

NEED FOR AND INTEREST IN SOCIAL AND EMOTIONAL ASPECTS OF LEARNING:  
PLANNING EVIDENCE-BASED PROFESSIONAL DEVELOPMENT

by

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## TABLE OF CONTENTS

LIST OF TABLES.....	v
ABSTRACT.....	vi
CHAPTER ONE: LITERATURE REVIEW.....	1
Mental Health in Adolescence.....	1
Mental Health in Schools.....	2
Social and Emotional Learning.....	3
SEL programs.....	3
Efficacy of SEL programs.....	4
Social and Emotional Aspects of Learning Professional Development Topics.....	6
Emotions as part of students' problem-solving processes.....	7
Mindfulness in the classroom.....	8
Self-advocacy for learning.....	11
Anxiety in the classroom.....	12
Social determinants of school success.....	14
Understanding trauma.....	16
Attributions for success and failure and adopting an incremental theory of intelligence.....	18
The Role of Teachers in Social and Emotional Aspects of Learning.....	19
The Role of School Psychologists in Social and Emotional Aspects of Learning.....	21
Interprofessional Education.....	22
IPE in Nova Scotia.....	23
The Nova Scotia Context.....	24

CHAPTER 2: NEED FOR AND INTEREST IN SOCIAL AND EMOTIONAL ASPECTS OF LEARNING: PLANNING EVIDENCE-BASED PROFESSIONAL DEVELOPMENT .....	26
The Current Study.....	27
Method .....	28
Participants.....	28
Measure.....	28
Procedure .....	29
Variables of Interest.....	30
Results.....	30
Participants’ Demographic Information .....	30
Ratings of Workshops.....	31
Social determinants of school success.....	31
Self-advocacy for learning.....	31
Anxiety in the classroom.....	32
Emotions as part of students’ problem-solving processes.....	32
Mindfulness in the classroom.....	32
Understanding trauma.....	33
Attributions for success and failure and adopting an incremental theory of intelligence.....	33
Previous Learning Opportunities .....	34
Preferred Modalities for Professional Development.....	34
IPE with Teachers and School Psychologists.....	34
Discussion.....	36
Implications for Professional Development.....	36

Limitations .....	39
Future Directions .....	40
References .....	42
Appendix A.....	51
Appendix B.....	62
Appendix C.....	63
Appendix D.....	64
Appendix E .....	66

LIST OF TABLES

Table 1. Knowledge, Interest, and Relevance Likert-Scale Ratings for Each Workshop.....51

## ABSTRACT

Classrooms across Nova Scotia encompass a wide range of complex student-learning, -behavioral, and -mental health needs. Teachers should be equipped with an understanding of how social and emotional aspects of students' experiences in the classroom influence learning, as well as how to implement practical strategies in their classroom that are evidence-based. Further, including school psychologists in this professional development would allow for interprofessional collaboration where both groups can learn from each other. The current research piloted a survey investigating Grades 7-9 teachers' and school psychologists' perceived interest in, need for, and relevance of various evidence-based workshop topics in social and emotional aspects of learning. Despite multiple recruitment attempts, only five participants completed the survey. The findings from the small sample indicate a possible learning need for both professional groups. The survey also addressed preferred modalities for professional development, previous learning opportunities, other possible topics of interest, and perceived value in learning together as a group. The variability in responses indicate the survey may be a useful tool when planning for future professional development in the province.

## CHAPTER ONE: LITERATURE REVIEW

### **Mental Health in Adolescence**

Mental health can be defined as “the capacity of each and all of us to feel, think, and act in ways that enhance our ability to enjoy life and deal with the challenges we face. It is a positive sense of emotional and spiritual well-being that respects the importance of culture, equity, social justice, interconnections, and personal dignity” (Government of Canada, 2011). Mental health is an important piece of overall health and well-being. Unfortunately, many mental health problems begin to manifest during adolescence (Government of Canada, 2011). In Canada, it is estimated that 1.2 million children and youth are affected by mental illness (Mental Health Commission of Canada, 2012). Untreated mental health problems or illnesses can severely influence children and adolescents’ development, specifically by hindering their educational achievement and their potential to live a productive life (Government of Canada, 2011).

Despite this large number of Canadian youth being affected by mental health problems, less than 20 percent will receive appropriate treatment (Mental Health Commission of Canada, 2012). This is concerning as research has indicated that early identification and intervention is key in improving youth’s trajectory and prevalence of mental health problems and illnesses in adulthood (Mental Health Commission of Canada, 2012). In order to best help Canadian youth, there needs to be an increase in access to appropriate services, as well as increased support across the entire continuum of care. This includes not just primary care, but mental health prevention, early identification, specialized treatment, ongoing support, and long-term care (Mental Health Commission of Canada, 2012). In order for mental health support to be a wraparound service for youth, all partners must be involved and share responsibility. This

includes parents, community organizations, health professionals, and educators (Mental Health Commission of Canada, 2012).

### **Mental Health in Schools**

The school environment has traditionally been seen as solely focusing on fostering students' academic development, but research has demonstrated that other aspects of student well-being predict academic success and play important roles in the learning process (Buchanan, Gueldner, Tran, & Merrell, 2009). Konishi and Park (2017) have discussed that to be successful, students must take initiative and be responsible for their own learning, have interpersonal relationships with those at school, and develop a sense of mastery in the various academic domains. Therefore, school requires students to be competent academically, socially, and emotionally. Aber, Grannis, Owen, and Sawhill (2013) expanded on this idea by stating that learning is almost always a social experience, as it requires frequent interactions with teachers, peers, and family members. The emotional component also plays a key role in adolescents' school success by influencing their level of engagement, work ethic, and commitment (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

There is increasing understanding in the research that schools must address a broader scope of students' wellbeing, by addressing not only their academic development, but their social and emotional development as well (Buchanan et al., 2009). Once students possess these social and emotional competencies they will be able to apply them to different situations in school (e.g. studying behaviour or academic engagement) to become more successful (Zins, Bloodworth, Weissberg, & Walberg, 2007). Adolescents spend the majority of their day at school, therefore schools can be the ideal environment to promote social and emotional development in students. Konishi and Park (2017) discussed how some children enter school having already developed



social and emotional skills through experiences with family, friends, and extra-curricular activities. However, not all children are lucky enough to have these opportunities for social and emotional growth. This means that teachers are in the unique position to help develop these important skills in students who otherwise would not have the necessary experiences (Konishi & Park, 2017). While targeted prevention programs for youth exposed to risk factors (e.g. poverty, family violence, family history of mental illness) are a crucial component for school-based efforts, broad programs which promote mental health for all students are also important. Healthy social and emotional development is key in promoting mental health and resilience through childhood and in later years (Mental Health Commission of Canada, 2012).

### **Social and Emotional Learning**

Social and emotional learning (SEL) is described by Zins et al. (2007) as, “the process through which children enhance their ability to integrate thinking, feeling, and behaving to achieve important life tasks” (p. 194). There are many different components of social and emotional skills, such as identifying emotions from social cues, goal setting, perspective taking, interpersonal problem solving, conflict resolution, and decision making (Durlak et al., 2011). Researchers have discussed the importance of students developing these competencies, as they will become more successful in school and beyond when compared to someone who does not possess these competencies (Zins et al., 2007).

**SEL programs.** Many schools have recognized the importance of developing social and emotional skills in their students, and have taken action by implementing various SEL curricula and programs. The goal of many of these programs are to foster the development of these five competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision making (Collaborative for Academic, Social, and Emotional Learning,

2013). Mastering these competencies is believed to provide a foundation to reduce risk factors and promote positive adjustment in children and youth. SEL programming can look different based on the program followed, but it generally involves systematic instruction of SEL skills, including modeling, practicing, and generalizing to diverse situations (Durlak et al., 2011). An example of an SEL program is the Promoting Alternative Thinking Strategies (PATHS) curriculum (Kam, Greenberg, & Kusche, 2004). It focuses on promoting students' emotional development, self-regulation, and social problem-solving skills. This program is delivered by teachers with the support of project staff and it includes regular lessons throughout the majority of the school year (Kam et al., 2004).

