Sisak et al. (2013) conducted a study and collected data from 2537 teachers across 159 randomly selected schools as part of The Saving and Empowering Young Lives (SEYLE) in Europe. The SEYLE project was conducted with the purpose of

drawing attention to developing mental health problems among youth and was designed to evaluate a variety of school-based interventions. One of the elements of the project was to evaluate teachers' attitudes and knowledge related to pupils' mental health issues and their own psychological well-being as well as their satisfaction with the school environment. Sisak et al. (2013) found that poor staff mental health may impact students' well-being and ability to learn; therefore, supporting staff well-being will ultimately benefit students. Sisak et al. (2013) argued:

> If teachers' own mental health needs are neglected, they may be unable or unwilling to consider mental health problems of the young people they teach. When teachers' emotional health is in jeopardy, it reduces their ability to support and respond to pupils appropriately, which creates further difficulties within the classroom and more emotional distress for pupils and teachers alike. (p. 3)

Kutcher and Wei (2013) emphasize the importance of "Teacher-First" training. In order for teachers (and all school staff) to successfully implement SEL, they must have strong SEL skills themselves. As such, social-emotional assessments were used to develop an understanding of their own level of emotional intelligence (EQ) and how to apply it to improve their teaching, classroom management and the social-emotional skills of their students (Stillman et al., 2018). Teachers who develop these competencies themselves are more likely to support students' wellbeing and achievement and are more likely to feel satisfied that they are being effective (Jones et al., 2013). This leads to greater self-efficacy in teaching, deeper and more meaningful relationships with coworkers and students, and the ability to handle stress more effectively if and when it occurs.

The other 'high level of importance' components include: (a) demonstrated administrative leadership (7/10), (b) evidence (9/10), (c) funding and project supports (9/10), (d)

readiness and prior community connectivity (9/10), and (e) context and structure (9/10). School administrators play an invaluable role throughout the process of mental health promotion and are key stakeholders in facilitating culture shifts within school communities. While not all studies highlighted the importance of administrators during the implementation process, without their support, it would be extremely difficult for decisions to be made and school culture to change. The importance of good leadership as evidenced by supportive decision making, physical presence in committee meetings, and role modelling was articulated in the scoping review as a key factor to implementation success. The value of having administrative support was highlighted in Roberts et al. (2015) in which the role of the principal was examined in the implementation of a CSH project aimed at creating a healthy school culture. The findings indicated that principals play a critical role in providing direction for a school and in determining the overall culture. School administrators are also key players in the implementation of projects that strive to make environmental-level changes within the school. The results of Roberts et al. (2015) are consistent with other research findings indicating that effective leaders are responsive to a school's changing context (Habegger, 2008). Habegger (2008) states that creating a positive school culture – one that promotes learning and engagement for all students and teachers – is imperative and the underlying reason that schools create success. In these successful schools, the principals fully understood the importance of positive school culture and how it helps student achievement and staff development in the school building (Habegger, 2008). The findings from this review are well-aligned with Habegger (2008) and Roberts et al. (2015) indicating that administrators play an invaluable role in any whole-school decision and positive culture change, including the implementation of mental health promotion programs.

The use and collection of evidence is essential for the planning, refining and supporting of the implementation of CSH (Storey et al., 2016). This is in the form of both research findings relating to health behaviours and environmental-level changes, as well as more informal evaluations. In regard to planning, stakeholders indicated that the research evidence collected in the form of individualized school reports allowed them to make decisions based on their school context. For example, in Bell et al. (2017), formative research was collected collaboratively to determine a single SEL or school climate-related area of concern prior to implementation. The importance of collecting evidence of school needs prior to the implementation process is also supported by Schwartz et al. (2010). Apple Schools, in partnership with EverActive Schools, created a Health Assessment Tool for Schools (HATS) survey to help assess the strengths and weaknesses of each school and identify each school's capacity for health promotion (Schwartz et al., 2010). This checklist helps school communities define the essential elements needed to become a healthy school community and provides an assessment of the school's current capacity. This information is used in mapping the assets available to the school community and in setting specific goals for schools that guide their yearly action plans. Once the action plans are implemented, the initial evidence collected provides an opportunity for schools to reflect on achievement of goals and objectives throughout the project.

