

Skills4Life: Final Evaluation Report

JUNE 2024



School
Mental Health
Ontario

Santé mentale
en milieu scolaire
Ontario

Overview

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Section 1: Background of *Skills4Life* Co- development



Youth mental health: A pressing public health issue

Youth mental health has become a pressing public policy issue across Canada. Adolescence is known as a period of heightened vulnerability for the onset of various mental health disorders (Government of Canada, 2006; Jawarska & MacQueen, 2015; Kessler et al., 2005; Scheiner et al., 2022; WHO, 2020), which are the leading cause of mortality and morbidity among adolescents and young adults (Jones, 2013; Mokdad et al., 2016). In addition, adolescence and young adulthood is a time of transition, which can have both positive and negative implications for mental health (Hendrickx et al., 2020; Nielsen et al., 2017; Zimmer-Gembeck & Skinner, 2008). In the transition from high school, youth may move from one academic setting to another or directly to work; many also leave home for the first time and learn how to live independently (Aseltine & Gore, 2005; Ruberman, 2018).

At present, there is evidence that rates of distress and more serious mental health problems are increasing among Canadian youth (Findlay, 2017; Wiens, 2020). Indeed, youth have experienced increased distress due to the COVID-19 pandemic, both in Canada (Courtney et al., 2020) and elsewhere (e.g., Creswell et al., 2021; Sampogna et al., 2021). During the pandemic, 57% of Canadian adolescents between 15 and 17 reported that their mental health had worsened (Children First, 2020; Statistics Canada, 2022). The pandemic has had lasting effects, with fewer youth reporting good mental health - since the pandemic, 62% of Canadian adolescents aged 15 and 24 reported poor mental health, compared to 40% prior to the pandemic in 2018 (Statistics Canada, 2022).

Yet research also indicates that most youth do not pursue or receive services for mental health concerns (Jones, 2013; Merikangas et al., 2011; MHASEF, 2017; Rickwood et al., 2014; Waddell et al., 2002). Although more children and youth are reporting mental health difficulties (including 22% of students in Ontario who meet diagnostic criteria for a mental health disorder), only 17- 40% of children and youth typically seek formal mental health services (Georgiades et al., 2019). However, 44% of children and youth in Ontario would seek mental health services at school if available (School Mental Health Ontario).

At the post-secondary level, these challenges are even more prevalent. Data released in 2022 confirmed that mental health challenges persist across Canadian post-secondary campuses, with the majority of students reporting that the pandemic had either worsened their pre-existing mental health challenges (74%) or created new ones (61%; Abacus, CASA, & MHCC, 2022).] Interestingly, a study conducted in Toronto found that undergraduate students who had experienced distress before the pandemic were more resilient to the negative impacts of the pandemic, as they may have previously learned various coping strategies (Edwing et al., 2022). Universal, school-based SEL prior to the post-secondary transition may also aid in boosting students' knowledge of coping strategies.

The promise of universal, school-based SEL

Providing youth with accessible mental health support as part of mental health promotion strategies at the secondary school level has the potential to provide lifelong benefits as they navigate formative decisions and strengthen skills to manage adversity.

Supporting the development of social and emotional learning (SEL) skills is one way to promote and protect youth mental health and well-being through times of transition, by building life-long coping skills. SEL is typically defined as ***“the process of acquiring core competencies to recognize and manage emotions, set and achieve positive goals, appreciate the perspectives of others, establish and maintain positive relationships, make responsible decisions, and handle interpersonal situations constructively”*** (Payton et al., 2008, p. 5-6).

In Ontario, the active ingredients of evidence-based SEL programs (PSSP, 2017) have been identified as: (1) stress management and coping, (2) healthy relationships, (3) positive motivation and perseverance, (4) identification and management of emotions, (5) self-awareness and sense of identity, and (6) critical and creative thinking (executive functioning). There is a growing body of research indicating a consistently positive relationship between high-school SEL and youth development outcomes, including positive social behaviors, academic achievement, fewer conduct problems, and less emotional distress and substance abuse (Taylor et al., 2017; Sancassiani et al., 2015; Corcoran et al., 2018).

In many countries, schools represent the ideal setting for teaching SEL skills, given their capacity to identify students in need, their role in facilitating service delivery such as health promotion, and the feasibility of doing so in a universal manner (Short & Manion, 2012; SBMHSA, 2013).



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Secondaire

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Apprentissage socioémotionnel
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Culturally safe and responsive SEL

Integrating ***culturally safe*** and responsive approaches to SEL skill-building is an important first step to enhancing students' social emotional development and ameliorating health and educational disparities (Mahfouz & Anthony-Stevens, 2020). Culturally responsive SEL interventions aim to put in practice cultural safety principles by both developing capacity for cultural competence throughout institutions and acknowledging historical and relational power imbalances (Curtis et al., 2019; Lavery et al., 2017).

Evidence suggests that development of social emotional competencies and self-awareness is strongly linked to emotionally engaging youth through their cultural experiences (Rodriguez-Izquierdo, 2018). A young person's learning and identity are shaped by cultural practices, situated life experiences, and many other variables that converge in any given social interaction (Gutiérrez & Rogoff, 2003).

Through reflection, dialogue, and exchange of different understandings of well-being, educators can draw on students' familial and cultural strengths to support mental health and address systemic educational inequities (Mahfouz & Anthony-Stevens, 2020; McCallops et al., 2019). It is important for teachers to understand how students of diverse backgrounds and experiences—including Indigenous, Black, minoritized, 2SLGBTQIA+ students, and students with differing abilities—may experience discrimination. Encouraging dialogue through a variety of SEL skill-building activities can also create opportunities for cultural learning for both students and teachers (Wallace, 2016).



School Mental Health Ontario

School Mental Health Ontario (SMH-ON) works alongside the Ministry of Education, English and French school districts and school authorities, and several provincial education and health organizations to develop a systematic and comprehensive approach to school mental health in Ontario.

SMH-ON provides:

- leadership and guidance about best practices in school mental health
- implementation coaching
- tailored, co-created resources
- mental health literacy for educators and school/system leaders
- training for school mental health professionals
- mental health awareness for parents/families
- a platform for student voice and leadership in school mental health

Through these services, SMH-ON aim to enhance the quality and consistency of mental health promotion, prevention and early intervention programming in Ontario schools.

Since 2014, SMH-ON (formerly School Mental Health Assist) has partnered with SRDC to co-develop the *Skills for Life (S4L)* resource. As part of the Leadership Team, SMH-ON has been responsible for project governance and operational decision-making, in addition to the design, pilot, planning, and evaluation stages of the project.

S4L has been designed to support the Grade 10 Careers Studies course (GLC2O) and complements the two new Mental Health Literacy Modules developed for that course by SMH-ON, to roll-out in the 2024-2025 school year. *S4L* also builds on curriculum supporting positive mental health and well-being in Grades 7, 8, and 9.



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@thrivesmh (student account)



School Mental Health Ontario

Skills4Life: A history of co-development



In 2014, School Mental Health Ontario (SMH-ON) and the Social Research and Demonstration Corporation (SRDC) formed a partnership to develop, implement, and evaluate a classroom resource for Ontario schools to strengthen SEL skills among Ontario high school students. It was thought this could be a promising way to prepare students for the transition from high school and likewise help address the youth mental health crisis.

Over the past ten years of development and evaluation, the *S4L* leadership team has at different times included representatives from the Children's Hospital of Eastern Ontario, the Ontario Ministry of Education, Mind your Mind, and the Ontario Secondary School Teachers' Federation, in addition to SMH-ON and SRDC. A previous version of the resource was based on a program for Grade 7 students that also focused on SEL skills during transitions, then adapted for high school students.

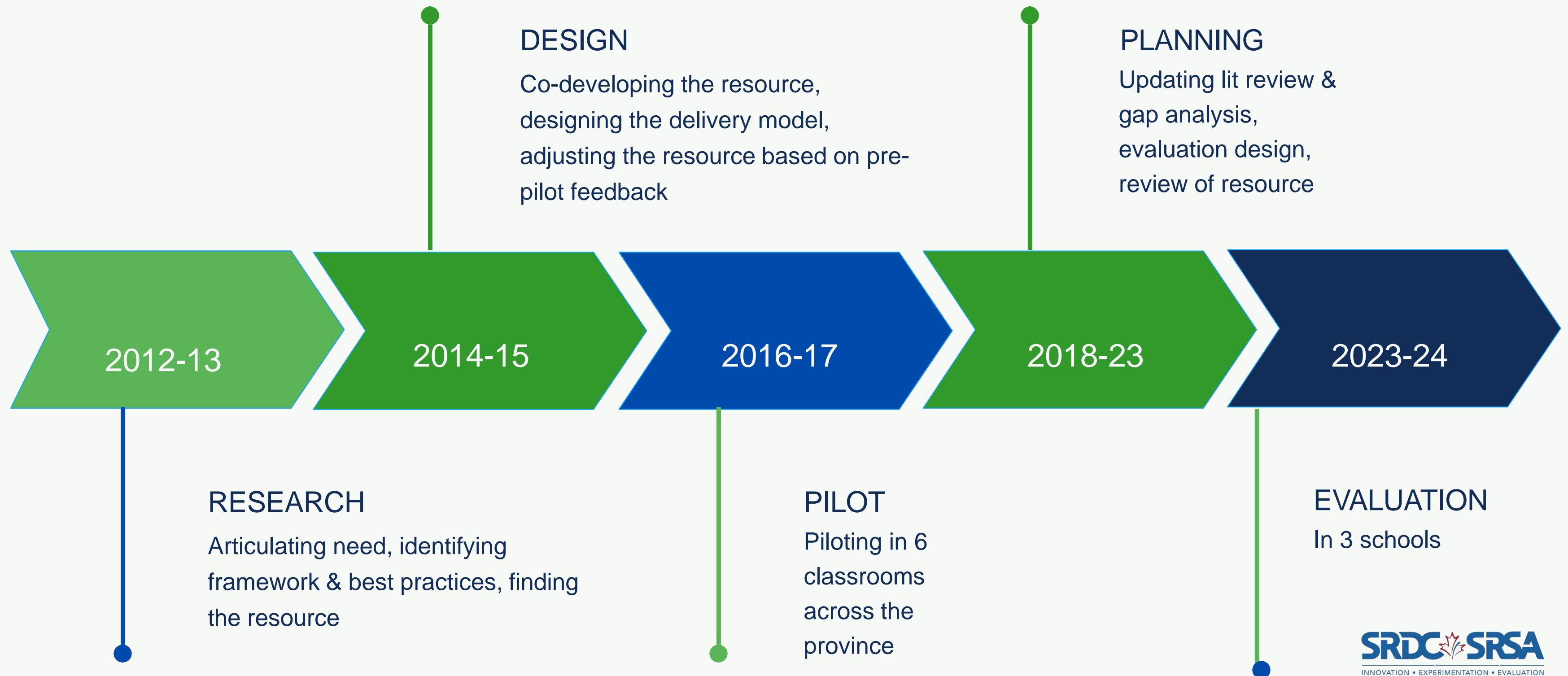


Given *S4L*'s focus on skills development to support students through life transitions, the decision was made to align content with the Grade 10 Civics and Careers course. Advantages of aligning content with this course curriculum included:

- A focus on the concept of transitions
- A universal approach to mental health promotion
- Efforts to support youth with different educational/career pathways

TIMELINE

Key phases of work over 10+ years to develop and evaluate the *S4L* resource



A promising pilot

In the 2016-2017 school year, an implementation pilot was conducted of the *S4L* resource which then comprised nine lessons as well as teacher training and support. The pilot took place in six Ontario schools (five English and one French) in each of the province's six regions. Participating schools represented a broad range of geographic locations, community contexts, board type and language, and student demographics.

Findings from the first pilot indicated that the resource was *relevant*, *useful*, and *feasible* to deliver. Using multiple data collection methods with all stakeholders was key to identifying implications for a subsequent effectiveness study.

1. Educators, students, and Mental Health Leads all indicated that **resources were appropriately designed and relevant regardless of school and student characteristics**. Participants felt the resource met its stated goals, fit well within the Grade 10 Careers Studies course, were practical to deliver in the classroom, and effectively engaged students.
2. **Teachers generally felt they were able to deliver the modules as designed**. While teachers reported making minor adjustments to the structure of the resources to meet timelines and accommodate classroom dynamics, they remarked that modules stacked well on each other and proceeded developmentally, while still allowing enough room for dynamic student discussions

3. **Positive changes in student outcomes were reported**. Both teachers and students reported positive changes in students' self-awareness, self-management, relationship skills, social awareness, and attitudes toward mental health. Quantitative measures showed limited changes in relationship skills, but qualitative evidence suggested some students felt more empathic toward their peers and appreciated the class climate during module delivery.