**Efficacy of SEL programs.** These SEL programs have been increasingly investigated empirically. In an article by Yeager (2017), he explained that effective SEL programs have the ability to promote healthy development in adolescents by promoting positive choices and respect, while teaching adolescents how to productively deal with their desires for independence. Social and emotional competencies have been linked to various positive outcomes for students in the research. Durlak et al. (2011) conducted a meta-analysis which included 213 school-based, universal (e.g. for entire student body) SEL programs which included 270, 034 students. They examined the effects of SEL programming across many outcomes. Results showed that enhancing areas of students' social and emotional skill development positively influenced students' overall wellbeing. This included greater social and emotional skills ( $d = .57$ ), academic achievement ( $d = .27$ ), positive social behaviour ( $d = .24$ ), positive attitudes about self and school ( $d = 0.23$ ), and a reduction in conduct problems and emotional distress ( $d = .24$ ) (Durlak et al., 2011).

SEL interventions have been shown to have positive follow-up effects as well. A meta-analysis by Taylor, Oberle, Durlak, and Weissberg (2017) reviewed 82 school-based, universal SEL interventions involving 97,406 students from kindergarten to high school. They investigated the follow-up effects of SEL programming on positive youth development. The outcomes assessed were SEL skills, attitudes towards self, others, and school, positive social behaviour, academic performance, conduct problems, emotional distress, and substance use. Students in the school-based SEL interventions continued to show significant positive outcomes in all seven of the indicators from 56 weeks to 195 weeks post-intervention (Taylor et al., 2017).

SEL interventions are also equally beneficial for students across demographic groups (Taylor et al., 2017). For example, there was no significant difference in the impact of SEL based on race, social economic status, or geographical context. The researchers discussed that this does not mean that SEL interventions should be “one size fits all”, but should continue to be designed and implemented in culturally competent ways (Taylor et al., 2017).

Taylor and colleagues (2017) discussed the issues and considerations for implementing SEL programs. According to the researchers, implementation is a multi-dimensional component which includes fidelity, dosage, differentiation, monitoring of control conditions, and finally, program reach. Programs where implementation is strong will achieve greater outcomes than those when implementation is poor. Taylor and colleagues (2017) went on to discuss how professional development is necessary for effective implementation. This is because if school personnel are simply following a manualized program, they are not able to discuss with experts the theory behind the intervention, the core components of the intervention, what to do if issues arise, and how much flexibility or freedom is possible when delivering the program (Taylor et

al., 2017). Providing teachers with professional development is very important in program implementation, and therefore producing positive outcomes in the students (Taylor et al., 2017).

### **Social and Emotional Aspects of Learning Professional Development Topics**

Emotions impact many things we do in a day. Being able to effectively manage emotions has many benefits for children in terms of their adaptive functioning, and particularly with their academic achievement (Graziano, Reavis, Keane, & Calkins 2006). Graziano and colleagues (2006) examined the role of children's emotion regulation skills on early academic success, specifically with kindergarteners. They found that emotion regulation as reported by parents positively predicted academic success and productivity in the classroom setting (Graziano et al., 2006). It also positively predicted performance on math and early literacy standardized tests. More specifically, their findings suggest that children who are able to regulate their emotions more effectively have less difficulty learning in the classroom and are more productive and accurate when completing work (Graziano et al, 2006). The researchers discussed how this could be because young children are experiencing emotional arousal (e.g. anxiety, frustration) when learning new topics and then having to apply this information. Children with more emotional regulation skills also had greater positive relationships with their teachers and showed less behaviour problems (Graziano et al., 2006).

As students transition from elementary school, emotions continue to play an important role in academic achievement. During this time (e.g. Grade 5-7) enjoyment consistently decreases, while boredom increases (Vierhaus, Lohaus, and Wild, 2016). Vierhaus and colleagues (2012) investigated this further. Not surprisingly, development of enjoyment was positively associated with the development of problem-focused coping and calming emotion regulation, whereas the development of boredom was positively associated with avoidant coping

and anger-related emotion regulation (Vierhaus et al., 2016). The researchers discussed that having an adaptive pattern of coping and emotional regulation in elementary school may inhibit these unfavorable emotions (e.g. boredom) when transitioning into adolescence. Their findings emphasize the importance of creating a positive learning environment during those crucial early years (Vierhaus et al., 2016).

**Emotions as part of students' problem-solving processes.** Various studies have examined the role emotions play specifically in problem-solving. Eynde, Corte, and Verschaffel (2006) conducted a study investigating the role of emotions in the mathematics classroom using case studies. They discussed the variety of emotions these students experienced during a problem-solving math activity (e.g. annoyed, frustrated, angry, worried, anxious, relieved, happy), also, that these emotions are linked to specific interpretation and appraisal processes. Negative emotions usually were experienced when the student was unable to solve the problem as easily as expected (Eynde et al., 2006). However, there were differences in how students confronted this difficulty, either by becoming hopeless or by becoming motivated and trying to overcome the cognitive block. The authors discussed that because negative emotions (e.g. frustration, anger) are so prevalent in mathematics problem-solving, educators should allow space for students to feel these emotions and be taught how to cope effectively with these feelings (Eynde et al., 2006).

A recent study of adolescents engaged in complex problem-solving online for a biology class explored the process of problem-solving over time through self-report measures, examining students' cognitive processes, positive and negative emotional experiences, and self-regulation (Baars, Wijnia, & Paas, 2017). Negative affect was predictive of poorer problem-solving performance among students, as was inaccurate self-assessments. Self-regulation – knowing the

extent to which one is moving toward a goal or needs to revise strategies to reach a goal in complex problem-solving- is key to successful complex problem-solving. This study was not able to identify if negative affect impacts problem-solving, or if students feel negative emotions because they are struggling. Broaden and build theory of positive emotions (Fredrickson, 1998; Fredrickson & Branigan, 2005) is an empirically supported framework positing that negative emotions narrow an individual's cognitive perspective taking. Complex problem-solving requires divergent thinking, whereby a student can think of alternative solutions and be flexible in the approach one is taking to solve a problem.

Complex problem-solving unfolds over a long time and is often interpersonal in nature. As such, it is difficult to study empirically. Online learning environments with tracking technology helps researchers understand how people solve problems and the roles emotions might play. Azevedo, Taub, Murdick, Millar, Bradbury and Price (2017) recently published a chapter on their theoretical and initial empirical work using advanced learning technologies. They propose that emotion-awareness, -regulation and -adaptivity all play a role in learners' problem-solving processes. Further, they are exploring how technology can be used to provide immediate feedback to people about their emotional experiences in the moment with the goal of helping learners become more aware of their emotional reactions during problem-solving, and in turn to develop self-regulatory strategies that will lead to learning and problem-solving success.

**Mindfulness in the classroom.** Mindfulness practices have shown benefits through meta-analyses conducted with adult populations (Goldberg et al., 2018). Mindfulness has been showing some promise with youth, however this has been mainly with clinical populations (Schonert-Reichl et al., 2015). Mindfulness-based interventions (MBIs) can be thought of as “any treatment that intentionally trains mindfulness skills as the core therapeutic component for

reducing problem behaviour or increasing wellbeing behaviour” (Klingbeil et al., 2017, p. 78). Klingbeil and colleagues (2017) synthesized the treatment effects for 76 published group-design studies on MBIs with youth, conducted across school and non-school settings, using both clinical and non-clinical samples. Findings indicated that MBIs yielded a small positive average treatment effect ( $g = 0.31$ ) across the therapeutic outcome domains (e.g. academic achievement and school functioning, externalizing problems, internalizing problems, negative emotions and subjective distress, positive emotions and self-appraisal, physical health, social competence, and prosocial behavior). However, the researchers note that some outcome domains (e.g. academic achievement and school functioning) were only included in a small number of studies and therefore more research into these areas are required. They discussed that because of the variety of therapeutic benefits targeted by MBIs in youth, their findings provide some empirical support for incorporating MBIs in SEL interventions. More specifically, MBIs can be beneficial in addressing some of the competencies addressed in SEL, such as self-awareness and self-management (Klingbeil et al., 2017).

Classroom-based mindfulness programs have shown promising benefits for youth as well. Carsley, Khoury, and Heath (2018) conducted a meta-analysis to assess the effects of school-based mindfulness interventions on mental health and wellbeing, with results showing a small to moderate effect size ( $g = 0.24$ ). They also found that interventions delivered later in adolescence had the greatest effect, consistent with the research showing the benefits of mindfulness for adults (Carsley et al., 2018). However, they did find that students showed greater benefits when the program was delivered by a trained teacher rather than an outside facilitator (Carsley et al., 2018). This is an important finding, as the authors discussed how this could be

because teachers are in a position to build a safe space for students to continue practicing and using the mindfulness strategies throughout the school year (Carsley et al, 2018).