The use of evidence-based programming and practices was cited the most often within the scoping review. Using evidence-informed programming creates a level of competency and buy-in amongst all school staff (Storey et al., 2016). For example, when questions of "why" arise during the initial stages of implementation, evidence-informed programming has proof to support its worth to all stakeholders involved. The final stage of the implementation process typically involves reflection, evaluating and celebrating (Alberta Health Services [AHS], 2017). This type

of evidence collection allows each school community to not only celebrate their successes but also to adapt the intervention on the basis of findings. Bartelink et al. (2019) supports the value of collecting evidence throughout the implementation of CSH referring to the process as "feedback loops". Feedback loops develop in two directions: on the one hand, the school context is expected to impact the health promoting (HP) change process, on the other hand, the context may respond to HP changes, which may result in a new way of working in the school context. Feedback loops may be positive, thereby amplifying the changes, or negative, thereby counteracting the changes. Either way, implementers need to be aware of and track the progress of new programs in order to evaluate any outcomes effectively.

Funding and support were recognized as invaluable for both the initial stages of implementation (resources, professional development, coaching) as well as sustainability throughout. Only one study failed within the scoping review to mention any direct funding or project support when implementing schoolwide SEL. The remainder of studies reviewed had support through external organizations (e.g., CASEL), research companies or foundations, or district initiatives (e.g., Mindfulness, Whole School Approach, Act-Belong-Commit or MindMatters) that were oftentimes supported through government grants. This finding provides more evidence to support why a top-down, bottom-up approach to implementation may be the most effective strategy for universal mental health programs. Similarly, Gleddie (2010) reported that district policy supporting CSH was in fact a critical component necessary for implementation. His findings suggest the importance of involving all stakeholders, the need for both grassroots and top-down strategies, recognition of the need for both rigidity and flexibility, and the importance of embedding health into the procedures, actions, and frameworks of a school authority (Gleddie, 2010).

Readiness and prior community connectivity were seen as necessary to ensure stakeholders felt understood, enthusiastic, confident, and connected with the decision to implement SEL in the school's culture. Transforming a school's culture is difficult and takes time (Morrison & Peterson, 2013). It demands 'buy-in' and commitment from all stakeholders and the organizational support and structure in place prior to implementation for the greatest impact over time. The studies reviewed emphasized the necessity of completing a needs assessment prior to implementation. This involved reaching out to all community stakeholders prior to decisions being made. Examples included SEL assessments of staff and students, professional development, community nights hosted by "mental health experts", school wide assemblies with inspirational messaging, and the creation of committees with enthusiastic leaders who positively influence others on staff. Van Dogen et al. (2019) found using a community-based approach as an effective framework for school-based health promotion aimed at stimulating healthy physical activity and dietary behaviour. This approach is consistent with findings from the CSH framework in that it builds on the community capacity of multiple stakeholders, empowering them to design and implement tailored activities that are supported by the whole school community. By involving all influential stakeholders with the opportunity to identify, prioritize, plan, implement, evaluate and sustain health-promotion activities, schools are building capacity beyond their walls that could potentially contribute to empowering community members to adapt evidence-based interventions to their own real-life situations (Van Dogen et al., 2019).

Finally, context and structure were revealed as a critical component of successful implementation. In a "healthy" school, students have many opportunities to engage with making healthy decisions - in the classroom, and in every aspect of their school experience. If schools

want students to take mental health education seriously and buy-in to whole school initiatives, then decisions surrounding mental health also need to be taken seriously. For example, if education supporting mental health is left out of the daily schedule, then our students will rightfully view it as less important than other daily 'core' subjects. The consensus across the majority of schools in this scoping review was that the concept of positive MH strategies (e.g., SEL) is a difficult one to explain, and in order to develop and foster positive mental health over time, input was required at the curriculum level.