Notably, students expressed statistically significantly greater willingness to seek support from a teacher (15%), school staff (8%), a counselor/public health nurse (12%), a psychologist (7%), or a church/religious organization member (5%) following the pilot.

Lessons learned from the pilot

Suggestions were made to improve format, make content even more inclusive, and streamline training:

- Decrease the number of lessons - some teachers expressed feeling rushed to deliver all nine lessons
- Make the content more inclusive of diverse youth, including equity-deserving groups and at-risk youth
- Make the content more developmentally appropriate for Grade 10 students
- Make more explicit the alignment with the Ontario Civics and Careers curriculum
- Update the teacher training model to be less labor-intensive and more practical to scale up

Updates and enhancements to *S4L*



Following the pilot, a series of updates were undertaken while awaiting an appropriate time for an outcome evaluation. The *S4L* Leadership Team engaged a team of teachers and mental health professionals to streamline and update content; youth were consulted on student materials; and a review was conducted to ensure the content was culturally responsive, identity-affirming, and strengths-focused.

To reflect the latest research on and ensure alignment with SEL and best practices in implementation and evaluation, SRDC conducted an updated literature review and environmental scan in 2018. The SRDC team also mapped the extent to which key concepts in the modules were already covered in other parts of the Ontario high school curriculum to identify gaps in current SEL resources. Findings from this research reinforced the need to include developmentally appropriate content such as identity exploration and explicitly consider issues of equity, and the Leadership Team reworked the pilot modules to bridge the identified gaps.

The resource was also classroom-tested by two teachers in the 2022-23 school year, as part of a “peer review” process and quality improvement process by SMH-ON.

Key adjustments in the past six years included:

- Representing a greater diversity of youth by explicitly drawing on different ways of knowing, adopting gender neutral language and examples, and validating different cultural strategies of seeking and achieving well-being.
- Shortening and structuring the modules to align more closely with existing lesson plans in the Careers curriculum.
- Supporting a more developmentally appropriate exploration of SEL topics.
- Ensuring *S4L* represents the latest thinking on mental health promotion.

Section 2: What is *Skills4Life*?



Overview of *S4L* content

S4L at-a-glance:

A series of five bilingual 60-minute lesson plans designed to be used in the Grade 10 Career Studies course. The intent was to build on mental health content in Healthy Active Living Education in Grade 9; new mental health promotion content has also been developed for Grades 7 and 8. *S4L* content is solidly grounded in research about SEL skill development and has been vetted by practicing teachers, clinicians, and youth using an identity-affirming and culturally-responsive lens.



Lesson	Core Content	SEL Skill	Curriculum Links	Learning Goals
Lesson 1 Promoting Mattering for Self and Others	Exploring the importance of mattering to self and others	Self-awareness and sense of identity Positive motivation and perseverance skills	A.1.1 A 1.2 B.1.1	<ul style="list-style-type: none"> to demonstrate an understanding of mattering and its connection to well-being to practice skills that contribute to creating a positive and inclusive culture that promotes mattering for oneself and others
Lesson 2 Exploring Identity and Acknowledging Strengths	Exploring the importance of self-awareness and strengths	Self-awareness and sense of identity	A.1.1 B.2.1 C.1.1 C.1.3	<ul style="list-style-type: none"> to identify personal interests, roles, goals, and strengths to connect identified assets/strengths to decision making and personal well-being
Lesson 3 Communication and Conflict Resolutions	Exploring the importance of effective communication and conflict resolution	Healthy relationships Identify and manage emotions	B.1.2 B.1.3	<ul style="list-style-type: none"> to develop effective communication skills and understand their importance in personal and professional relationships to apply strategies for resolving conflict in a constructive and respectful manner
Lesson 4 Understanding stress and managing transitions	Exploring the importance of understanding transition stress	Identify and manage emotions	A.1.1 A.1.2	<ul style="list-style-type: none"> to normalize stress related to change To increase knowledge needed to care for well-being during times of transition
Lesson 5 Managing stress at school and in the workplace	Exploring the importance of understanding strategies for personal wellness	Stress management and coping with challenges	A.1.1 A.1.2 B.1.2	<ul style="list-style-type: none"> To increase understanding of how well-being strategies can support future goals To improve understanding of when to seek support

Logic Model

INPUTS



- Careers teachers who are eager to support students' SEL skills development
- Time for teachers to prepare and deliver the resource, including completion of the self-directed learning module
- Support from administration and other staff (e.g., for teacher preparation, for referrals to other resources for students)

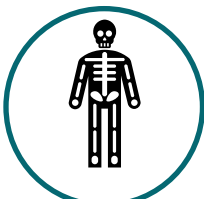
ACTIVITIES



S4L consists of a mix of didactic lessons, discussions, and self-reflection activities that allowed students to:

- Explore the importance of mattering to self and others
- Explore the importance of self-awareness and strengths
- Explore the importance of effective communication and conflict resolution
- Explore the importance of understanding transition stress
- Explore the importance of understanding strategies for personal wellness

IMMEDIATE/SHORT-TERM OUTCOMES



SELF-AWARENESS



SELF-MANAGEMENT/
ABILITY TO COPE
WITH CHALLENGES



KNOWLEDGE OF
MENTAL HEALTH
RESOURCES



IDENTITY &
BELONGING



TEACHER-STUDENT
RELATIONSHIPS



PEER
RELATIONS

MEDIUM-TERM OUTCOMES



MENTAL HEALTH



SCHOOL
ENGAGEMENT

LONG-TERM OUTCOMES



ACADEMIC
SKILLS



BEHAVIOUR
CHANGES

CONTEXTS



PEER
NETWORKS



SCHOOL &
WORK



CLASSROOM
DYNAMICS



FAMILY &
COMMUNITY

Long-term outcomes are intricately intertwined with both short and medium-term outcomes, each contributing essential building blocks to overall development

The various contexts in which youth find themselves can moderate the influence of SEL resources on overall development

Theory of Change

KEY CONTEXT FACTORS: ADMIN SUPPORT, TEACHER COMFORT & PREPAREDNESS

FIVE S4L LESSONS

1. **Promoting Mattering to Self and Others**
2. **Exploring Identity and Acknowledging Strengths**
3. **Communication and Conflict Resolutions**
4. **Understanding Stress and Managing Transitions**
5. **Managing Stress at School and in the Workplace**

SHORT-TERM OUTCOMES

Increased Self-Awareness

- Ability to identify and label emotions
- Ability to identify and label stressors and stress

Increased Sense of Identity and Mattering

- School belongingness and attachment

Increased Knowledge of Available Mental Health Resources

More Emotionally Supportive and Inclusive Classroom Environment

- Normalizing talking about stress and mental health

Increased Self-Management of Emotions and Ability to Cope with Challenges/Stress

- Ability to self-regulate thoughts, emotions, and behaviours (e.g., with breathing exercises)
- Ability to seek social support (e.g., use of assertive and respectful communication strategies to resolve conflict, ask for help)

More Positive School-Based Healthy Relationships

- Higher quality student-teacher relationships
- More and better-quality peer relationships

MEDIUM-TERM OUTCOMES

Improved Mental Health

- Decreased internalizing (e.g., anxious and depressive feelings).
- Decreased externalizing (e.g., off-task behaviours, aggression)

Increased School Engagement

- Increase in perseverance and positive motivation

LONG-TERM (INDIRECT) OUTCOMES

Improvements in Academics

- Improvements in academic achievement
- Increased high school completion rates
- Increased post-secondary transition rates

Changes in Long-term Behaviours

- Across settings & life spheres
- Ongoing use of positive mental health strategies

The pivotal role of context for SEL implementation

KEY CONTEXT FACTORS: ADMIN SUPPORT, TEACHER COMFORT & PREPAREDNESS

Schools that have **strong administrator support**, which includes a shared vision for social and emotional learning (SEL) and a well-structured implementation plan, tend to encounter fewer obstacles in implementing SEL initiatives (Thierry et al., 2023). Teachers in these schools often receive additional supports, such as extra preparation time or additional resources, including team-teaching opportunities.

Additionally, **teachers' comfort** and commitment to teaching social and emotional skills play a crucial role in moderating the effectiveness of SEL programs. Teachers' self-efficacy in delivering SEL instruction can significantly impact students' behavioral and emotional challenges, the quality of teacher-child relationships, and teachers' levels of stress and job satisfaction (Collie et al., 2012; Hoglund et al., 2015; Mahoney et al., 2021; Poulou, 2017).

Providing teachers with the necessary skills for effective SEL implementation (e.g., through training opportunities to increase **teachers' preparedness**) enhances students' social-emotional competencies, leads to improved academic outcomes, and promotes teachers' well-being by reducing stress and burnout (Jennings & Frank, 2015).



Theory of change: Assumptions re: short-term student outcomes

KEY CONTEXT FACTORS: ADMIN SUPPORT, TEACHER COMFORT & PREPAREDNESS

SHORT-TERM OUTCOMES

School-based, universal SEL initiatives can *increase students' social-emotional competencies*, such as their **self-awareness, self-management, coping skills**, and **emotional regulation** (Durlak et al., 2022; Green et al., 2020; Sousa et al., 2023). These initiatives can also contribute positively to **students' self-concept, sense of mattering, and identity development**. Adolescence is a crucial period for identity and autonomy development, and SEL programs support this by encouraging students to explore and establish their personal goals and beliefs, such as identifying their interests, roles, goals, and strengths (Yeager, 2017).

Another significant advantage is the **improvement in social skills and relationship management with teachers and peers** (Durlak et al., 2022; Green et al., 2020). SEL programs enhance students' *communication* and *conflict resolution* skills, which are essential for managing relationships. This is particularly important during adolescents' adjustment to school transitions (Pollak et al., 2023), as it supports *peer connectedness* and helps them navigate social dynamics more effectively.

Effective SEL programs *foster a sense of belonging* and mutual respect, and strengthen students' attachment to school (Durlak et al., 2011). Students who feel they belong are also likely to feel they can adjust to group expectations while at the same time, that *their authentic self is appreciated by the group*. Effective SEL programs also provide opportunities for students to earn status and admiration from those whose opinions matter to them, helping them feel respected by both adults and peers and satisfying their need to belong (Yeager, 2017). These more respectful, **emotionally supportive, and inclusive** environments promote positive change and a strengths-based perspective, helping students feel valued and understood (Green et al., 2020).

Furthermore, SEL programs increase students' knowledge of curriculum content related to social-emotional learning. This includes recognizing stressors, developing coping strategies, and **being aware of available mental health resources** (Green et al., 2020). Such knowledge is vital for students to manage their well-being effectively.

Theory of change: Assumptions re: medium-term student outcomes

KEY CONTEXT FACTORS: ADMIN SUPPORT, TEACHER COMFORT & PREPAREDNESS

MEDIUM-TERM OUTCOMES

IMPROVED MENTAL HEALTH

Increased social-emotional competencies play a crucial role in enhancing students' mental health. When students develop skills such as emotional regulation, empathy, and resilience, they experience improved mental health outcomes (Clarke et al., 2021; Greenberg et al., 2017; Zhang et al., 2023).

Emotionally supportive classrooms are another key factor contributing to better mental health and well-being by *teaching growth mindsets* and *normalizing discussions* about mental health. This supportive environment not only improves mental health within the classroom but also equips students with skills they can apply in other settings, leading to positive developmental outcomes (Hoglund et al., 2015; Yeager, 2017; Mahoney et al., 2021).

Positive relationships between students and teachers significantly contribute to better mental health outcomes for children and adolescents. These relationships help reduce anxious feelings and promote a sense of security and well-being (Salter et al., 2024; Sousa et al., 2023). Peer connectedness also plays an important role in mental health, especially in early adolescence. When students feel connected to their peers, they experience greater feelings of happiness and belonging (Pollak, 2023).

INCREASED SCHOOL ENGAGEMENT

School engagement often decreases during the transition to high school, which can be a challenging period for many students (Smith et al., 2023). However, **healthy school-based relationships**, including those between teachers and students as well as among peers, can counteract this trend and positively influence students' school engagement (Hosan & Hoglund, 2017; Thornberg et al., 2022). These effects are particularly strong in the older grades, where the quality of relationships can significantly impact students' commitment to their school and academic activities (Roorda et al., 2011).