Schonert-Reichl and colleagues (2015) investigated how a classroom-based SEL program that incorporates mindfulness practices may promote positive outcomes (e.g. emotion regulation, well-being) in students. In this study, four classes of combined Grade 4 or 5 students were randomly assigned to receive the SEL with a mindfulness component or a regular social responsibility program (Schonert-Reichl et al., 2015). Promising findings for the SEL with mindfulness program were noted, such as improvements in executive functioning, self-reported measures of well-being, and self- and peer-reported prosocial behaviour. The researchers discussed that the daily mindfulness practices could have led to increased inhibitory control, leading to improved emotional control and decreased aggression (Schonert-Reichl et al., 2015).

Not all of the research for mindfulness in youth have shown clear benefits. Thorton, Williamson, and Cooke (2017) conducted a mindfulness group with youth ( $n = 5$ ) who had identified mild-moderate learning difficulties and also reported struggling with things such as anxiety, low mood, low self-esteem, poor social skills, and aggression. The six-week group was facilitated by a clinical psychologist and psychology student, and participants were taught a variety of mindfulness practices which focused on the five senses (e.g. body scanning, mindful breathing). Despite receiving positive feedback from the participants, the researchers noted that their findings were limited due to participants not completing post-group questionnaires. Despite not being able to draw any conclusions from the group, they note that the pilot study suggests that a mindfulness-based group intervention can be accessible and perhaps useful for students with learning disabilities and anxiety (Thorton et al., 2017).



**Self-advocacy for learning.** Self-advocacy has been defined in many different ways by many different researchers. In general, self-advocacy occurs when an individual is able to speak to other individuals (e.g. teachers, classmates, colleagues, bosses) on their own behalf to improve their ability to succeed (Test, Fowler, Wood, Brewer, & Eddy, 2005). This could include things like discussing certain accommodations they require in a classroom setting. Self-advocacy is particularly important for individuals with different abilities as they go through school, post-secondary, and into the workforce. Test and colleagues (2005) developed a framework which outlines four components of self-advocacy, including, knowledge of self, knowledge of others, communication, and leadership. Each component has various features which help develop the skill. For example, knowledge of self includes students being able to develop an understanding of their interests, preferences, strengths, and needs (Test et al., 2005). As students' progress through development, the level of complexity of self-advocacy skills increases. This framework is designed to help in the teaching of self-advocacy skills. By using this model, teachers would be able to design lessons to develop instruction following the different components. Also, teachers could use the model to assess individual student's strengths and weaknesses and therefore develop personalized self-advocacy goals (Test et al., 2005).

Middle school is a time of tremendous change for adolescents as it requires greater independence. Because of this, self-advocacy skills become even more important. Mishna, Muskat, Farnia, and Wiener (2011) conducted a school-based group intervention teaching self-advocacy skills to middle school students with a learning disability. Some of the topics covered included education on learning disabilities, understanding supports that help individuals learn and complete school work, how to ask for help, how to stand up for oneself, relaxation techniques, and problem-solving (Mishna et al., 2011). Besides the delivery of the manualized

program, consultation with parents and teachers was also involved in the intervention. Results from students' self-reports indicated an increase in self-advocacy knowledge and ability post intervention (Mishna et al., 2011). Self-advocacy interventions have also been found to be effective when delivered virtually (Kotzer & Margalit, 2007). Self-advocacy behaviours were not directly measured, as the study focused on examining the role different variables play in predicting students' competence while learning to present their needs and difficulties. When students use self-advocacy skills, such as expressing their needs, it is often related to their increased self-competence (Kotzer & Margalit, 2007). Students with a learning disability reported higher self-competence scores following the intervention. The factors which predicted their score included their level of competence at the beginning of the year, their feeling of belonging with the intervention group, their feeling of loneliness, and their feeling of hope (Kotzer & Margalit, 2007).

**Anxiety in the classroom.** Students with anxiety can experience great difficulty learning and accessing learning in the classroom (Moran, 2016). Moran (2016) wrote a report discussing the implications of anxiety in the middle school classroom, and recommended things teachers can do in relation to students' anxiety. These recommendations included that teachers could collaborate with school counselors to deliver lessons which assist students in developing coping skills (e.g. relaxation techniques), and taking notes of signs and symptoms in students who appear to be struggling. Moran (2016) also discussed classroom accommodations that can be beneficial for students with anxiety, such as posting a clear routine and letting them know in advance if any changes are to be made, allowing group work to promote positive peer interactions, and giving the student a pass to leave the classroom without drawing attention to themselves if their anxiety symptoms are feeling overwhelming. While a teacher's role is not to

diagnose students with anxiety, they are in an important position to help identify students who are showing signs of anxiety, and then using the system in place to ensure students reach the professionals who are able to help them (Moran, 2016).

Cognitive behaviour therapy (CBT) approaches are commonly used in school-based programs targeting anxiety (Werner-Seidler, Perry, Callear, Newby, & Christensen, 2017). Werner-Seidler and colleagues (2017) conducted a meta-analysis of 81 studies investigating the effectiveness of school-based prevention programs on anxiety and depression. Results showed a small effect size ( $g = 0.20$ ) for anxiety immediately post-intervention and a marginal effect ( $g = 0.13$ ) at 12-month follow-up (Werner-Seidler et al., 2017). The authors note that even though the effect size was small, these prevention programs (in comparison to treatment programs) are likely to be associated with meaningful improvements at the population level. More specifically, these programs are likely to have implications for preventing the onset of an anxiety disorder in some youth (Werner-Seidler et al., 2017). There were no differences in the effect size for universal (e.g. for the entire student body) or targeted (e.g. for those at risk) prevention programs. It is worth noting that the authors discussed that almost all of the studies included were of low quality (e.g. some level of bias, not measuring fidelity), therefore there is room for improvement in the quality of studies in this area (Werner-Seidler et al., 2017).

Not all anxiety prevention programs using CBT have yielded positive results. The FRIENDS for Life program is a curriculum for anxiety prevention used in schools (Miller et al., 2011). Miller and colleagues (2011) conducted a study where they enriched the FRIENDS for Life program with culturally sensitive Aboriginal content and delivered it in Canadian public-school classrooms. FRIENDS is a manualized program which teaches children to identify and understand anxiety signals, bodily responses, worried thoughts, and maladaptive behaviours

associated with feeling worried and anxious (Miller et al., 2011). Their analyses indicated that a reduction in anxiety symptoms could not be directly attributed to the FRIENDS intervention because the students in the control condition also had a reduction in anxiety symptoms (Miller et al., 2011). The study relied solely on self-report measures for anxiety symptoms. They also noted that Aboriginal children did not significantly differ in anxiety levels, symptom decline, or positive response to the program (Miller et al., 2011).

Test anxiety is another area of concern in today's schools, as it can have negative effects on students' academic performance, motivation, and problem-solving confidence (Yeo, Goh, & Liem, 2016). However, most of the research has been done on college-age students (Yeo et al., 2016). Yeo and colleagues (2016) examined the utility of a school-based test anxiety intervention for fourth grade students. The intervention was four sessions, classroom-based, and used behavioural strategies and cognitive modification based on the CBT literature. Results showed a moderate treatment effect size ( $d = 0.7$ ), indicating that this brief, school-based, group administered CBT program can lower the test anxiety of young students. They also found reduced level of students' anxiety at follow-up. The authors discuss how this preliminary evidence suggests how, at a time where testing is beginning earlier, early intervention can allow for children to get a head start in gaining the skills to cope with their anxiety (Yeo et al., 2016).