The level to which positive mental health strategies were integrated into the formal curriculum varied significantly between schools and, to a small extent, over time. At the most integrated level, schools had positive MH embedded in all decisions and instruction. It was not treated as an "add-on" or something "extra" that teachers had to incorporate into planning. Ideas supporting MHP were found in the school's mission statement and used as the number one pillar for decision making. In addition, teachers received ongoing professional development and planning time with coaches/experts for strategies and advice on best practices for MHP. The most successful programs were multifactorial, with curricular components, that led to changes in school ethos and culture, and included training of the school-based program leaders. It was essential that programs chosen and implemented were based on solid research evidence and included ongoing evaluation to ensure proper implementation and outcomes were being achieved. These findings are consistent with Rowling and Weist (2004) who present a summarized review from the first meeting with the International Alliance for Child and Adolescent Mental Health and Schools on the growth, improvement and sustainability of school mental health programs globally. Their findings indicate that successful implementation of mental health promotion can only be achieved and sustained through efforts and support of an

entire school community, including the collaborative partnerships with a range of public health services. In addition, school administrators and policymakers play an essential role through their leadership, resource support and decision-making powers; however, teachers, parents and students need to be fully involved and, in many instances, are the drivers of cultural change efforts within schools (Rowling & Weist, 2004).

Conclusion

Canadians are living through an unprecedented time of extreme mental health concerns. Even before the COVID-19 pandemic hit, mental health problems were on the rise. Following the outbreak, Canadians have reported a significant decline in their mental health (44% of women and 32% of men) (CMHA, 2019). One group that is particularly vulnerable to facing mental health challenges is adolescence (Youth Mental Health Canada [YMHC], 2020). Approximately one in five Canadian children and youth are currently facing a mental health challenge (CMHA, 2019) and experts warn that a historic wave of mental health problems is fast approaching with the fallout of the COVID-19 pandemic. Those who fare well in the face of trauma, adversity or stress have something in common: resilience. Resilience is the ability to cope with difficulty, and also to embrace it—and even to allow for profound personal growth (CMHA, 2019). Building emotional resilience, along with other protective factors such as self-esteem, positive thinking, problem-solving and social skills, stress management skills and feelings of mastery are at the heart of mental health promotion programs in schools.

Schools provide an ideal environment for mental health promotion because they reach large groups of children during their formative years of cognitive, emotional and behavioural development. As a result, educators have a shared responsibility alongside parents and community partners to provide positive learning experiences that promote mental health in

schools. Historically, a common approach to school-based health promotion has been to focus on specific, individual-level student health-related behavioural change (Stewart, 2008). While these initiatives are important and involved in whole-school health promotion, they fail to recognize the longer-term health improvements of initiatives that are integrated into a multi-disciplinary, multi-faceted health promotion strategy that supports sustained change.

There is a growing need to consider the factors that make mental health promotion in schools more or less successful, as well as the mechanisms involved (Slemp et al., 2017). These findings are consistent with a recent environmental scan and literature review completed by the Alberta Teachers' Association (ATA) (2019) of related K-12 well-being/wellness program initiatives and activities in Canadian schools. The ATA found that although the literature supports a multifaceted, whole-school approach, there are relatively few studies that have examined initiatives incorporating all components of a CSH approach. Rather, the majority of available research on CSH focuses on certain components of healthy school community frameworks such as those found in the physical dimension of health (e.g., increases in PA, decreases in body mass index, eating more fruits and vegetables). The purpose of this research paper was to narrow the gap between "knowing what to do" and has determined actual factors and outcomes for real world implementation of mental health promotion in secondary schools. These factors and their implications are summarized in the following paragraph.

The implications from this study identified a number of critical components necessary for the successful implementation of mental health promotion in schools. First off, mental health promotion in schools may be most successful when programs are implemented using a top-down, bottom-up approach. A framework where the initiative is created and driven by centralized leadership, yet schools are given the autonomy to move forward based upon building stakeholder

consensus and culture at a grassroots level. This review also suggests that staff wellness and professional development are essential factors to consider when whole-school positive mental health is the goal. Staff buy-in is key for successful implementation and in order to achieve this, stakeholders must fully understand (and practice) CSH every day. Positive leadership creates an ideal learning environment where staff and students connect and understand, feel safe and confident and behave intentionally in order to promote positive mental health. “Protecting the current and future health of our children is our collective societal responsibility and our schools provide a powerful platform to provide evidence-based health education to all of our children,” (Van Dusen, 2020).