Moreover, the contributions of SEL to the development of **social-emotional skills** foster more positive relationships in the short term. These improvements, in turn, lead to greater emotional engagement in school, as students feel more connected and motivated within their educational environment (Yang & Bear, 2018).

Emotionally supportive classrooms also contribute to greater school engagement among early adolescents, including better attendance, increased motivation, and higher morale (Durlak et al., 2011; Reyes et al., 2012).

Theory of change: Assumptions re: long-term student outcomes

KEY CONTEXT FACTORS: ADMIN SUPPORT, TEACHER COMFORT & PREPAREDNESS



LONG-TERM (INDIRECT) OUTCOMES

CONTRIBUTIONS OF STUDENT MENTAL HEALTH AND SCHOOL ENGAGEMENT TO ACADEMICS

The impact of mental health and wellbeing on academic achievement is well-established, with both internalizing behaviours (such as depression), and externalizing behaviors (such as ADHD) contributing to lower academic performance across all grade levels. Students who struggle with mental health issues are less likely to graduate from high school or be eligible for post-secondary education (Wickersham et al., 2021; Flores et al., 2022; Jangmo et al., 2020; Agnafors et al., 2021).

Addressing the mental health needs of high school students can lead to improved academic outcomes in tandem with indicators of greater school engagement, such as increased attendance and adherence to homework (Duncan et al., 2021; Jangmo et al., 2020). When students' mental health is supported, they are better equipped to engage with their academic responsibilities and perform well academically.

Student engagement is a strong predictor of both current and future academic achievement. Students who are more engaged in school—demonstrated by behaviors such as higher attendance rates—tend to achieve better academic results. This engagement not only supports their current academic success but also enhances their prospects for the future (Flores et al., 2022; Reyes et al., 2012). For example, students who exhibit higher levels of engagement are more likely to complete high school and transition successfully to post-secondary pathways (Reschly, 2020; Fraysier et al., 2020). These findings underscore the importance of fostering student engagement to ensure long-term educational and career success across settings.

Section 3: Overview of the 2023/24 *S4L* Evaluation



Board engagement and ethics approvals process

An outcome evaluation of the *S4L* resource was initially planned for the 2019-2020 school year. Research ethics approval was received from the Community Research Ethics Office (original approval September 2019, amendment approved June 2023) and eight district school boards (DSBs). However, plans were delayed due to labour unrest in the sector, which escalated to a full strike in December 2019, followed by rotating strikes in March 2020. Schools were then closed due to the COVID-19 pandemic.

In January 2023, SMH-ON and SRDC re-engaged the eight DSBs to gauge interest in participating in the 2023-2024 evaluation and to seek feedback on proposed changes to the evaluation design. While there was considerable interest, representatives of several DSBs expressed that they did not have capacity to participate as they continued to adjust to evolving post-pandemic issues. Ethics applications were amended to reflect changes to the evaluation plan, including the study design and electronic data collection procedures. Ultimately, research ethics approvals were received from the two DSBs that participated in the evaluation.

School recruitment and student outreach

Following REB approvals in June 2023, both DSBs required internal review of the *S4L* resource and evaluation plan. Board approvals for the delivery of the resource and implementation of the evaluation plan were received between the end of September and mid-October 2023.

Given this delay in approvals, outreach to school administration was not initiated until October and continued until mid-November. In collaboration with DSB representatives, over 30 schools were invited to participate. Following extensive outreach to school administration and communications with teachers, five classes in three schools took part in the evaluation. In the post-COVID context, schools expressed limited capacity of teachers, administration transitions, and pressing student mental health priorities as challenges to participating in the evaluation.

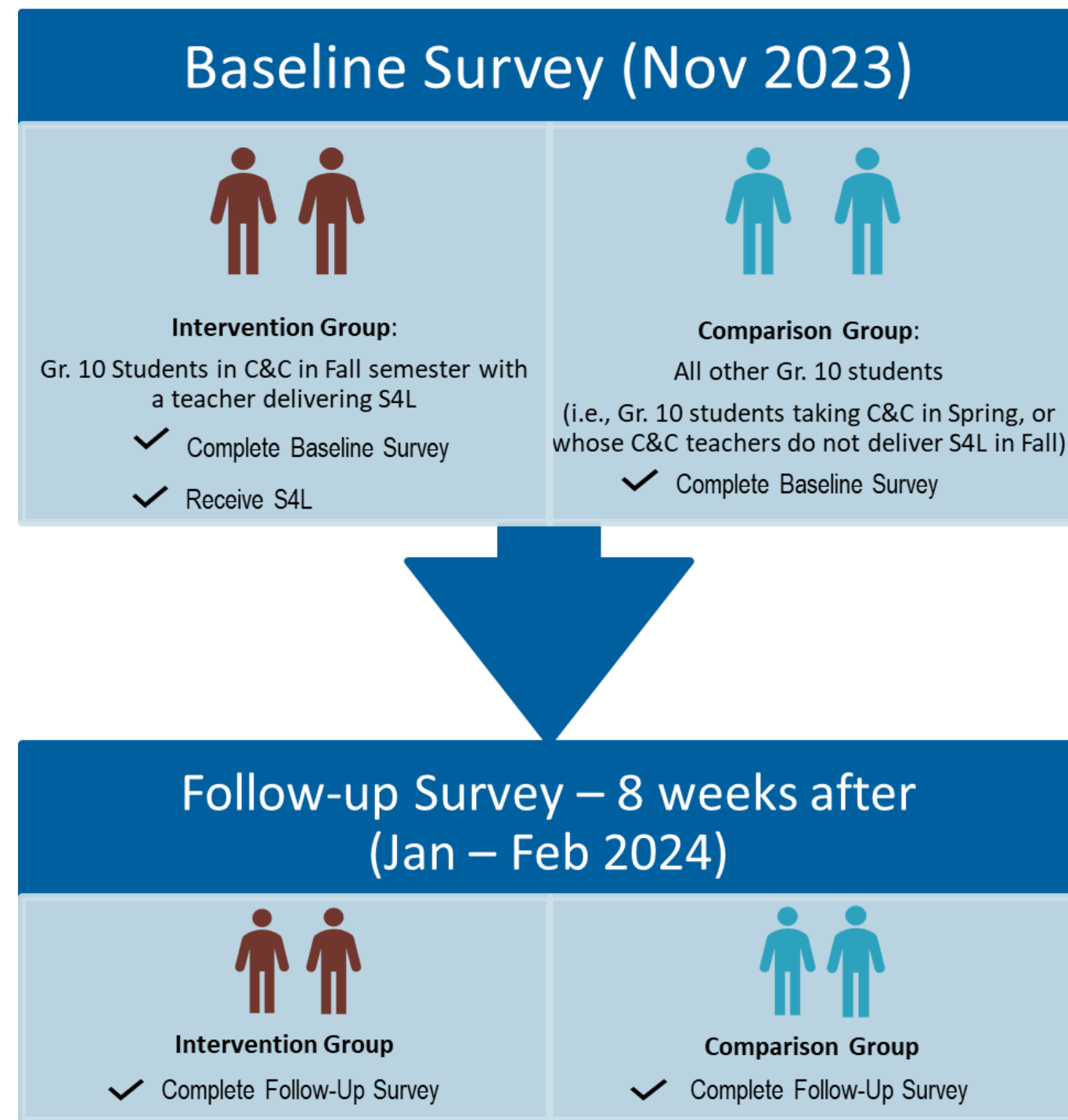
Across the three participating schools, the project was promoted throughout school communication channels (e.g., school newsletters, parent e-mails, posters) (see next slide for full evaluation implementation timelines). Students were requested to submit parent consent online until the end of November. Following parent consent, students were also asked for their consent to participate and to complete the baseline survey by early December.

Teachers were requested to deliver *S4L* between early December 2023 and end of January 2024. Students were invited to complete the post-survey at the end of January 2024 and to take part in focus groups in mid-February. Individual teacher interviews took place in early February, prior to student focus groups. Students who submitted parent consent forms (regardless if they received consent to participate), completed each survey (baseline and post), or took part in a focus group received an honorarium in recognition of their time; those who responded to the survey also received recognition of two hours of community service to count toward this requirement. Teachers who participated in an interview were also provided an honorarium.

Skills for Life (S4L) School-Based Activities

		October					November				December				January					February			
Project Week Monday →		2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26
Outreach and Recruitment	Connecting with Principals																						
	Grade 10 Homeroom Teacher Outreach																						
	Project Promotion																						
	Parent Consent																						
S4L Program Activities	Grade 10 Careers Teacher Outreach																						
	Careers Teachers' Self-Directed Learning																						
	S4L Delivery by Careers Teachers																						
Schoolwide Data Collection	Student Pre-Survey																						
	Teacher Feedback																						
	Student Post-Survey																						
Small Scale Data Collection	Student Focus Groups																						
	Teacher Interviews																						

Evaluation questions and methods



Main evaluation questions:

- Do students whose teachers use the *S4L* resource in the classroom experience positive changes in knowledge, skills, and attitudes important for mental health and resilience, compared to students who have not yet been exposed to the resource?
- To what extent did teachers use the *S4L* resource as intended, and was this related to outcomes experienced by their students?
- What has been learned from the evaluation that might influence widespread distribution of *S4L*?

Methodology:

- Quasi-experimental design in semestered high schools to take advantage of a “natural” comparison group (Grade 10 students who take Careers in semester 2)

Mixed methods approach:

- Online student survey at baseline (pre) and a follow-up survey (post) administered in three schools in two District School Boards in the Greater Toronto Area
- Focus groups with students who received *S4L* (n=5)
- Interviews with teachers and administrators (n=3) and online feedback forms for each lesson (n=4)

Theory-based evaluation: Using the Theory of Change, understand and explain why student outcomes happened by looking at the underlying theories or assumptions behind expected changes.

Section 4: Guidance on interpretation of findings



How did students and teachers experience *S4L*?

- Consistent with our mixed-methods approach, findings are presented thematically based on both qualitative and quantitative data, in alignment with our Theory of Change. We focus here on short-term outcomes, given that follow-up data were collected within a month following *S4L* delivery.
- We first present our findings on how *S4L* was delivered, followed by findings on how students experienced *S4L* and any changes in outcomes. We conclude by discussing the experiences of educators who either taught using the resource or facilitated its implementation.
- In line with our Theory of Change, students reported increased self-awareness and self-management (e.g., ability to identify and cope with stress), greater awareness of the mental health resources that were available to them, valuing discussions of mental health and wellbeing that normalized conversations about stress. Consistent with expectations based on our Theory of Change, teachers indicated improvements in classroom dynamics, including improved teacher and peer relationships; they also appreciated being able to introduce novel concepts such as identity and mattering.

Interpreting the quantitative findings

- Statistical analysis of the survey data did not show statistical significance in most comparisons being students who received *S4L* and those who did not. This was likely due to a sample size which was far smaller than recommended through power calculation.
- Results of outcome analyses are presented descriptively, with averages and other measures of central tendency. Quantitative results representing fewer than five students have been suppressed to maintain anonymity.
- Effect sizes are used throughout this report to demonstrate the size of changes in outcome measures in a way that does not depend on sample size. Our effect sizes are consistent with those of other universal, school-based SEL resources (Takizawa et al., 2023). Due to the lack of statistical significance, however, these findings should be interpreted with caution and considered exploratory rather than confirmative.
- Our conclusions about the *S4L* being promising for SEL skills development and mental health promotion were made on the basis of consistency with qualitative findings, and in the larger context of findings from the pilot evaluation, other empirical research literature, and its theoretical foundations. We make reference to these sources throughout the sections on findings.
- Additional details on the methods and findings of the *S4L* evaluation can be found in companion documents from SRDC.

Implementation of *S4L*

Careers teachers participating in the evaluation were asked to complete an online self-directed module via the D2L platform to access the *S4L* resource. Teachers were provided access to the module and resource in advance to provide sufficient time to complete the learning module and review the resource and lessons.

Teachers were requested to deliver the five *S4L* lessons in their classrooms sometime from December 4, 2023 to January 19, 2024 (excluding the holiday break) of the Fall 2023 semester.