**Social determinants of school success.** The term "social determinants" is often used in health research, which the WHO (2008) defines as, "the conditions in which people are born, grow, live, work, and age". These social determinants affect all aspects of an adolescents' well-being, with one aspect being school performance (Viner et al., 2012). For example, Viner and colleagues (2012) discussed how a safe and supportive school where students and their parents feel connected, positively impacts many health outcomes and protects against risk behaviours in

youth. Park, Stone, and Holloway (2017) examined the role school-based parental involvement plays in student achievement. They found that schools where parents were more involved (e.g. volunteering, fundraising, being on committees) had higher percentages of students meeting or above national/state standards in math and reading. The researchers hypothesized that this could be because when parents are involved in school, they share the responsibility in making the school more sensitive to students' needs (Park et al., 2017). They also have more interactions with other parents, where there can be open communication regarding academically beneficial information and parents can also form a common expectation for student achievement and conduct (Park et al., 2017). Other researchers have also examined the effects of family involvement on academic achievement, finding that greater family involvement predicted a higher GPA in middle school students (Li, Allen, & Casillas, 2017).

Socio-economic status (SES) can have an impact on students' academic performance as well. Luo, Wang, Zhang, and Chen (2016) examined the role of family SES on learning burnout in adolescents. Learning burnout is one of the most important factors influencing students' academic progress and refers to a, "negative emotional or behavioural response to stress arising from a failure to cope with academic pressure or to solve learning problems" (Luo et al., 2016, p. 1). Results from their study indicated that family SES has a negative effect on learning burnout. Therefore, student with a lower SES have higher rates of learning burnout. They also note that family cultural environment played a mediating role in this interaction, and therefore interventions in preventing learning burnout might be more beneficial if they focus on creating a better learning environment in the family or increasing parental involvement at school (Luo et al., 2016). Li et al. (2017) found an indirect link between SES and academic achievement, with emotional control playing a mediating role. Their results showed that students with a lower SES

and who have difficulty regulating emotions showed less academic achievement (Li et al., 2017). A similar pattern was found with school climate playing a mediating role in the relation between SES and academic achievement. School climate plays an important part in shaping adolescents' self-regulation skills, and the development of these skills may influence their level of academic achievement (Li et al., 2017).

**Understanding trauma.** Schools are developing an increased awareness of how trauma can negatively affect children and adolescents' development and functioning (Frydman & Mayor, 2017). Trauma can impact adolescents' social development (e.g. developing healthy relationships) and cognitive development (e.g. emotion regulation) (Frydman & Mayor, 2017). Many articles have expressed the need for more informed and comprehensive approaches to addressing trauma in schools (Durlak, et al., 2011; Frydman & Mayor, 2017). There is an increasing trend to use a multitiered service delivery model when addressing trauma in schools (Phifer & Hull, 2016). The primary tier focuses on system-wide preventative measures to promote a safe learning environment. This would include informing school staff about the signs and impact of trauma, teaching students coping skills, and engaging teaching practices. Ongoing data would indicate at-risk students who are in need of more targeted group intervention (e.g. psycho-education, strengthening self-regulation skills). Students who require more individualized and intensive support move to tertiary interventions, such as CBT (Phifer & Hull, 2016).

One example of a multitiered trauma-informed program is Healthy Environments and Response to Trauma in Schools (HEARTS) (Dorado, Martinez, McArthur, & Leibovitz, 2016). An example of Tier I universal supports included in the program was training sessions with school staff to establish common language and understanding around the effects of complex

trauma on things like learning, teaching, behaviour, and relationships (Dorado et al., 2016). An example of a Tier II intervention was integrating a trauma-informed lens to disciplinary policies (e.g., less punitive and more supportive) when dealing with at risk youth. An example of the Tier III intervention included therapy provided by clinicians for trauma-impacted students. Results from data taken indicated preliminary support for the effectiveness of the HEARTS program (Dorado et al., 2016). School personnel indicated a significant increase in their understanding of trauma and trauma-sensitive practices. They also reported improvements in students' ability to learn, on task behaviour, and attendance. Students who received therapy had a decrease in trauma-related symptoms. Lastly, there was also a drop in disciplinary office referrals, incidents of physical aggression, and suspensions at the school (Dorado et al., 2016). Despite these positive preliminary findings, a limitation of the study was that the researchers did not collect student-level data regarding learning improvements post intervention (Dorado et al., 2016).

Chafouleas, Johnson, Overstreet, and Santos (2016) wrote a report discussing the complexities of trauma-informed service delivery in schools. For example, students can experience events very differently, and therefore could respond in numerous ways to potentially triggering situations (Chafouleas et al., 2016). Frydman and Mayor (2017) also discussed the need for professional development in this area, as preservice training programs do not consistently address trauma-informed instruction. This leaves teachers having to address challenging behaviour not always understanding how trauma could be impacting the student (Phifer & Hull, 2016). To begin to better understand how trauma can manifest itself in the classroom, a focus group was held with 39 youth involved in the judicial system (West, Day, Somers, & Baroni, 2014). Themes were identified through the researchers' analysis of the conversations. Their findings suggested that these students have an understanding of how their

previous experiences may impact their functioning at school, and they have thoughts and perceptions on what could better the learning environment for them (West et al., 2014).

Therefore, the authors suggested that it may be beneficial to include students in how to best help them in a trauma-informed way. Based on the youths' descriptions of their experiences at school, it was clear to the authors that greater trauma-informed teaching practices are needed. For example, using more creative classroom management strategies which avoid threatening or triggering students with complex trauma histories (West et al., 2014). The authors discussed how, for students who have experienced violence, the school setting might be their only safe space and it is important to be as informed as possible in order to keep it feeling safe for them (West et al., 2014).

**Attributions for success and failure and adopting an incremental theory of intelligence.** Individuals hold different beliefs about the nature of intelligence. These self-theories of intelligence are believed to impact academic achievement, as they can shape students' responses to challenging tasks and setbacks at school (Renaud-Dubé, Guay, Talbot, Taylor, & Koestner, 2015). An incremental theory of intelligence refers to the belief that intelligence is malleable and can be refined and changed over time, as opposed to an entity theory of intelligence, which refers to the belief that intelligence is fixed and cannot be changed over time (Renaud-Dubé et al., 2015). Those who hold an incremental theory of intelligence have higher levels of autonomous motivation, because they are more likely to regulate their behaviours for intrinsic reasons or for self-identified ones (Renaud-Dubé et al., 2015). Renaud-Dubé and colleagues (2015) conducted a study investigating the relation between self-theories of intelligence and school persistence intentions. They found that students who hold an incremental



theory of intelligence directly reported greater intentions to persist in school (e.g. versus dropping out) (Renaud-Dubé et al., 2015).

Other researches have examined how self-theories of intelligence manifest themselves in students' feelings and behaviours toward schoolwork. Rickert, Meras, and Witkow (2014) investigated how self-theories of intelligence influence students' self-handicapping, which is thought of as the "creating of obstacles to compensate for possible future poor performance, thus allowing the self-handicapper to externalize the cause of failure" (p. 1). An example of self-handicapping includes procrastination. They found that students who had more of an incremental theory of intelligence had a greater increase in their effort and study time on days with high levels of homework demands than did those with more of an entity theory (Rickert et al., 2014). Those with an incremental theory also had more positive feelings towards school, spent more time studying, and put more effort into their schoolwork (Rickert et al., 2014). Bernstein (2006) examined how having an incremental theory affects those with learning challenges. Findings revealed that when students believed in the malleability of intelligence when combined with having a learning goal, this protected students from the effects of a learned helpless response to failure (Bernstein, 2006). Overall, multiple studies have shown that an incremental theory of intelligence has many benefits for students' academic achievement.

### **The Role of Teachers in Social and Emotional Aspects of Learning**

Adolescents spend the majority of their day at school. Classroom teachers are professionals who spend the most time with them during the school day when compared to other members of the school team (e.g. principal, guidance counsellor, school psychologists, reading mediation specialists, speech-language pathologists). Because of this, teachers are often the first ones to identify if a student is struggling or experiencing a learning, social or emotional problem

(Reinke, Stormont, Herman, Puri, & Goel, 2011). However, access to school-based mental health services can be difficult as the demand is high and therefore the waitlist is long (Rodger et al., 2014). This means that mental health professionals, such as school psychologists, are not readily available to address the difficulties adolescents are experiencing. This is concerning as research has shown that early prevention and intervention can help lead to better outcomes later in life (Splett, Fowler, Weist, McDaniel, & Dvorsky, 2013).