Canadians are spending too much, too late on reactive treatments for preventable diseases. Schools are the best (and possibly only) means to ensure that all children obtain the health knowledge and skills they need for long and productive lives. For health promotion to be effective, educational stakeholders need to understand why health demands more attention and requires the platform in schools to create positive change. Health care costs are at an all-time high across Canada (Canadian Institute for Health Information [CIHI], 2021) and education in Alberta is often at the receiving end of both criticism and complaints; yet the potential synergy between the two sectors, and their fundamental interdependence, have been ignored long enough. Given the current state of mental health in Canadian adolescents and the opportunity that schools have in public health promotion, all decision-making stakeholders should narrow their focus to how comprehensive school health can be systematically implemented.

Strengths and Limitations

This scoping review provides a comprehensive and structured search through the literature, capturing all relevant information, providing reproducible results, with a decrease in

any potential bias from flawed implementation. The research findings were summarized thoroughly and gaps in universal mental health promotion in schools were identified.

This research is limited to the specific publications chosen for the final review. Mental health promotion in schools is a 'hot topic' and found in a large number of research papers (9,023 sources). However, how schools implement a comprehensive, integrated approach to promoting mental health in school settings continues to be a significant issue and under researched (Stewart, 2008). This research paper focused on discovering the critical components necessary for implementation of whole-school mental health promotion in K-12 schools and more specifically, adolescent-aged (12-18 years) students or secondary schools; not necessarily in the details (or the outcomes) of the given programs. Additionally, the results from this study highlight the inconsistencies with regards to the universality of language and definitions supporting MHP in schools. As a result, it is very possible that research was missed for inclusion in this study.

The specific exclusion criteria limited the number of studies included in the final review. Only English peer reviewed research-based publications from the year 2010 (and on) were included in the final review. The research was also limited to only include evidence from Canada, the United States, Australia, New Zealand, and the United Kingdom. Given that North American education systems work largely with local schools and teachers in these Western contexts, we chose to limit the extent of the search to these demographics. As a result, a number of sources were excluded that could have provided a more extensive scoping review. Also, while much of the literature review contained Canadian content, only one of the 10 studies included in the scoping review was Canadian. This not only presents a limitation in the current study, but

also for any Canadian researcher interested in the implementation process of mental health promotion in secondary schools.

Additionally, scoping reviews have limitations by design. This study included a sizable number of research papers in the initial screening process. A second reviewer was utilized at this stage to assist the primary reviewer with identifying sources for potential inclusion. The primary researcher had a privileged relationship with the data generated and as a result there may have been selection bias during the initial screening process.

Future Implications

There are many research examples (including Storey et al., 2016) that have explored the components necessary to successfully implement CSH; however, most of these studies focus on the physical dimension of health (e.g., physical activity, nutrition, sleep) rather than on mental health. Due to the complexity of mental health, there is limited real-world guidance or examples of how the processes for culturally specific programming (e.g., mental health promotion programs) unfold (Bell et al., 2017). Therefore, future research, using the 13 critical components found in this study to be necessary for the implementation of whole-school mental health programming, is necessary. Additionally, more Canadian research on the implementation of mental health promotion programs in secondary schools is necessary. It was concerning that the results from this scoping review yielded only one Canadian study that researched the implementation of whole-school mental health programming. Given the current state of our Canadian children's mental health, school stakeholders need to step up and create an easily understood and practical framework for educators to successfully facilitate the implementation of mental health programming.