Teachers were also asked to complete a brief (5-minute) online feedback form after each *S4L* lesson they taught. Feedback forms included questions on class attendance, modifications to lessons, overall group participation, level of interest in each topic, and ratings for the overall format and content of each topic. Teachers were also given an opportunity to share any comments or suggestions for improvement.

Data on the implementation of *S4L* by Careers teachers were gathered by:

- Completion of the online feedback form by 4 out of 5 Careers teachers participating in the evaluation
- Participation in individual interviews by 2 Careers teachers and 1 department head



Results

Delivery of *S4L*:

- 4 out of 5 teachers delivered all five *S4L* lessons.
- One teacher delivered 3 out of 5 lessons but did not have enough time to deliver the last two lessons on stress and coping. This teacher reported sharing all materials from all lessons with students online so that all resources would be accessible to students
- All teachers delivered lessons in sequential order over the course of 4 to 6 days

Successful implementation of *S4L*

Teachers did not report any significant implementation issues

Adaptations to the lessons were minimal. One French immersion teacher reported that some “*content was difficult for students due to language*,” and consequently, making modifications to the lessons to make terminology simpler. The French language resource “H2V: Habiletés de vie” was developed for native French speakers with French-language Ontario school boards in mind, and may have been challenging for French immersion students.

During an interview, one teacher discussed being “*mindful of not overloading*” students with information. This teacher recognized that throughout the Careers course, new concepts were introduced frequently, and this could be overwhelming for some students. They also tried to incorporate tangible experiences that would be relevant to students.

With respect to preparation, one teacher highlighted that early access to the resource was very helpful. Having a chance to review the lessons and student notebook helped them identify similarities and differences between other course content as well as prioritize important parts of each lesson. As part of their preparation, they also gave students notice ahead of *S4L* classes that they would be having a conversation about topics that could be potentially sensitive and reassured them that they do not need to discuss anything they may be uncomfortable sharing.



Section 5: Student Experiences and Outcomes



Who participated in the *S4L* evaluation?

Across the *S4L* (n=69) and comparison (n=89) groups, students who responded to the survey were:

- Equally represented by gender, with 3.8% identifying as nonbinary or agender
- Mostly born in Canada (80%) in 2010 (97%)



	S4L	COMPARISON	TOTAL
GENDER			
Girl/woman	34 (22%)	44 (28%)	78 (49%)
Boy/man	33 (21%)	37 (24%)	60 (44%)
Non-binary, agender	*	*	6 (4%)
Missing/prefer not to say	*	*	*
DO YOU IDENTIFY AS TRANSGENDER, TRANS, OR WITHIN THE TRANS UMBRELLA?			
Yes	*	*	5 (3%)
No	67 (42%)	83 (53%)	150 (95%)
Missing/prefer not to say	*	*	*
COUNTRY OF BIRTH			
Canada	52 (33%)	75 (47%)	127 (80%)
Outside of Canada	17 (11%)	14 (9%)	21 (20%)

Note. * Data not shown due to small numbers of participants in the respective categories.

Who participated in the *S4L* evaluation?

	S4L	COMPARISON	TOTAL
RACIAL/ETHNIC BACKGROUND			
Black	7 (4%)	5 (3%)	12 (7%)
East Asian	15 (9%)	38 (24%)	53 (33%)
Indigenous	*	*	*
Latin American	*	*	*
Middle Eastern	*	*	11 (7%)
South Asian	15 (9%)	13 (8%)	28 (18%)
Southeast Asian	*	*	6 (4%)
White	9 (6%)	15 (9%)	24 (15%)
Another race category	*	*	*
Do not know	*	*	5 (3%)
Multiple race categories	5 (3%)	9 (6%)	14 (9%)
Missing/prefer not to say	*	*	*



Across the *S4L* (n=69) and comparison (n=89) groups, students who responded to the survey represented diverse racial and ethnic backgrounds. This diversity was also represented in the small subset of youth who participated in the focus groups.

Note. * Data not shown due to small numbers of participants in the respective categories.

Influence of demographics on *S4L* outcomes

Gender and race were explored as possible demographic factors which could affect student outcomes in relation to *S4L*. It is important to note that, as shown on the previous slides, there were no differences at baseline between students in the *S4L* group and those in the comparison group on these key demographic variables.

While the small sample size makes it difficult to detect any differences in outcomes for students by demographic factors, there was no evidence in the data that the *S4L* resource was received differently by students of different races and genders. **Moreover, there was no evidence of any harm or negative experience of *S4L* by any students, including by race or gender.**



Potential impact of the COVID-19 pandemic

Students were asked in the survey whether the COVID-19 pandemic had a positive impact, negative impact, or no effect on their lives. The sample size was too small to assess whether the impact of COVID affected students' outcomes from participating in *S4L*. However, **effects of S4L on each of the outcome variables included in this document were slightly larger when considering only those students who reported that the COVID-19 pandemic had had an overall negative impact on their lives.** This suggests that student context and experience is a relevant factor for student outcomes following experience of the *S4L* resource.

Teachers across boards and levels of experience also noticed that post-pandemic, students were generally more reserved and less social in-class. Given other findings, such as students appreciating the opportunity to engage in reflective discussions in-class, **it may be that S4L helped make students feel more comfortable engaging with others in their classrooms, and the ability to adapt to the new social dynamics post-pandemic.**

"I've been finding with all of my classes, I guess maybe at the school or maybe just post COVID, many students are a little bit more reserved with being more involved now in class. So really trying to engage and get them involved in the conversation was something I found a little bit difficult and struggled with, not just with Careers, but with pretty much every class..."

"That was why I found more students were kind of keeping information but were engaged in other ways. I noticed connections or even just reactions, eyebrows, differences in faces. Some would put up their hands and engage, while others maybe just did something else, but I could tell were still listening in the background." – Teacher 2

Students valued class discussions and interactive activities

S4L Students were engaged in class discussions

- In focus groups, students described enjoying activities that included opportunities for class discussion. They said the chance to exchange thoughts was an important part of reflecting on and understanding their own experience better.
- Overall, students appreciated:
 - Activities that included student participation (e.g., reflecting on students' identities and social roles)
 - Actively listening to class discussions, even if they did not necessarily feel comfortable sharing their personal opinions with their class

Less engaging

- Students expressed that practice statements (e.g., “I statements” for conflict resolution) were challenging to use and felt unnatural for their age group
- Didactic parts of lessons



“A couple of the lessons we had group discussions, and a lot of people would share. The teacher would ask for examples, and we would go around, and people would put their hand up and share. I thought it was nice to get talking about stuff like this more.” – Student 4

“I felt like my class was really interactive. Not like quiet, the class was actually sharing with each other.” – Student 1

Most *S4L* students recalled all lessons and learned something new

Qualitative findings suggest that the repetition of materials was valued from both a teacher and student perspective.

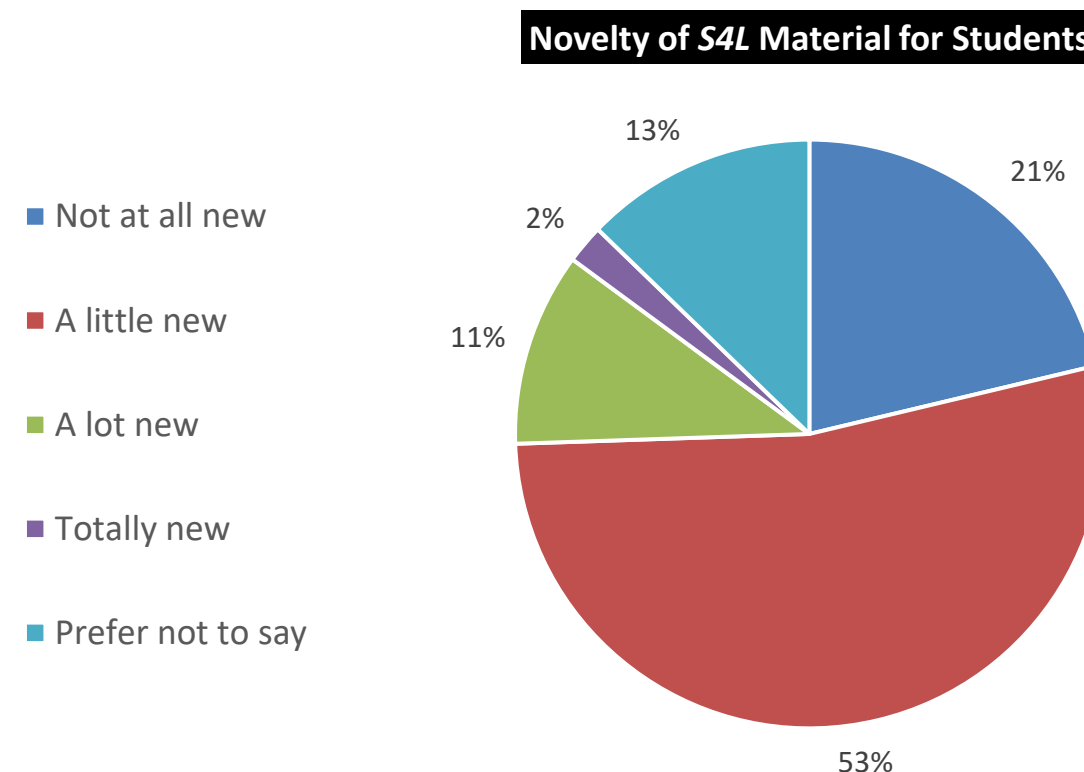
"I think as for the resources given, I don't think it's taught me something new, but overall ... focusing on yourself and providing the confidence some kids may need. I think that that may really help some others." – Student 3

[On the importance of repeating concepts] *"Somebody has to go over things like eight times in order to kind of remember stuff. So even myself, I can't remember some of the teachings that I did."* – Teacher 1

When asked which *S4L* lessons they could remember and about the novelty of the material:

- 70% of students who received *S4L* remembered all five lessons and another 20% recalled some of the lessons.
- While the content was not “completely new” to the majority of these students, most found that the material was “a little” new or “a lot” new.
- Nevertheless, 30% of respondents at baseline said they had never encountered these concepts before.

In other words, most students found something at least something new in the *S4L* materials.



***S4L* students recognized SEL concepts from other sources such as Physical Education class**

Analysis of survey data suggests that the *S4L* resource is well situated in the Ontario curriculum for Grade 10 students. Prior to receiving *S4L*, students were asked whether they had been exposed to any of the relevant SEL concepts. The majority (70%) of students named at least one class in which they had previously heard of SEL concepts, 6% of students named at least one source from school but outside of class time (e.g., sports or posters around school) and 13% named a source outside of school (e.g., family or friends). The following classes were named as sources of information about SEL skills:

- Physical Education/Healthy Active Living Education (n=109)
- Mental Health Assignment/Program/Meetings (n=4)
- Careers (n=4)
- Family Studies (n=4)
- Core Subjects: Math, English, History (n=4)
- GLE/GLS (n=2)
- Wellness Period (n=2)
- Food and Nutrition (n=1)
- Integrated Arts (n=1)

"Some things I do, for example, doing my hobbies and keeping myself entertained and distracted, I didn't know those were stress management skills. But now I know."