Waajid, Garner, and Owen (2013) discussed how infusing knowledge about social and emotional learning into teacher training programs may help bring a deeper understanding of the impact of social and emotional-related behaviour in the learning and teaching that occurs in schools. In their study, Waajid et al. (2013) surveyed preservice teachers about their perspectives and views after completing a course which focused on social and emotional learning concepts. While the researchers did not survey students' knowledge of social and emotional learning before the course, they discussed that students did provide first-hand reports that they had given little thought to social and emotional learning previously. After the course, the preservice teachers reported a newfound awareness and understanding of the role emotions play in academic learning (Waajid et al., 2013). Despite this encouraging evidence, traditional bachelor of education programs do not spend much time training teachers on addressing students' social and emotional wellbeing (Atkins & Rodger, 2016). Therefore, in order for students to succeed, teachers are expected to address their academic, emotional, and social needs, without the adequate training and capacity to do so.

Teachers' perceptions on promoting social and emotional development in their students is of critical importance to consider. A study by Buchanan et al. (2009) surveyed kindergarten to Grade 8 teachers regarding their attitudes and perceptions of implementing social and emotional

learning in the classroom. Nearly all teachers reported that social and emotional learning is important for students in school and in their life beyond. Over one third of teachers reported not being satisfied with their current level of knowledge and skills in the realm of social and emotional learning. Many teachers reported wanting meaningful consultation regarding their implementation of teaching social and emotional skills. For example, observations, meetings, or feedback with the professional who is training them (Buchanan et al., 2009). These findings support the idea that teachers are interested in learning more about social and emotional aspects of learning, but more consideration needs to be put into training and the practicality of implementation.

### **The Role of School Psychologists in Social and Emotional Aspects of Learning**

Interprofessional collaboration between school psychologists and teachers will be necessary for teachers to build capacity in areas of social and emotional development. School psychologists are the most highly trained mental health specialists in the education system. They have also been extensively trained in evaluating research and translating it into practice (e.g. evidence-based practice) (Splett & Maras, 2011). Therefore, it would be ideal for school psychologists to support teachers in building their capacity to implement evidence-based aspects of social and emotional learning in their classrooms. Stoiber (2011) supported this idea by explaining that school psychologists have the ability to consult with teachers by translating the research in social and emotional learning into real-world contexts. Therefore, this professional collaboration can help close the research to practice gap. However, a paper by Meyers, Tobin, Huber, Conway, and Shelvin (2015) discussed the role of school psychologists in implementing social and emotional curricula in schools. They reported that often, school psychologists are heavily involved in the beginning stages, but due to other job demands related to more

individualized interventions, they do not have sufficient time to remain involved in the primary prevention effort delivered by the teacher (Meyers et al., 2015). This is concerning as Stoiber (2011) reported that teachers need consultation available from a trained professional, like a school psychologist, throughout the entire implementation of a social and emotional learning curriculum. When teachers have this support, which allows them to reflect, ask questions, and discuss, they are more committed to promoting social and emotional development in the classroom. Stoiber (2011) concluded that this professional relationship between teacher and consultant was key to the success of programs that promote children's social competence and resilience.

### **Interprofessional Education**

Collaborative learning between professionals has been increasingly evaluated in the literature, specifically in the health field (Hammick, Freeth, Koppel, Reeves, & Barr, 2007). Interprofessional education (IPE) can be thought of as a learning process where professionals from at least two professions are provided with organized opportunities for shared learning experiences to increase interprofessional collaboration and improve service delivery in working environments (Horsburgh, Lamdin, & Williamson, 2001). IPE requires professionals to learn with, from, and about one another (Hammick et al., 2007). Studies have shown many benefits to IPE, such as positively influencing patient care and outcomes (Hammick et al., 2007). A systematic review investigating IPE within undergraduate health professional programs found positive effects related to changes in knowledge, skills, attitudes, and beliefs (Cooper, Carlisle, Gibbs, & Watkins, 2001). For example, they found an increase in team-working skills as an interprofessional team, such as effective problem-solving and conflict resolution.

**IPE in Nova Scotia.** Teachers and school psychologists working collaboratively is an area of need in Nova Scotia. A study conducted by Reader (2014) investigated teacher perception and knowledge of school psychology in Nova Scotia. 114 elementary, middle, and high school teachers completed an online survey. Results indicated that 77.2 percent of teachers surveyed have accessed school psychology services during their career, and that teachers reported valuing their services. Results also indicated that 40.5 percent of teachers were uncertain of how accessible the school psychologist was, and often reported they did not know how often they were in the building. Teachers expressed a desire for an increase in the amount of time they are present, visible, and available for consultation. More specifically, teachers reported that it would be beneficial for school psychologists to include them in the development of recommendations and to support them in the implementation process (Reader, 2014). Results also indicated a considerable number of teachers have very little understanding of what a school psychologist does. This study demonstrates that Nova Scotia school psychologists and teachers are not able to collaborate enough for each to truly understand the other's professional role and expertise.

A study on IPE with masters (MA) of school psychology students and bachelor of education (BEd) students was conducted by MacGregor (2017) at Mount Saint Vincent University in Nova Scotia. MA school psychology students and BEd preservice teachers were recruited to participate in an IPE workshop where each profession could learn from each other. MacGregor (2017) reported that no preservice teachers showed interest in the study despite several recruitment attempts. There were six preservice school psychologists who participated in the workshop ( $n = 6$ ). Because no preservice teachers participated in the workshop, the structure had to be modified. MacGregor (2017) hypothesized that a major reason for the lack of

participation by the preservice teachers could be because the lack of academic credit/recognition awarded, also commenting that the different culture between the two programs could be another reason. For example, preservice school psychologists are taught throughout their program the value of research and evidence-based practice, therefore they could be more likely to want to participate. In contrast, bachelor of education programs has less focus on research and evidence-based practice. MacGregor (2017) made the argument that the results of her study indicated the need for IPE to be mandatory in order for education students to begin to see the value in it. This study again demonstrates the gap that exists between the education profession and school psychology.

### **The Nova Scotia Context**

Teachers in Nova Scotia will now have increased expectations for their capacity development in areas of social and emotional aspects of learning. The province is promoting the importance of evidence-based practice in schools, as the Nova Scotia Department of Education has released an early version of a standards document (Province of Nova Scotia, 2016). This document will guide decision making around accreditation of Bachelor of Education programs and approaches to continuing professional development for teachers in practice in the province. In that document, it is made clear that evidence-based practice is something teachers need to embrace. One standard listed is: “Teachers know about and utilize the teaching approaches that research has shown to have the greatest impact on student learning” (Province of Nova Scotia, 2016, p. 10). This document also lists a range of important topics on social and emotional aspects of learning that can affect the classroom, which teachers will be expected to have competency in. An example of this is shown here: “The teacher seeks and responds to information about various types of individual student learning strengths and challenges, including but not limited to:

giftedness, mental health, multiple disabilities, cognitive, emotional/behavioural, learning, physical, medical, sensory” (Province of Nova Scotia, 2016, p. 9). Clearly, the Department of Education is moving in a way that promotes social and emotional aspects of learning competency in its educators, making the current study timely and locally relevant.

## **CHAPTER 2: NEED FOR AND INTEREST IN SOCIAL AND EMOTIONAL ASPECTS OF LEARNING: PLANNING EVIDENCE-BASED PROFESSIONAL DEVELOPMENT**

Adolescence is a time of great change and tremendous learning (American Psychological Association, 2002). It is also a time where adolescents must navigate their increasingly complicated social lives while managing intense positive and negative emotions. Therefore, it is not surprising that classroom contexts in seventh to ninth grade classrooms across Nova Scotia encompass a wide range of complex student-learning, -behavioral, and -mental health needs. Many researchers have investigated the value in interventions which promote students' social and emotional skills. Implementing universal SEL curricula is one of the ways schools are beginning to address students' social and emotional development. These programs have been linked to various positive outcomes related to student achievement in the research (Durlak et al., 2011). They have also been found to have positive follow-up effects and are equally beneficial across demographic groups (Taylor et al., 2017). The findings indicated that social and emotional development is something that needs to be embraced and promoted in today's schools.

School psychologists are in the unique position as mental health experts in the schools and their expertise in this area is important when addressing students' social and emotional development (Splett & Maras, 2011). Unfortunately, the waitlist for access to school psychologists can be long and teachers are often left to deal with their students' individual needs, without the adequate training to do so (Atkins & Rodger, 2016). While the mental health of students cannot solely be the teachers' responsibility, teachers should be equipped with an understanding of how social and emotional aspects of students' experiences in the classroom influence learning, as well as how to implement practical strategies in their classroom that are evidence-based. Teachers report that social and emotional learning is important for student



success and that they are interested in learning more in this area (Buchanan et al., 2009).