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Appendix

Database	Search Strategy
MEDLINE Ovid MEDLINE(R) ALL 1946 to May 28, 2020	1. ((mental health or health promot* or wellbeing or well-being or wellness) adj3 (promot* or treatment* or program* or intervention* or workshop* or campaign* or school* or literacy)).ti,ab,kf. 2. whole child.mp. 3. (social adj2 emotional learning).mp. 4. 1 or 2 or 3 5. (pubescen* or puber* or juvenile* or teen* or youth* or young adult* or young* people or adolesc* or high school* or junior high or secondary school* or middle school*).ti,ab,kf. 6. exp Adolescent/ 7. 5 or 6 8. exp *School Health Services/ 9. school*.ti. or school*.ab. /freq=2 10. (whole school* or school wide or schoolwide).mp. 11. universal program*.mp. 12. (strength* based adj2 (education* or approach or learning)).mp. 13. 8 or 9 or 10 or 11 or 12 14. 4 and 7 and 13 15. limit 14 to yr="2010 -Current"
Embase Embase 1974 to 2020 May 28	1. ((mental health or health promot* or wellbeing or well-being or wellness) adj3 (promot* or treatment* or program* or intervention* or workshop* or campaign* or school* or literacy)).ti,ab,kw. 2. whole child.mp. 3. (social adj2 emotional learning).mp. 4. 1 or 2 or 3 5. (pubescen* or puber* or juvenile* or teen* or youth* or young adult* or young* people or adolesc* or high school* or junior high or secondary school* or middle school*).ti,ab,kw. 6. exp adolescent/ 7. 5 or 6 8. exp *school health service/ 9. school*.ti. or school*.ab. /freq=2 10. (whole school* or school wide or schoolwide).mp. 11. universal program*.mp. 12. (strength* based adj2 (education* or approach or learning)).mp. 13. 8 or 9 or 10 or 11 or 12 14. 4 and 7 and 13 15. limit 14 to yr="2010 -Current"

PsycInfo APA PsycInfo 1806 to May Week 4 2020	1. ((mental health or health promot* or wellbeing or well-being or wellness) adj3 (promot* or treatment* or program* or intervention* or workshop* or campaign* or school* or literacy)).tw. 2. exp Mental Health Programs/ 3. whole child.mp. 4. (social adj2 emotional learning).mp. or exp Social Emotional Learning/ 5. 1 or 2 or 3 or 4 6. (pubescen* or puber* or juvenile* or teen* or youth* or young adult* or young* people or adolesc* or high school* or junior high or secondary school* or middle school*).tw. 7. exp School Based Intervention/ 8. school*.ti. or school*.ab. /freq=2 9. (whole school* or school wide or schoolwide).mp. 10. universal program*.mp. 11. (strength* based adj2 (education* or approach or learning)).mp. 12. 7 or 8 or 9 or 10 or 11 13. 5 and 6 and 12 14. limit 13 to yr="2010 -Current"
ERIC ERIC 1965 to March 2020	1. ((mental health or health promot* or wellbeing or well-being or wellness) adj3 (promot* or treatment* or program* or intervention* or workshop* or campaign* or school* or literacy)).tw. 2. exp Mental Health Programs/ 3. whole child.mp. 4. (social adj2 emotional learning).mp. 5. 1 or 2 or 3 or 4 6. (pubescen* or puber* or juvenile* or teen* or youth* or young adult* or young* people or adolesc* or high school* or junior high or secondary school* or middle school*).tw. 7. exp Adolescents/ or exp Early Adolescents/ or exp Late Adolescents/ or exp Youth/ 8. exp Secondary School Students/ 9. 6 or 7 or 8 10. exp School Health Services/ 11. school*.ti. or school*.ab. /freq=2 12. (whole school* or school wide or schoolwide).mp. 13. universal program*.mp. 14. (strength* based adj2 (education* or approach or learning)).mp. 15. 10 or 11 or 12 or 13 or 14 16. 5 and 9 and 15 17. limit 16 to yr="2010 -Current"
Google Scholar	(mental health promotion OR health promotion intervention OR social emotional learning OR "whole child") AND (adolescents OR youth OR teenagers OR young adults) AND (whole school OR schoolwide OR universal program OR strengths-based approach)