- Student 3

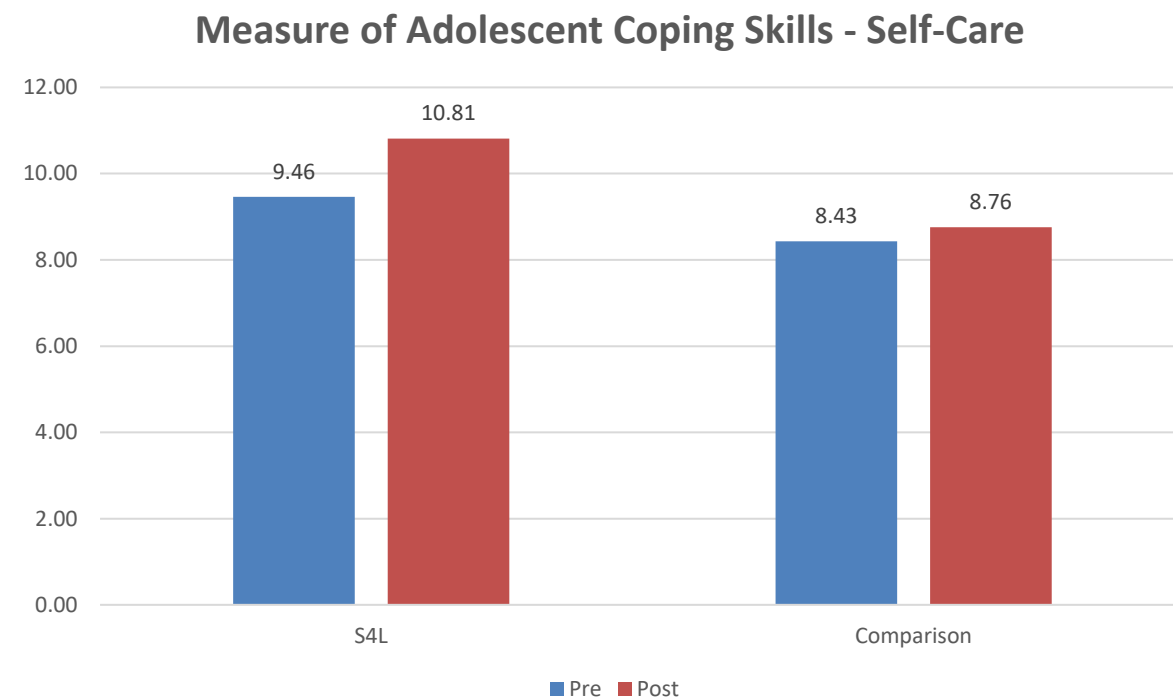
In focus groups, students reported that *S4L* increased their:

- Ability to identify and label stress management and coping strategies as such
- Knowledge of available mental health resources

"I don't feel as though I handle it differently, but now I recognize what I do." [When asked for examples] "I believe they talked about doing something else. When you're stressed, you can go read or go on a walk or something like that. And I learned about other things like that and that I already do that."

– Student 2

S4L students indicate using strategies for stress management, self-care and social support



This scale asked students to think of a stressful situation they had experienced and to indicate how often they used different coping strategies, including talking with another person, exercising, and making a plan of action. Consistent with our theory of change and results from the previous pilot, survey data suggests that students who received S4L increased their use of self-care and social support as ways to cope with stressful situations, more than students who did not receive S4L. While these findings were not statistically significant ($p=.096$), the effect size, as measured by partial eta-squared (η^2), indicated a small effect (.033) on S4L students' use of social support as a stress coping strategy.

In focus groups, students reported that they use diverse strategies to cope with stressors and to communicate, such as:

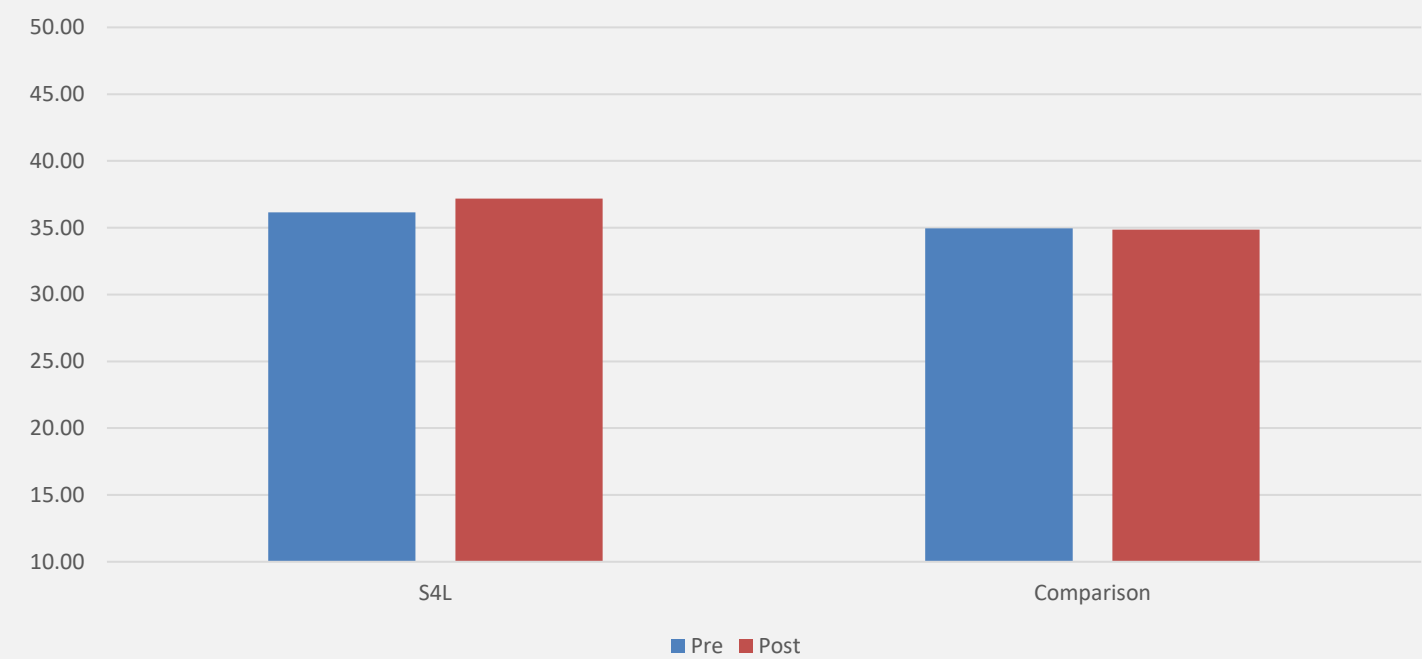
- Breathing exercises to help with anxiety
- Talking to others about stressful situations
- Acknowledging stress and using multiple strategies to manage it
- Using “I” statements to communicate feelings

“The breathing exercise was pretty cool. We also did that in gym class, and I really enjoyed it.” – Student 1

“Yes, before I was keeping some of my stress in my mind. Now, I can talk to others. I can text Kids Help Phone. Now, I’m going outside, talking to friends, listening to happy music, playing sports to make me more focused on my own goals rather than ignoring my stress.” – Student 5

S4L students reported improvements in self-management and mental wellbeing

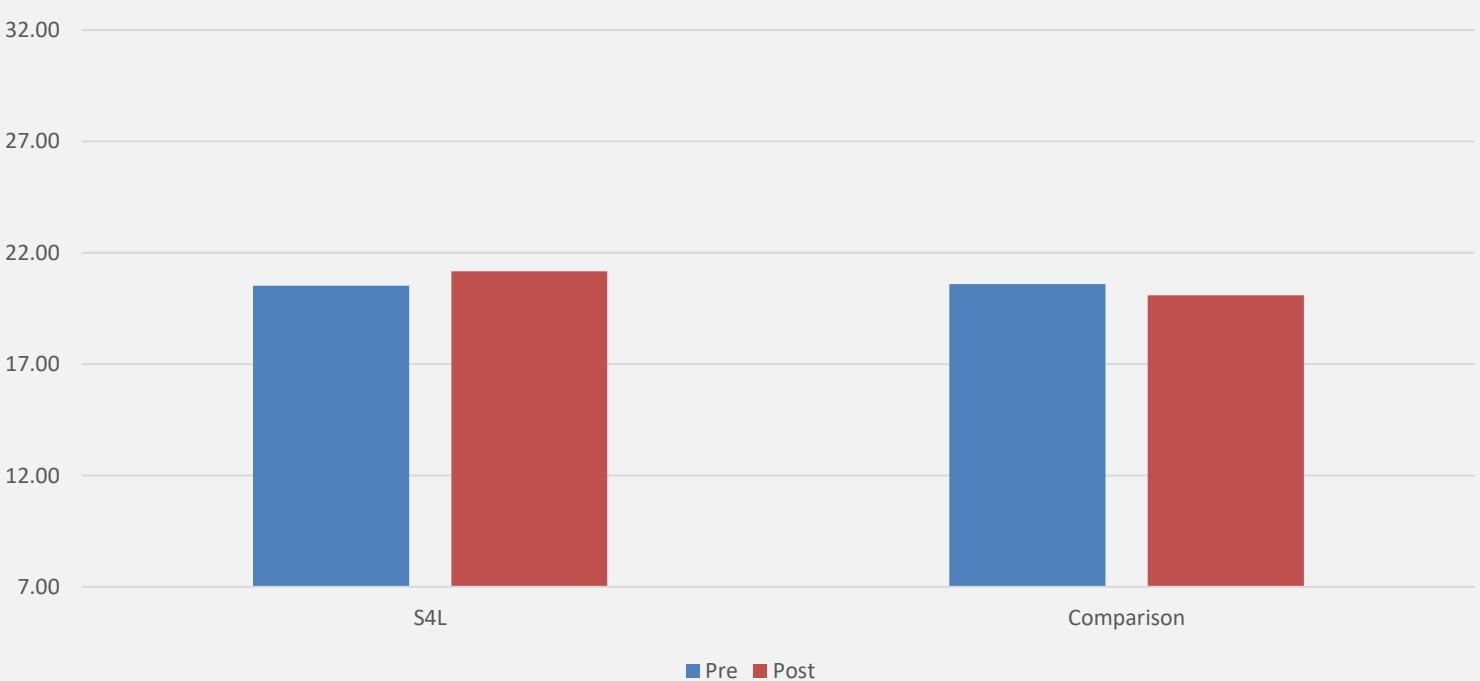
Emotional Self-efficacy for youth (Youth-ESES) (Using and Managing own emotions Subscale)



This scale asked students to rate their confidence in doing certain emotion-focused tasks, including making oneself feel better when in a bad mood, using a good mood to be creative in problem solving, and calming oneself down when feeling angry. Analysis of survey data suggests that students who received *S4L* experienced slight increases in their sense of self-efficacy in managing their own emotions, whereas there was little change in the comparison group. While this finding was not statistically significant ($p=.35$), the effect size (as measured by partial η^2), indicated a small effect (0.012) of *S4L* on emotional self-efficacy.

This scale asked students to rate how often they have had experiences over the past two weeks, including feeling useful, optimistic, close to other people, and able to think clearly. Analysis suggests that students who received *S4L* had slight increases in a measure of their mental wellbeing (also called positive mental health), whereas the comparison group had slight decreases in the same measure. While this finding was not statistically significant ($p=.091$), the effect size, as measured by partial η^2 , indicated a small effect (0.034) of *S4L* on mental wellbeing.

Short Warwick Edinburgh Mental Wellbeing Scale



S4L students valued discussions of stress and mental health

In focus groups, students reported that they benefited from:

- Having a dedicated space to talk about mental health
- Knowing you are not the only one experiencing stress
- Feeling heard

“I do think that it is important to continue recognizing mental health. Giving students the opportunity to see what resources are available and communication styles and all the things that are covered.” – Student 2

We're normalizing mental health help and all of these - learning about yourself and knowing how to manage your stress - I think it's very important. Skills for, especially kids at a young age need help with [that]. I definitely felt comfortable hearing my teacher talk about things that I've experienced, where I felt like it was only just me experiencing those things... It's really nice to talk about it with others... For me, it felt like I was just being heard, in a way.” – Student 3

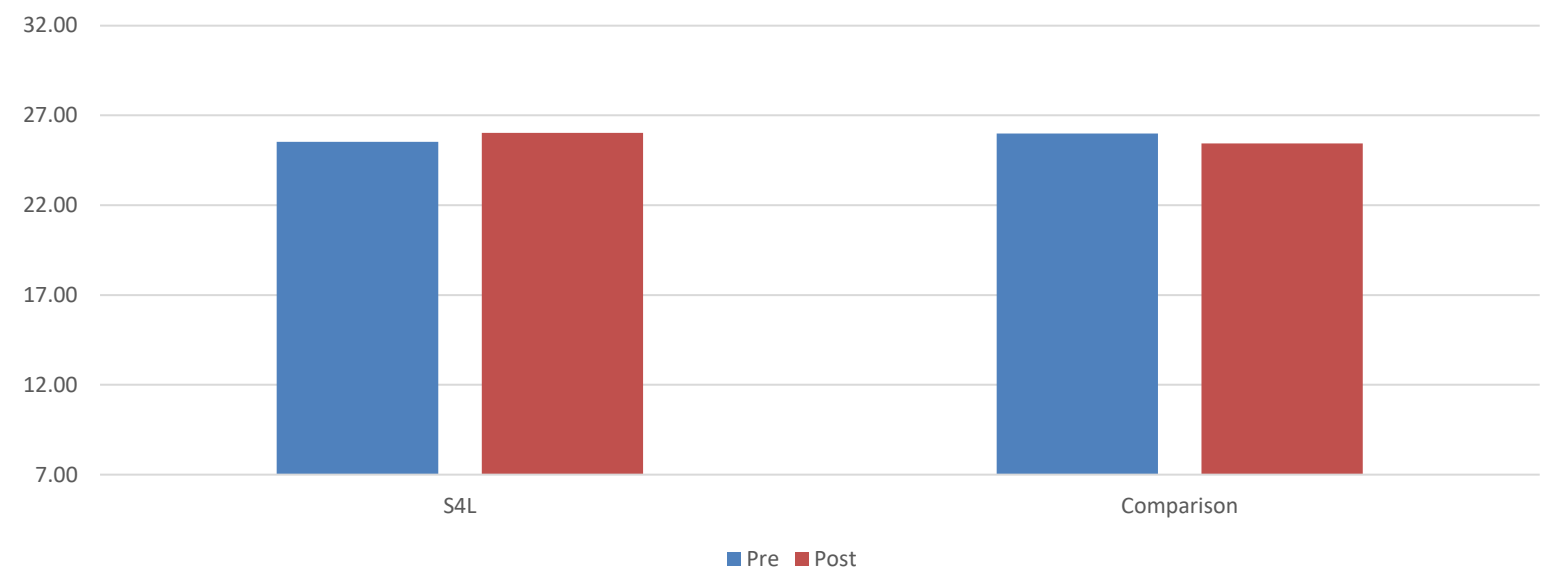
SCHOOL BELONGINGNESS

When we measured School Belongingness at baseline, student scores on this scale were at the upper limit of the range of possible scores, which prevented meaningful analysis of change following S4L.