Therefore, teachers require access to evidence-based professional development in areas of social and emotional aspects of learning. Teachers also report wanting increased collaboration with school psychologists (Buchanan et al., 2009). Including school psychologists in this professional development would allow for greater interprofessional collaboration where both groups can learn with, from, and about each other, and could in turn improve service delivery to students.

This area of research is of particular relevance in Nova Scotia, as the the province is beginning to promote and expect this social and emotional competency in preservice and certified teachers by creating new standards and procedures (Province of Nova Scotia, 2016). Further, recent studies by researchers in the province have also demonstrated the need for interprofessional collaboration in the education field between teachers and school psychologists (Reader, 2014; MacGregor, 2017). However, there are still some gaps that remain to be filled by future researchers investigating this topic.

### **The Current Study**

The current study will be focusing on the professional development and collaboration components of this area of research. To begin to address the infusion of social and emotional development into the seventh to ninth grades classrooms in Nova Scotia, teachers and school psychologists must first communicate which specific areas they are most interested in learning about and are of most relevance to them. This will be a first step in beginning to plan and build interprofessional collaboration between school psychologists and teachers, where they can learn from each other. The objective of the current study is to better understand the learning needs and interests of Grades 7 to 9 teachers and school psychologists as pertaining to developing, or

maintaining competency in, areas of social and emotional aspects of learning that can be understood from a strong basis of empirical research.

## **Method**

### **Participants**

The survey was designed for both school psychologists and Grade 7 to 9 teachers in the province of Nova Scotia. The proposed method of data collection was to gain support from the Government of Nova Scotia to send an email on our behalf. Unfortunately, this was not possible and so a secondary method was used, by recruiting through social media and through posters on university campuses, in libraries, and in coffee shops. Seven people expressed interest in filling out the survey but only five were returned.

### **Measure**

To begin, a database of topics on different areas of social and emotional aspects of learning from the Nova Scotia standards document that could be turned into a workshop for teachers and school psychologists was created. Workshop topics were narrowed down by conducting literature searches on those topics, using the words in the document, and entering those terms into thesaurus searches in EBSCO Education Research Complete and PsychInfo databases. Many topics searched did not have substantial empirical literature from studies conducted in classroom contexts that measured student learning or academic achievement. The topics with the best available evidence were retained to conceptualize workshops that might be of interest and use to teachers and school psychologists. This process was a collaboration between the author of this thesis and her thesis supervisor. They did not independently conduct literature searches or rate the quality of the evidence in each article. Rather, they met multiple times between searches and upon reading articles retrieved and interpreted the research evidence

in light of the provincial standards and created workshop ideas together. The final survey consisted of seven evidence-based topics for workshops (see Appendix A).

The descriptions and objectives of the workshops were informed by searching and reading about the available professional development sessions on the Nova Scotia Teachers' Union website (e.g. [www.nstu.ca](http://www.nstu.ca)). This ensured that the descriptions are written in a way that is consistent with practice. The descriptions of the workshops were then put into an interactive Word Document that was used for the survey. For each workshop, teachers and school psychologists were asked on a five-point Likert scale (1) the degree of facility they feel they currently have (2) the extent to which they are interested in learning more, and (3) the extent to which they think they need to learn about the topic given their current professional context. The survey also included three open-ended questions asking if there is anything else they are interested in learning about, if they have any suggestions for the modality in which they, personally, would like to learn, and their perceived value in learning collaboratively as teachers and school psychologists. The survey ended with seven demographic questions to better describe the participant group (e.g. school board they work for, age, years' experience in current profession, grade(s) they currently work with, cultural identity and gender identity).

### **Procedure**

Ethics clearance was received from Mount Saint Vincent's University Research Ethics Board prior to beginning the study. Recruitment was done through social media and through posters on university campuses, at coffee shops, and libraries. Members of the Child and Adolescent Psychology Interest Group (CAP-I) also received an e-mail (See Appendix B) containing information about the purpose of the study and an e-mail address to contact if they were interested in participating. Once participants sent an e-mail indicating interest, they were

sent an e-mail (See Appendix C) with various attachments, with one being the survey. The other attachments included a consent form (See Appendix D), which included additional information about the study and indicated that if the participant sent back their completed survey they were consenting to participate. Another document was also sent with several citations for academic articles which informed each workshop topic (See Appendix E).

The survey took approximately five minutes to complete. Participants were instructed to send the completed survey back to the researcher's email address once completed. A reminder e-mail was sent to interested participants who had not sent back a completed survey after two to three weeks. Participants were also given the option to enter their contact information for a chance to win a draw of three gift cards to a local book store.

### **Variables of Interest**

There were several research questions that this study hoped to answer, (1) which topics of social and emotional aspects of learning do teachers and school psychologists identify as an area of learning need, (2) in what modality do teachers and school psychologists prefer to learn about these topics, (3) where have teachers and school psychologists previously learned about these topics, and finally (4) what do teachers and school psychologists rate as their perceived value in learning together in an interprofessional context?

## **Results**

### **Participants' Demographic Information**

All participants ( $n = 5$ ) were females. Four participants were Caucasian and one was European. The ages ranged from 30 to 52. Three participants were school psychologists and two participants were teachers. Participants were employed in the Halifax Regional School Board, Chignecto-Central Regional School Board, and the South Shore Regional School Board. The

sample of school psychologists have been practicing for a range of 5 to 18 years. The sample of teachers have been teaching for a range of 1.5 to 26 years.

### **Ratings of Workshops**

Due to a small sample size, the raw data was analyzed through visual inspection as found in Table 1. The ratings of perceived knowledge, interest, and relevance for each workshop was analyzed to look for identified learning needs for teachers and school psychologists. A learning need was defined as when participants rated their knowledge about the topic as lower on the scale (primarily 0, 1, or 2 on a 5-point Likert scale ranging from 0 to 4), and rated their interest in learning more and the relevance of the topic as higher on the scale (3 or 4 on a 5-point Likert scale from 0 to 4).

**Social determinants of school success.** When looking at participants' perceived knowledge on this topic, two school psychologists and one teacher reported knowing about the social determinants of school success and that they have tried using strategies which address this in their classroom. One school psychologist and one teacher reported only being familiar with this topic. Both groups indicated that this topic was of interest and relevance to them. Based on these findings (e.g. lower ratings of knowledge and higher ratings of interest and need), this topic could be an area of IPE for both teachers and school psychologists.

**Self-advocacy for learning.** When looking at participants' perceived knowledge on this topic, school psychologists reported knowing about self-advocacy for learning, with two reporting knowing a lot and that using strategies which address self-advocacy in the classroom is part of their practice. Teachers indicated having a lower competency level with this topic. Both groups indicated that this is a topic of interest and relevance to them. Results show that self-

advocacy is an area of learning need for teachers as they reported limited knowledge but are very interested in learning more and it is very relevant to their work.

**Anxiety in the classroom.** A similar pattern emerged for this workshop as for self-advocacy. Unsurprisingly, all school psychologists reported knowing a lot about anxiety and using this knowledge in their practice. They also reported it was of interest to them and was very relevant to their work. One teacher reported knowing nothing about anxiety in the classroom, and one reported knowing about it and trying strategies addressing student anxiety in the classroom. They both reported it was very interesting and very relevant to their work. Based on these results, anxiety in the classroom is a learning need for teachers, as they have less knowledge but are very interested in it and believe anxiety in the classroom is very relevant to their work.

**Emotions as part of students' problem-solving processes.** When looking at perceived knowledge of this topic, two school psychologists reported that they know a lot and use strategies which address students' emotions in problem-solving as part of their practice. One school psychologist and one teacher reported they know about it but have not tried using, and one teacher reported they are familiar with it. All teachers and two school psychologists reported that this topic was of interest and relevance to them. One school psychologist was neutral about their interest, but rated it as very relevant to their work. This topic could be a moderate learning need for teachers, due to their lower ratings for knowledge and higher ratings for interest and relevance.

**Mindfulness in the classroom.** All teachers and school psychologists indicated they know about mindfulness, with three participants reporting they have used it as part of their work. Both groups rated mindfulness as of interest and relevance to them.