Based on the qualitative data and theory of change, this ‘ceiling effect’ could mean that schools taking part in the evaluation already had cultures that encouraged high levels of school belongingness. In schools where students feel less of a sense of school belonging, we hypothesize that S4L could increase this, while nevertheless contributing to a greater sense of a supportive climate for discussions of stress and mental health in all schools.

S4L students reported improved ability to communicate with adults and peers

Assertiveness Formative Questionnaire - Respect subscale



This scale asked students to indicate how much statements describe them, including “I am careful to avoid hurting other people's feelings, even when I feel that I have been wronged,” and “In disagreements, I make sure that I understand other points of view.” Analysis of survey data suggests that students who received S4L had slight increases in their use of assertive and respectful communication with others while the comparison group had slight decreases in this same measure. While this result was not statistically significant ($p=.34$), partial η^2 indicated a small size of effect for the interaction (0.011), suggesting that those who received S4L experienced a small effect of the resource on measures of their assertive and respectful communication.

Findings on communication skills were consistent with our theory of changes and the previous pilot study. In focus groups, students described changes in how they use communication in different relationships and in different settings, such as talking to new people in class, and sharing stressors and feelings with friends

“I think it helped me in talking up for myself. And interacting with others. I’m always a little shy to talk to others. And I started to talk a lot more, so I think that has helped me.” – Student 4

I think it [communication skills] changed. Before I was talking to my friends in my classes that I know. But if I didn’t have any friends in a class, I was like, I was so alone like that, just listening to the teacher. But now it changed a lot. I’m talking to others, making more friends. I talk to them about I have stress.” [In terms of how their communication changed:] “Yeah. Sometimes I talk to them about my feelings. [I ask them] What should I do? ... So they help me.” – Student 5

Section 6: Teachers' Impressions of *S4L*



Teachers confirmed students were engaged with *S4L*

The five teachers who used the *S4L* resource in their classrooms provided information about their delivery and students' responses via four feedback forms and three interviews. Generally, teachers indicated that *S4L* lessons and activities were well-received by their classes. During interviews, the following activities and lessons appeared to have resonated most:

- Classes were most engaged when prompted with open-ended discussion questions
- Reflection activities also appeared to be interesting to students, who indicated they appreciated the time to consider their personal experiences and draw connections with the lesson materials



Teachers felt planning materials were helpful



"All I did is I went over the material that was to be taught and reviewed how I was going to teach it in my own way. I used the PowerPoint material as questions to pose. I think I just did what I traditionally do, which is to review the material and then think about how I should deliver it to the population that I'm working with"—Teacher 1

"[I] Needed to make modifications with language as it was taught in French. Some content was difficult for students due to language." – Teacher feedback form

- Teachers said early access to the self-directed learning module was very helpful for familiarization and lesson planning.
- Reviewing the Notebook helped teachers to familiarize themselves with the lessons and identify potential similarities with other class content, so they could prioritize materials.
- Reviewing the Notebook also allowed teachers to identify new concepts to be introduced in each Careers class, and to give advance notice to students that they would have these conversations, prior to beginning lessons.
- As noted in the implementation section, one teacher who used the French version of *S4L* reporting making small adaptations to her lessons to modify the level of language to be appropriate for their French immersion students.

Teachers perceived positive changes in student dynamics and relationships

Although teachers recognized the limited timeframe to observe changes, a couple of them said they did notice some positive shifts in classroom dynamics:

- More camaraderie between students, such as “stronger” students being more inclusive or supportive of other students
- More rapport and trust built between teachers and students

“Short term, I did notice maybe a little bit more camaraderie, maybe a little bit more, thinking a little bit about what they're saying and acting amongst each other. I had a few students with very loose filters, where over time, with a little bit of this and everything else in the course, they started to kind of realize that you can't just say what's on your mind. You can't just argue with somebody because you have this opinion. You need to kind of consider everything.” – Teacher 2

“I think I was a little kinder to my kids, to be honest. I had a great group of students and they were always kind, but maybe they were even a little bit more inclusive after that lesson...I did notice some of the guys saying, ‘How are you doing?’ and stuff like that. I think they took some of that to heart and tried to reach out.” – Teacher 1

“I didn't know many of them very well because I'm fairly new. They did open up and I did build rapport very easily with them...Students are aware that it's not just black and white, that they can ask questions, they have decision making in the process. I did notice more students kind of relying on each other, helping each other out a little bit more. I noticed a few students kind of guiding other, maybe ‘weaker’ students” – Teacher 2

Teachers said they appreciate concepts such as ‘mattering’ and exploring identity

“Mattering. How do we matter? Why do we matter to our friends? Why do we matter to our parents? Why do we matter? And I thought that was really excellent. I thought that kids could relate well to that.” – Teacher 1

“I really like the lesson about identity because I've noticed with multicultural students or just in schools, sometimes it's explained and it's celebrated, but it's not always done in a certain way that maybe people make the connections or are able to see themselves fully. So that was something important. I think that would be good to continue with that.” – Teacher 2

A couple of teachers highlighted concepts they felt resonated with and were new to students, as well as themselves:

- **Promoting mattering** was considered a valuable lesson to teachers - who thought it was relevant and important for students to reflect on why we matter - as well as encouraging students to say kind things. As one teacher said, “It shows that I matter to you, and you matter to me.”
- **Exploring identity** was also important to teachers, who said this was covered less in other classes. Teachers recognized this lesson could be impactful for students who might be exploring their own identity. It was also an opportunity for teachers to learn about students’ experiences.

Section 7: Implications and Considerations



Real-world applicability: *S4L* is useful and relevant

S4L is the result of careful study, collaboration, and consultation over many years. Throughout, the *S4L* Leadership Team strove to deepen its understanding of the day-to-day context in which teachers would be using the *S4L* resource, and to adapt its development and evaluation to be as sensitive as possible to teachers' and students' needs. This process has been fruitful, since the results of both the 2023/24 evaluation and the previous pilot have found the resource to be highly relevant, easy for teachers to implement, engaging for students, and promising in terms of effectiveness. Development of the resource stemmed in part from considerable demand from teachers who were looking for materials to support mental health literacy and development of SEL skills, particularly to mitigate the effects on students of the COVID-19 pandemic.

S4L appears to be relevant and helpful for students in reinforcing mental health promotion concepts covered in Grade 9 and building their SEL skills. It appears to have a unique role in introducing new SEL concepts such as mattering to others and exploring identities, thereby helping to address the specific developmental needs of adolescents. Teachers and students said they appreciated the opportunity to have conversations that normalize stress and coping, and to enhance communication and relationships. Notably, the pilot study conducted in 2016-2017 showed very similar findings.

While *S4L* was specifically developed for the Ontario Grade 10 Careers course, it potentially has broader relevance because a) it was designed explicitly to meet adolescents' developmental needs in an identity-affirming way, and b) its skills-based approach to promoting mental health through life transitions potentially relates to a variety of contexts. Furthermore, SRDC is exploring the possibility of *S4L* implementation in other jurisdictions, as well as in other settings outside the education system, such as youth-serving organizations, training programs, and employment support programs. To facilitate uptake of *S4L* in other jurisdictions and settings, we have developed a Companion Guide that provides implementation tips and guidance on adaptation.

Considerations for spreading and scaling *S4L*

Feasibility and requirements for broader scale-up:

Providing teachers with the necessary skills for effective SEL implementation (e.g., through preparation time and training opportunities to increase teachers' comfort and confidence) can promote teachers' well-being by reducing stress and burnout (Jennings & Frank, 2015). *S4L* has a real advantage over many resources available to schools, which have often not been based on research or evaluated and not designed to fit seamlessly into educators' practice and the classroom environment; unlike *S4L*, these other resources often have costs for purchase and/or associated training.

However, it is important to note that both this evaluation and the broader research literature indicates a strong association between the effectiveness of SEL programming and support for implementation. In particular, it is necessary for teachers to have sufficient time for learning and preparation in order to feel comfortable and confident about teaching SEL content and. In the case of *S4L*, teachers had access to a training module on mental health promotion in the classroom, and materials that reinforced alignment with the curriculum. As part of making *S4L* more widely available, it may be necessary to further adapt the French version for French immersion students, depending on their language fluency, and to consider examples that may resonate more with the specific characteristics of the student or youth population involved.

Implementation of *S4L* in Ontario was also supported by Ontario's multi-tiered system of support for school mental health, including the use of the Aligned and Integrated Model (AIM; smho-smso.ca/about-us/our-approach). In other jurisdictions, this model may be referred to as the Response to Intervention (RTI) Model. Both models recommend pairing universal, Tier-1 preventative resources, such as *S4L*, with Tier-2 strategies targeted to the needs of students at-risk for mental distress, and Tier-3 strategies individualized to the needs of students with complex needs who need more intensive supports. Effective SEL implementation requires careful consideration of all students' diverse needs, and the context in which SEL is implemented.

A mechanism for collective learning:

Frequent monitoring and feedback is crucial to maintaining the perceived value and feasibility of any curriculum resource for teachers, schools, and school boards, and for quality improvement, evaluation, and collective learning. While forming a community of practice was not considered at the provincial level, there may be benefits to this taking place at a school board or regional level, perhaps with support from a curriculum or system lead (e.g., teachers implementing *S4L* could have a Facebook group where they share tips for increasing student engagement, or modifications to the lesson pacing). If implemented at scale, further evaluation of *S4L* could be very useful to pinpoint who benefits most from the resource and how these benefits could be sustained and enhanced, especially closer to the transition from high school.

Considerations for future outcome-focused evaluation

While the 2023/24 *S4L* evaluation has yielded considerable information about the resource's design and delivery, and promising evidence about its effectiveness in terms of student outcomes, this evaluation did not end up being the large-scale, definitive test of effectiveness that was intended. This was largely due to the challenges of conducting research in schools while they dealt with the after-effects COVID-19. While we are confident *S4L* can be recommended as part of broader mental health promotion efforts in schools, there is an opportunity to learn considerably more through outcomes-focused evaluation at scale. Considerations for future evaluation include:

Refining measurement to assess student outcomes:

- Look for validated measures with respect to the concept of exploring identity, and normalizing stress
- Consider measures of school belongingness that allow for a larger range of scores, particularly for schools where students already feel a high degree of school belongingness.
- Measures of classroom engagement or classroom climate may help better nuance the understanding of how *S4L* may affect students' social skills and/or use of social interaction as a stress coping strategy.

Gathering data on implementation and teacher experiences in various settings and context

- Explore the role of having a whole-school approach to mental health promotion in *S4L* delivery.
- Explore the influence of teachers' background and readiness to teach *S4L* content

Consider opportunities to evaluate the sum of SEL and mental health promotion curricula across several grades

- *S4L* represents only one of several initiatives in Ontario schools to enhance students' SEL skills, mental health literacy and wellbeing. There is an exciting opportunity to evaluate the cumulative effects of these initiatives in terms of both short- and medium-term outcomes for students and the durability of these effects (Biringer et al., 2017; Engström et al., 2023; Hugunin et al., 2023 ; Ojo et al., 2024). This would likely be more feasible than a stand-alone evaluation if and when the resource has been adopted at scale.

Conclusions

As teachers increasingly look for ways to recognize and respond to the social and emotional needs of their students, helping young people develop SEL skills has emerged as a promising means of protecting and promoting student mental health and well-being. However, the process of developing school based SEL interventions is complex, since they should be both implementation-sensitive and evidence-informed for maximum effectiveness.

In the multi-year process of developing, revising, and evaluating an evidence-informed resource for use in Ontario's Grade 10 *Career Studies* classrooms, the *S4L* Leadership Team made sure to align the research evidence with tacit and practice knowledge, and sensitivity to the delivery context. Findings from the latest evaluation suggest the *S4L* resource is indeed relevant for both students and teachers, credible in terms of its theoretical foundations, reasonable in terms of expectations for preparation, and promising in terms of achieving student outcomes, particularly regarding students' knowledge of SEL concepts and mental health promotion strategies, sense of belonging, skills development, and use of positive coping strategies such as seeking supports.

A few issues need to be considered for potential scaling-up of the *S4L* resource, particularly in terms of availability of contextual supports for implementation, particularly a modest amount of preparation time and administrator support for this approach. A more robust outcome evaluation could more definitively assess effectiveness across different subgroups of students and settings, but also in relation to different school environments as they influence delivery of the resource. Such an evaluation would likely be more feasible at scale than a smaller, stand-alone evaluation, since it could be embedded into ongoing delivery. That said, considering the history of the project and a decades' worth of evaluation and continuous improvement, these latest findings – somewhat limited by sample size – indicate alignment with other empirical and theoretical research on SEL skills development among high school students.

References

- Agnafors, S., Barmark, M., & Sydsjö, G. (2021). Mental health and academic performance: A study on selection and causation effects from childhood to early adulthood. *Social Psychiatry and Psychiatric Epidemiology: The International Journal for Research in Social and Genetic Epidemiology and Mental Health Services*, 56(5), 857–866. <https://doi.org/10.1007/s00127-020-01934-5>
- Aseltine, R. H., & Gore, S. (2005). Work, Postsecondary Education, and Psychosocial Functioning Following the Transition From High School. *Journal of Adolescent Research*, 20(6), 615–639. <https://doi.org/10.1177/0743558405279360>
- Biringer, E., Hartveit, M., Sundfør, B., Ruud, T., & Borg, M. (2017). Continuity of care as experienced by mental health service users—A qualitative study. *BMC Health Services Research*, 17(1), 763. <https://doi.org/10.1186/s12913-017-2719-9>
- Children First (2020). *Child advocates ring the alarm as new report highlights unprecedented impact of COVID-19*. childrenfirstcanada.org/press-releases/child-advocates-ring-thealarm-as-new-report-highlights-unprecedented-impact-of-covid-19/
- Clark, A. J., Van Dyke, M. K., Tussey, J. T., & Haas, L. (2021). Literacy as a support for social-emotional and academic growth. In J. Tussey & L. Haas (Eds.), *Handbook of research on supporting social and emotional development through literacy education* (pp. 406–430). Information Science Reference/IGI Global.
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social–emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, 104(4), 1189–1204. <https://doi.org/10.1037/a0029356>
- Corcoran, R. P., Cheung, A., Kim, E., & Xie, C. (2018). Effective Universal school-based social and emotional learning programs for improving academic achievement: A systematic review and meta-analysis of 50 years of research. *Educational Research Review*, (25), 56-72. <https://doi.org/10.1016/j.edurev.2017.12.001>
- Courtney, D., Watson, P., Battaglia, M., Mulsant, B. H., & Szatmari, P. (2020). COVID-19 Impacts on Child and Youth Anxiety and Depression: Challenges and Opportunities. *The Canadian Journal of Psychiatry*, 65(10), 688–691. <https://doi.org/10.1177/0706743720935646>
- Creswell, C., Shum, A., Pearcey, S., Skripkauskaitė, S., Patalay, P., Waite, P. (2021). Young people's mental health during the COVID-19 pandemic. *The Lancet*, 5(8), 535-537. [https://doi.org/10.1016/S2352-4642\(21\)00177-2](https://doi.org/10.1016/S2352-4642(21)00177-2)
- Curtis, E., Jones, R., Tipene-Leach, D., Walker, C., Loring, B., Paine, S. J., & Reid, P. (2019). Why cultural safety rather than cultural competency is required to achieve health equity: A literature review and recommended definition. *International Journal for Equity in Health*, 18(1), 1–17. <https://doi.org/10.1186/s12939-019-1082-3>
- Duncan, M. J., Patte, K. A., & Leatherdale, S. T. (2021). Mental Health Associations with Academic Performance and Education Behaviors in Canadian Secondary School Students. *Canadian Journal of School Psychology*, 36(4), 335–357. <https://doi.org/10.1177/0829573521997311>

References

- Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D. & Schellinger, K.B. (2011). The impact of enhancing students, social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405-432. <https://doi.org/10.1111/j.1467-8624.2010.01564.x>
- Durlak, J. A., Mahoney, J. L., & Boyle, A. E. (2022). What we know, and what we need to find out about universal, school-based social and emotional learning programs for children and adolescents: A review of meta-analyses and directions for future research. *Psychological Bulletin*, 148(11-12), 765–782. <https://doi.org/10.1037/bul0000383>
- Engström, I., Hansson, L., Ali, L., Berg, J., Ekstedt, M., Engström, S., Fredriksson, M. K., Liliemark, J., & Lytsy, P. (2023). Relational continuity may give better clinical outcomes in patients with serious mental illness – a systematic review. *BMC Psychiatry*, 23, 952. <https://doi.org/10.1186/s12888-023-05440-1>
- Ewing, L., Hamza, C. A., Walsh, K., Goldstein, A. L., & Heath, N. L. (2022). A Qualitative Investigation of the Positive and Negative Impacts of the COVID-19 Pandemic on Post-Secondary Students' Mental Health and Well-Being. *Emerging Adulthood*, 10(5), 1312–1327. <https://doi.org/10.1177/21676968221121590>
- Findlay, L. (2017). Depression and suicidal ideation among Canadians aged 15 to 24. Statistics Canada, Catalogue no. 82-003-X. *Health Reports*, 28(1) 3-11. www.statcan.gc.ca
- Fraysier, K., Reschly, A., & Appleton, J. (2020). Predicting Postsecondary Enrollment With Secondary Student Engagement Data. *Journal of Psychoeducational Assessment*, 38(7), 882–899. <https://doi.org/10.1177/0734282920903168>
- Georgiades, K., Duncan, L., Wang, L., Comeau, J., Boyle, M. H., & 2014 Ontario Child Health Study Team. (2019). Six-month prevalence of mental disorders and service contacts among children and youth in Ontario: Evidence from the 2014 Ontario child health study. *The Canadian Journal of Psychiatry*, 64(4), 246–255. <https://doi.org/10.1177/0706743719830024>
- Government of Canada (2006). *The human face of mental health and mental illness in Canada*. Ottawa: Minister of Public Works and Government Services Canada. https://www.phac.aspc.gc.ca/publicat/human-humain06/pdf/human_face_e.pdf
- Government of Canada (2022). *Youth mental health in the spotlight again, as pandemic drags on*. <https://www.statcan.gc.ca/o1/en/plus/907-youth-mental-health-spotlight-again-pandemic-drags>
- Green, A. L., Ferrante, S., Boaz, T. L., Kutash, K., & Wheeldon-Reece, B. (2021). Social and emotional learning during early adolescence: Effectiveness of a classroom-based SEL program for middle school students. *Psychology in the Schools*, 58(6), 1056–1069. <https://doi.org/10.1002/pits.22487>
- Greenberg, M. T., Goldhaber, C. E., Weissberg, R. P., & Durlak, J. A. (2017). Social and emotional learning as a public health approach to education. *The Future of Children*, 27(1), 13-27.
- Gutiérrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher*, 32(5), 19-25. <https://journals.sagepub.com/doi/10.3102/0013189X032005019>
- Hendrickx, G., De Roeck, V., Maras, A., Dieleman, G., Gerritsen, S., Purper-Ouakil, D., Russet, F., Schepker, R., Signorini, G., Singh, S. P., Street, C., Tuomainen, H., & Tremmery, S. (n.d.). Challenges during the transition from child and adolescent mental health services to adult mental health services. *BJPsych Bulletin*, 44(4), 163–168. <https://doi.org/10.1191/bjpp.2019.55>

References

- Hoglund, W. L. G., Klinge, K. E., & Hosan, N. E. (2015). Classroom risks and resources: Teacher burnout, classroom quality and children's adjustment in high needs elementary schools. *Journal of School Psychology, 53*(5), 337–357. <https://doi.org/10.1016/j.jsp.2015.06.002>
- Hosan, N. E., & Hoglund, W. (2017). Do teacher–child relationship and friendship quality matter for children's school engagement and academic skills? *School Psychology Review, 46*(2), 201–218. <https://doi.org/10.17105/SPR-2017-0043.V46-2>
- Hugunin, J., Davis, M., Larkin, C., Baek, J., Skehan, B., & Lapane, K. L. (2023). Established Outpatient Care and Follow-Up After Acute Psychiatric Service Use Among Youths and Young Adults. *Psychiatric Services, 74*(1), 2–9. <https://doi.org/10.1176/appi.ps.202200047>
- Jangmo, A., Stålhandske, A., Chang, Z., Chen, Q., Almqvist, C., Feldman, I., Bulik, C. M., Lichtenstein, P., D'Onofrio, B., Kuja-Halkola, R., & Larsson, H. (2019). Attention-Deficit/Hyperactivity Disorder, School Performance and Effect of Medication. *Journal of the American Academy of Child and Adolescent Psychiatry, 58*(4), 423–432. <https://doi.org/10.1016/j.jaac.2018.11.014>
- Jaworska, N., & MacQueen, G. (2015). Adolescence as a unique developmental period. *Journal of Psychiatry & Neuroscience : JPN, 40*(5), 291–293. <https://doi.org/10.1503/jpn.150268>
- Jennings, P. A., & Frank, J. L. (2015). Inservice preparation for educators. In *Handbook of social and emotional learning: Research and practice* (pp. 422–437). The Guilford Press.
- Jones P. B. (2013). Adult mental health disorders and their age at onset. *The British journal of psychiatry. Supplement, 54*, s5–s10. <https://doi.org/10.1192/bjp.bp.112.119164>
- Kessler, R.C., Berglund, P., Demler, O., Jin, R., Merikangas, K.R., & Walters, E.E. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 593–602. <https://doi.org/10.1001/archpsyc.62.6.593>
- Laverty, M., McDermott, D. R., & Calma, T. (2017). Embedding cultural safety in Australia's main health care standards. *The Medical journal of Australia, 207*(1), 15–16.
- Mahfouz, J., & Anthony-Stevens, V. (2020). Why Trouble SEL? The Need for Cultural Relevance in SEL. *Occasional Paper Series, 2020* (43). <https://educate.bankstreet.edu/occasional-paper-series/vol2020/iss43/6>
- Mahoney, J. L., Weissberg, R. P., Greenberg, M. T., Dusenbury, L., Jagers, R. J., Niemi, K., Schlinger, M., Schlund, J., Shriver, T. P., VanAusdal, K., & Yoder, N. (2021). Systemic social and emotional learning: Promoting educational success for all preschool to high school students. *The American Psychologist, 76*(7), 1128–1142. <https://doi.org/10.1037/amp0000701>
- McCallops, K., Barnes, T. N., Jones, I., Nelson, M., Fenniman, J., & Berte, I. (2019). Incorporating culturally responsive pedagogy within social-emotional learning interventions in urban schools: An international systematic review. *International Journal of Educational Research, 94*(March), 11–28. <https://doi.org/10.1016/j.ijer.2019.02.007>