**Understanding trauma.** Teachers and school psychologists varied in their perceived knowledge of trauma. One school psychologist indicated knowing a lot about this and using strategies in their practice which address trauma in students. One school psychologist and one teacher reported knowing about the topic and that they have tried using this knowledge in the classroom. One school psychologist knows about this topic but has not tried using, and one teacher is familiar with it. All school psychologists and one teacher reported the topic of trauma was of interest and relevance to them. However, one teacher reported it was of interest but provided a rating of neutral on the relevance of trauma in their work.

**Attributions for success and failure and adopting an incremental theory of intelligence.** Teachers and school psychologists indicated knowing the least about this workshop, with three participants reporting only being familiar with this topic, and two reporting they know nothing at all. School psychologists rated this topic as less interesting and relevant to them when compared to other workshops. However, teachers rated this as slightly more interesting and relevant to them. Based on these results, the incremental theory of intelligence could be another learning need for teachers.

Participants were asked if there were any other topics in the realm of social and emotional aspects of learning that they would like to learn more about. Only two participants provided a response for this question, and both were school psychologists. One indicated wanting to learn more about trauma and restorative practices. The other indicated wanting to learn more about supporting students with depression and related mood disorders in the classroom.

### **Previous Learning Opportunities**

After questions about each workshop, participants were asked, if relevant, where they had previously learned about the different topics. Both groups indicated learning about the majority of the topics through professional development, workshops/conferences, undergraduate or master's degree (e.g. BEd, MA), other relevant courses and presentations, and from work experience. Three of the participants indicated having learned about the topics by doing their own readings and research. One psychologist indicated learning about the topics through supervision with other psychologists. One teacher reported learning about mindfulness through yoga teacher training, and another learned about self-advocacy by facilitating a learning disability group which taught them to use this skill. None of the participants reported where they previously learned about the incremental theory of intelligence. Both teachers did not indicate previously learning about emotions as a part of problem-solving.

### **Preferred Modalities for Professional Development**

Participants were asked their preferred modality for learning about the above topics. Four participants indicated preferring a traditional professional development, conference, or workshop setting. A school psychologist reported their preferred modality was a professional development session with other school psychologists and mental health professionals. One teacher indicated also preferring a self-paced online module format. The other teacher was more specific, describing that a combination of whole-group presentation, small group discussion, and being provided with background and follow-up readings would be ideal.

### **IPE with Teachers and School Psychologists**

The final question on the survey asked participants on a 5-point Likert scale their perceived value in learning in a group comprised of both teachers and school psychologists. A



space for a qualitative explanation was also provided. Responses from both groups varied. One school psychologist reported learning as a group would be useful for both groups to “be on the same page” and that it would “save time down the road and leave more time for implementation”. Another psychologist agreed this would be useful, and would allow them to “be able to hear and collaborate with teachers” when working on modifying their own practice as a psychologist. However, the school psychologist explained their experiences with this further that, “what often happens is that psychologists are outnumbered and our voices are not heard, our perspective not considered, and the PD ends up feeling less effective for my own practice. It’s not a negative experience, but possibly less direct in helping psychologists”.

The last psychologist also had concerns about learning together with teachers, rating it as very not useful due to the discrepancy in knowledge and training between both groups. Due to this discrepancy, teachers and school psychologists are looking for different things from professional development sessions. When they learn together as a group, it can result in the majority of the workshop being spent on concepts most psychologists are already familiar with. Further, the psychologist explained wanting “much more in-depth training on how to help” and that “teachers are still learning the theory” and “psychologists need to go beyond to treatment”.

One of the teachers also recognized that differences in teacher and school psychologists’ daily tasks “might make it less useful to be together”. She rated the usefulness as learning in a group as neutral. However, the teacher proposed that “perhaps it would be useful to be together for some sessions and separate for others” as “it is important for professionals from both groups to be familiar with one another and understand each group’s roles”. The other teacher indicated working together would be useful as “both professions work with students in crisis, but we often

feel that we are working from opposite directions”. The teacher explained further that if school psychologists and teachers learn together, “then working together should be easier”.

### **Discussion**

The objective of the current study was to better understand the learning needs and interests of Grades 7 to 9 teachers and school psychologists as pertaining to developing, or maintaining competency in, areas of social and emotional aspects of learning that can be understood from a strong basis of empirical research. By doing this, the research hoped to begin to inform first steps in building interprofessional collaboration between school psychologists and teachers, where they can learn from each other. There were four main findings from the current research. Firstly, there was one workshop that could be used for possible IPE with both groups, Social Determinants of School Success. However, there were mixed findings regarding the value teachers and school psychologists see in IPE. Secondly, there was several learning needs identified by teachers, which included the workshop topics on self-advocacy, anxiety, and the incremental theory of intelligence, with a moderate learning need for emotions and their role in problem-solving. Thirdly, both groups preferred a traditional professional development type setting to learn. Finally, two participants reported other areas of interest to them, including depressive and related mood disorders and restorative approaches to trauma.

### **Implications for Professional Development**

The first result of the survey was that one workshop topic, Social Determinants of School Success, could be identified as a learning need for both teachers and school psychologists. Both groups were inconsistent in their rating for how knowledgeable they felt about the topic, but were consistent in their ratings for the topic being of interest and relevance to them. These results indicate that this area could be a topic used for IPE between teachers and school psychologists

where they learn with, from, and about each other. Despite this potential for IPE, the participants provided mixed reviews for their believed degree of usefulness in learning together as a group. Responses from the participants indicated that it may be helpful to learn about each other's professions in order to better understand each groups' competencies and work together more collaboratively. However, participants from each group mentioned that differences in knowledge bases regarding social and emotional aspects of learning, and differences in daily activities, make learning together not as effective. This makes sense, as school psychologists are considered the mental health experts in schools, and therefore would likely have had greater training and knowledge in topics such as anxiety and trauma (Splett et al., 2013). Because of this difference in training, IPE could be difficult as one group may need to begin at a more foundation level than the other. However, one participant discussed the potential benefit in having sessions which were together and sessions which were separate. This way, each group is learning material specific to their knowledge base, but are also able to discuss and collaborate with the other profession.

The second finding from the survey is that there were several identified learning needs for teachers. Teachers rated their knowledge as lower when compared to their interest and relevance for the workshop topics of anxiety, self-advocacy, and the incremental theory of intelligence. This is a positive finding, as there is an extensive literature backing for each of these topics which could be incorporated into a professional development session for teachers. For mindfulness, the teachers rated their knowledge on the lower end of the scale as well, but were less interested in it and saw it as less relevant when compared to many of the other identified learning needs. School psychologists also saw this topic as one of the least relevant and interesting. This finding could be related to the fact that the effectiveness of mindfulness with

children and youth is still in the promising stage and does not have the research backing that some of the other topics do (Schonert-Reichl et al., 2015).

The third finding from the survey is that the majority of participants indicated preferring a traditional professional development, workshop, or conference type setting. One participant indicated that follow-up readings may be useful. Blank (2013) examined the common characteristics of professional learning that leads to student achievement, and found that the most effective initiatives included multiple and ongoing activities designed to reinforce and follow up with teachers. If the sample was larger, perhaps a greater range of modalities for professional development would have been reported. Also, learning modality was asked in an entirely open-ended way in the survey. As such, participants could only suggest options they know, and might have limited their thinking specifically to ways they currently receive professional development.

The final finding from the survey was that two participants identified other areas of interest to them, depressive and mood disorders in the classroom and restorative approaches to trauma. Depression can be debilitating for youth and it often begins to emerge during middle to late adolescence (Ruderman, Stifel, O'Malley, & Jimerson, 2013). Depression can significantly hinder a student's functioning at school. Maag (2002) discussed different interventions school-based personnel could implement that target depression in children. These included things like social skills training, self-control training, activity scheduling, cognitive restructuring, and relaxation training (Maag, 2002). However, school-based depression prevention programs have found similar results as with anxiety, where a meta-analysis of these programs showed a small effect (Werner-Seidler et al., 2017). This finding indicates the need for refinement in this area (Werner-Seidler et al., 2017).