References

- Merikangas, K. R., He, J. P., Burstein, M., Swendsen, J., Avenevoli, S., Case, B., Georgiades, K., Heaton, L., Swanson, S., & Olfson, M. (2011). Service utilization for lifetime mental disorders in U.S. adolescents: results of the National Comorbidity Survey-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 50(1), 32–45. <https://doi.org/10.1016/j.jaac.2010.10.006>
- MHASEF Research Team. The Mental Health of Children and Youth in Ontario: 2017 Scorecard. Toronto, ON: Institute for Clinical Evaluative Sciences; 2017. ISBN: 978-1-926850-72-6 (Online). <https://www.ices.on.ca/Publications/Atlases-and-Reports/2017/MHASEF>
- Mokdad, A. H., Forouzanfar, M. H., Daoud, F., Mokdad, A. A., El Bcheraoui, C., Moradi-Lakeh, M., Kyu, H. H., Barber, R. M., Wagner, J., Cercy, K., Kravitz, H., Coggeshall, M., Chew, A., O'Rourke, K. F., Steiner, C., Tuffaha, M., Charara, R., Al-Ghamdi, E. A., Adi, Y., Afifi, R. A., ... & Murray, C. J. (2016). Global burden of diseases, injuries, and risk factors for young people's health during 1990-2013: A systematic analysis for the Global Burden of Disease Study 2013. *Lancet (London, England)*, 387(10036), 2383–2401. [https://doi.org/10.1016/S0140-6736\(16\)00648-6](https://doi.org/10.1016/S0140-6736(16)00648-6)
- Nielsen, L., Shaw, T., Meilstrup, C., Koushede, V., Bendtsen, P., Rasmussen, M., Lester, L., Due, P., & Cross, D. (2017). School transition and mental health among adolescents: A comparative study of school systems in Denmark and Australia. *International Journal of Educational Research*, 83, 65–74. <https://doi.org/10.1016/j.ijer.2017.01.011>
- Ojo, S., Okoye, T. O., Olaniyi, S. A., Ofochukwu, V. C., Obi, M. O., Nwokolo, A. S., Okeke-Moffatt, C., Iyun, O. B., Idemudia, E. A., Obodo, O. R., Mokwenye, V. C., & Okobi, O. E. (2024). Ensuring Continuity of Care: Effective Strategies for the Post-hospitalization Transition of Psychiatric Patients in a Family Medicine Outpatient Clinic. *Cureus*, 16(1), e52263. <https://doi.org/10.7759/cureus.52263>
- Payton, J., Weissberg, R.P., Durlak, J.A., Dymnicki, A.B., Taylor, R.D., Schellinger, K.B., & Pachan, M. (2008). *The positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific reviews*. Chicago, IL: Collaborative for Academic, Social, and Emotional Learning. <http://www.casel.org/>
- Pollak, I., Stiehl, K. A. M., Birchwood, J., Schrank, B., Zechner, K. A., Wiesner, C., & Woodcock, K. A. (2024). Promoting Peer Connectedness Through Social-Emotional Learning: Evaluating the Intervention Effect Mechanisms and Implementation Factors of a Social-Emotional Learning Programme for 9 to 12-Year-Olds. *Journal of Youth and Adolescence*, 53(1), 89–116. <https://doi.org/10.1007/s10964-023-01871-x>
- Poulou, M. S. (2017) Students' emotional and behavioral difficulties: the role of teachers' social and emotional learning and teacher-student relationships. *International Journal of Emotional Education*, 9 (2), 7289.
- Provincial System Support Program. (2017). *Common Elements of School-based Social and Emotional Learning Programs: Program Review*. Toronto, ON: Centre for Addiction and Mental Health. https://smho-smso.ca/emhc/wp-content/uploads/sites/6/2020/07/SEL_CommonElementsAnalysis_May12017_final.pdf

References

- Reschly, A. L. (2020). Dropout prevention and student engagement. In A. L. Reschly, A. J. Pohl, & S. L. Christenson (Eds.), *Student engagement: Effective academic, behavioral, cognitive, and affective interventions at school* (pp. 31–54). Springer Nature Switzerland AG. https://doi.org/10.1007/978-3-030-37285-9_2
- Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. *Journal of Educational Psychology*, 104(3), 700–712. <https://doi.org/10.1037/a0027268>
- Rickwood, D. J., Telford, N. R., Parker, A. G., Tanti, C. J., & McGorry, P. D. (2014). headspace - Australia's innovation in youth mental health: who are the clients and why are they presenting? *The Medical Journal of Australia*, 200(2), 108–111. <https://doi.org/10.5694/mja13.11235>
- Rodgers, R. F., Lombardo, C., Cerolini, S., Franko, D. L., Omori, M., Fuller-Tyszkiewicz, M., Linardon, J., Courtet, P., & Guillaume, S. (2020). The impact of the COVID -19 pandemic on eating disorder risk and symptoms. *International Journal of Eating Disorders*, 53(7), 1166–1170. <https://doi.org/10.1002/eat.23318>
- Rodríguez-Izquierdo, R. M. (2018). Researching the links between social-emotional learning and intercultural education: strategies for enacting a culturally relevant teaching. *Intercultural Education*, 29(5–6), 609–623. <https://doi.org/10.1080/14675986.2018.1528527>
- Roorda, D., Koomen, H., Spilt, J., & Oort, F. (2011). The Influence of Affective Teacher-Student Relationships on Students' School Engagement and Achievement: A Meta-Analytic Approach. *Review of Educational Research*, 81, 493–529. <https://doi.org/10.3102/0034654311421793>
- Ruberman, L. (2014). Challenges in the Transition to College: The Perspective of the Therapist Back Home. *American Journal of Psychotherapy*, 68(1), 103–115. <https://doi.org/10.1176/appi.psychotherapy.2014.68.1.103>
- Salter, D., Neelakandan, A., & Wuthrich, V. M. (2024). Anxiety and teacher-student relationships in secondary school: A systematic literature review. *Child Psychiatry and Human Development*. Advance online publication. <https://doi.org/10.1007/s10578-024-01665-7>
- Sampogna, G., Pompili, M., & Fiorillo, A. (2021). Mental Health in the Time of COVID-19 Pandemic: A Worldwide Perspective. *International journal of environmental research and public health*, 19(1), 161. <https://doi.org/10.3390/ijerph19010161>
- Sancassiani, F., Pintus, E., Holte, A., Paulus, P., Moro, M. F., Cossu, G., Angermeyer, M. C., Carta, M. G., & Lindert, J. (2015). Enhancing the Emotional and Social Skills of the Youth to Promote their Wellbeing and Positive Development: A Systematic Review of Universal School-based Randomized Controlled Trials. *Clinical practice and epidemiology in mental health: CP & EMH*, 11(Suppl 1 M2), 21–40. <https://doi.org/10.2174/1745017901511010021>
- Scheiner, C., Grashoff, J., Kleindienst, N., & Buerger, A. (2022). Mental disorders at the beginning of adolescence: Prevalence estimates in a sample aged 11-14 years. *Public Health in Practice*, 4, 100348. <https://doi.org/10.1016/j.puhip.2022.100348>

References

- School-Based Mental Health and Substance Abuse (SBMHSA) Consortium. (2013). *School-based mental health in Canada: A final report*. Mental Health Commission of Canada. https://www.mentalhealthcommission.ca/wp-content/uploads/drupal/ChildYouth_School_Based_Mental_Health_Canada_Final_Report_ENG_0.pdf
- Short, K., Bullock, H., Crooks, C. V., & Georgiades, K. (2022). Using Implementation Science to Optimize School Mental Health During the COVID-19 Pandemic. *Canadian Journal of Community Mental Health*.
- Singh, S. P., Paul, M., Ford, T., Kramer, T., Weaver, T., McLaren, S., Hovish, K., Islam, Z., Belling, R., & White, S. (2010). Process, outcome and experience of transition from child to adult mental healthcare: Multiperspective study. *British Journal of Psychiatry*, 197(4), 305–312. <https://doi.org/10.1192/bjp.bp.109.075135>
- Smith, Z. R., Flax, M., Becker, S. P., & Langberg, J. (2023). Academic motivation decreases across adolescence for youth with and without attention-deficit/hyperactivity disorder: Effects of motivation on academic success. *Journal of Child Psychology and Psychiatry*, 64(9), 1303-1313.
- Sousa, V., Silva, P., Romão, A., & Coelho, V. (2023). Can an Universal School-Based Social Emotional Learning Program Reduce Adolescents' Social Withdrawal and Social Anxiety? *Journal of Youth and Adolescence*, 52, 1–13. <https://doi.org/10.1007/s10964-023-01840-4>
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting Positive Youth Development Through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects. *Child Development*, 88(4), 1156–1171. <https://doi.org/10.1111/cdev.12864>
- Thierry, K., Vincent, R., Norris, K. & Dawson, O. (2022). Improving School Readiness for a Social Emotional Learning Curriculum: Case Study of a School-Mental Health Agency Partnership, *Journal of Research in Childhood Education*, 36:3, 483-505, DOI: [10.1080/02568543.2021.1960938](https://doi.org/10.1080/02568543.2021.1960938)
- Thornberg, R., Wegmann, B., Wänström, L., Bjereld, Y., & Hong, J. S. (2022). Associations between student–teacher relationship quality, class climate, and bullying roles: A Bayesian multilevel multinomial logit analysis. *Victims & Offenders*, 17(8), 1196–1223. <https://doi.org/10.1080/15564886.2022.2051107>
- Waddell, C., McEwan, K., Shepherd, C. A., Offord, D. R., & Hua, J. M. (2005). A Public Health Strategy to Improve the Mental Health of Canadian Children. *The Canadian Journal of Psychiatry*, 50(4), 226–233. <https://doi.org/10.1177/070674370505000406>
- Waddell, C., Offord, D. R., Shepherd, C. A., Hua, J. M., & McEwan, K. (2002). Child Psychiatric Epidemiology and Canadian Public Policy-Making: The State of the Science and the Art of the Possible. *The Canadian Journal of Psychiatry*, 47(9), 825–832. <https://doi.org/10.1177/070674370204700903>
- Wallace, S. (2016). *Factors in Aboriginal Student Success Final report on the research project We're all in this together: Keeping Aboriginal students in school (KASIS)*. https://www.sd57.bc.ca/school/abed/Documents/FIASS_Final%20Report.pdf

References

- Wickersham, A., Sugg, H. V. R., Epstein, S., Stewart, R., Ford, T., & Downs, J. (2021). Systematic Review and Meta-analysis: The Association Between Child and Adolescent Depression and Later Educational Attainment. *Journal of the American Academy of Child and Adolescent Psychiatry*, 60(1), 105–118. <https://doi.org/10.1016/j.jaac.2020.10.008>
- Wiens, K., Bhattarai, A., Pedram, P., Dores, A., Williams, J., Bulloch, A., & Patten, S. (2020). A growing need for youth mental health services in Canada: Examining trends in youth mental health from 2011 to 2018. *Epidemiology and Psychiatric Sciences*, 29, E115. <https://doi.org/10.1017/S2045796020000281>
- World Health Organization. (2020). *Guidelines on mental health promotive and preventive interventions for adolescents: helping adolescents thrive*. Geneva: World Health Organization; 2020. <https://www.who.int/publications/i/item/guidelines-on-mental-health-promotive-and-preventive-interventions-for-adolescents>
- Yang, C., Bear, G. G., & May, H. (2018). Multilevel Associations Between School-Wide Social–Emotional Learning Approach and Student Engagement Across Elementary, Middle, and High Schools. *School Psychology Review*, 47(1), 45–61. <https://doi.org/10.17105/SPR-2017-0003.V47-1>
- Yeager, D. S. (2017). Social and emotional learning programs for adolescents. *The Future of Children*, 73-94.
- Zhang, Z., & Peng, P. (2023). Longitudinal reciprocal relations among reading, executive function, and social-emotional skills: Maybe not for all. *Journal of Educational Psychology*, 115(3), 475–501. <https://doi.org/10.1037/edu0000787>
- Zimmer-Gembeck, M. J., & Skinner, E. A. (2008). Adolescents coping with stress: development and diversity: "Approximately 25% of adolescents will experience at least one significant stressor, including the death of a loved one or witnessing a traumatic event." *The Prevention Researcher*, 15(4), 3+. <https://link.gale.com/apps/doc/A191015331/AONE?u=anon~78b3d24e&sid=googleScholar&xid=df779d44>

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Alexandra Fortier, EdD, MSS, RSW | Innovation, Scale Up and Research Mobilization
Consultant

School Mental Health Ontario | Santé mentale en milieu scolaire Ontario

afortier@smho-smso.ca

smho-smso.ca | [@SMHO](https://twitter.com/SMHO) [SMO](https://www.facebook.com/SMHO)



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Geneviève Mák, Principal Research Associate/ Associée principale supérieure de recherche Société de
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