Research on restorative practices (RP) is in its preliminary stages, with some case studies and comparison studies emerging with promising findings (Gregory, Clawson, Davis, & Gerewitz, 2016). RP in schools refers to the movement toward focusing on the prevention of rule infractions, but also intervening after they occur. RP emphasizes fairness, engagement, and expectation clarity (Gregory et al., 2016). Elements of RP include opportunities to build social connection, mutual responsibility, and communication. One way this is done is through “Responsive Circles”, where students and teachers sit in a circle and have structured discussions on academic or social and emotional topics in a meaningful way (Gregory et al., 2016). RP also looks at discipline differently, by focusing on accountability, joint problem-solving, and reintegration into the community (Gregory et al., 2016).

### **Limitations**

The most notable limitation for the current study was the very small sample size. This made it difficult to draw any conclusions from the research regarding potential professional development for teachers and school psychologists. Only two teachers and three school psychologists completed the survey. Recruitment proved very challenging due to system changes in the province which will be discussed further below. Difficulty with recruitment for educators was seen in MacGregor’s (2017) study where no preservice teachers participated in the IPE workshop. Unfortunately, the low participation is indicative of the lack of culture of research in the education system. In order for educators to engage in evidence-based practice, there must be a system change in which research is valued and informs all decisions regarding things like teaching practices.

## **Future Directions**

Going forward, this survey should be distributed across the province in order to generate a larger number of responses. Even with the small sample size, the survey did show promise as a useful tool, as it generated variability in responses and gave insights into learning needs, preferred modalities for professional development, the potential for IPE, and possible new topics to explore. A consideration when distributing the survey could be gaining support from the province for the project. Having members of the province be a part of recruitment and express the benefits of filling out the survey (e.g. teachers and school psychologists having a say in their future professional development) could have a stronger effect in terms of survey participation and completion. If this is achieved, the province would be able to use the data from the survey to set priority for which areas of social and emotional aspects of learning they should focus on developing professional development for.

As mentioned previously, education in Nova Scotia is currently undergoing a system change, which is another consideration for future work. These changes which began during the data collection phase of the study, made it difficult to conduct research as a collaborative process with the school board. At this time, the province is working on new policies in regard to applied educational research, but it is in the early days of development. Hopefully once the policies are put into place, doing applied research, like the current study, will be met with a greater response and evidence-based practice will become a priority in education. However, it is important to consider both sides and meet teachers where they are in terms of evidence-based practice. Reinke and colleagues (2011) surveyed teachers regarding school-based mental health and over half of the teachers indicated not even being familiar with the term evidence-based practice. This means that it will take time for evidence-based practice to become fully infused in the Nova Scotia

education system, but taking small steps towards it, such as through professional development, is important.

A final consideration for future work in this area would be to encourage researchers to conduct specific implementation studies which could inform teacher, or school psychology, professional development in the area of social and emotional aspects of learning. While doing research for the different proposed workshop topics, there was a lack of studies in the literature that could be directly transferred into practice. For example, it was difficult to find a study which tested different strategies for teachers to use in the classroom with anxious students. Having access to studies that assess practical strategies which impact student success and could be used in the classroom would be beneficial in the efforts to infuse evidence-based practices into the education system.

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Table 1

*Knowledge, Interest, and Relevance Likert-Scale Ratings for Each Workshop*

Workshop Topic	Profession	Knowledge	Interest	Relevance
Emotions as Part of Students' Problem-Solving Processes	SP	4	3	4
	SP	2	4	3
	SP	4	2	4
	T	1	3	3
	T	2	3	3
Mindfulness in the Classroom	SP	2	3	3
	SP	3	4	3
	SP	2	3	3
	T	3	3	3
	T	3	3	3
Self-Advocacy for Learning	SP	3	3	4
	SP	4	4	4
	SP	4	3	4
	T	1	4	4
	T	1	4	4
Anxiety in the Classroom	SP	4	3	4
	SP	4	4	4
	SP	4	4	4
	T	0	4	4
	T	3	4	4
Social Determinants of School Success	SP	3	3	4
	SP	1	4	3
	SP	3	4	4
	T	3	4	4
	T	1	4	4
Understanding Trauma	SP	3	4	4
	SP	2	4	3
	SP	4	4	4
	T	1	3	2
	T	3	3	3
Attributions for Success and Failure and Adopting and Incremental Theory of Intelligence	SP	0	2	2
	SP	1	3	2
	SP	1	3	4
	T	0	3	3
	T	1	4	4

*Note: Participants chose their response on a 5-point Likert scale, ranging from 0-4.*

## Appendix A

Electronic Version of Survey for Teachers and School Psychologists in Nova Scotia

**NEED FOR AND INTEREST IN SOCIAL AND EMOTIONAL ASPECTS OF  
LEARNING: PLANNING EVIDENCE-BASED PROFESSIONAL DEVELOPMENT  
SURVEY**

*Please answer all of the questions below. There are no right or wrong answers. You will not be identifiable in any reporting of results from this survey. This survey is for all grades 7, 8, and/or 9 teachers and school psychologists in the province of Nova Scotia. Results will be published in a master's thesis and journal article.*

*Below are titles and brief descriptions of workshops that can be offered to you and your colleagues. Please answer the questions to let us know what you think about these workshops. Research reports that inform the content of the workshops are provided in attached document.*

**1. EMOTIONS AS PART OF STUDENTS' PROBLEM-SOLVING PROCESSES:**

A presentation outlining a model of problem-solving and the roles emotions have on this process. Discussions on how to help students identify, normalize, and regulate negative reactions when problem-solving.

Do you know about the roles of emotions in problem-solving?	<b>Click to respond</b>
Are you interested in learning more about the roles of emotions in problem-solving?	<b>Click to respond</b>
Are the roles of emotions in problem-solving relevant to your work?	<b>Click to respond</b>

b) If relevant, where have you previously learned about the roles of emotions in problem solving? Click in the grey box to type your answer.

**2. MINDFULNESS IN THE CLASSROOM:**

A discussion on classroom climate and the importance of helping students to self-regulate feelings of anxiety and distraction. Also, examples of 2 and 5-minute mindfulness exercises to do in the classroom.

Do you know about mindfulness in the classroom?	<b>Click to respond</b>
Are you interested in learning more about mindfulness in the classroom?	<b>Click to respond</b>
Is mindfulness in the classroom relevant to your work?	<b>Click to respond</b>

b) If relevant, where have you previously learned about mindfulness in the classroom?

### 3. SELF-ADVOCACY FOR LEARNING:

A discussion on teaching students how to ask for help by setting up classroom expectations and practicing through planned activities. Self-assessment and self-regulation strategies will also be discussed.

Do you know about self-advocacy for learning?	<b>Click to respond</b>
Are you interested in learning more about self-advocacy for learning?	<b>Click to respond</b>
Is self-advocacy for learning relevant to your work?	<b>Click to respond</b>

b) If relevant, where have you previously learned about self-advocacy for learning?

### 4. ANXIETY IN THE CLASSROOM:

A presentation on how clinicians diagnose and treat anxiety, examples representing a large range of what anxiety can look like in the classroom, as well as practical strategies for supporting students in the moment as a teacher.

Do you know about anxiety in the classroom?	<b>Click to respond</b>
Are you interested in learning more about anxiety in the classroom?	<b>Click to respond</b>
Is anxiety in the classroom relevant to your work?	<b>Click to respond</b>

b) If relevant, where have you previously learned about anxiety?

### 5. SOCIAL DETERMINANTS OF SCHOOL SUCCESS:

A presentation to explain how social factors and inequities impact academic success and reflective discussion to improve socio-cultural competence.

Do you know about the social determinants of school success?	<b>Click to respond</b>
Are you interested in learning more about the social determinants of school success?	<b>Click to respond</b>
Are the social determinants of school success relevant to your work?	<b>Click to respond</b>

b) If relevant, where have you previously learned about the social determinants of school success?

### 6. UNDERSTANDING TRAUMA:

A presentation on how clinicians diagnose and treat PTSD, with a discussion on the Nova Scotia context regarding student-populations most at risk to have experienced trauma. Also, a discussion on how trauma can look in the classroom.

Do you know about trauma in the classroom?	<b>Click to respond</b>
Are you interested in learning more about trauma in the classroom?	<b>Click to respond</b>
Is trauma in the classroom relevant to your work?	<b>Click to respond</b>

If relevant, where have you previously learned about trauma?

### 7. ATTRIBUTIONS FOR SUCCESS AND FAILURE AND ADOPTING AN INCREMENTAL THEORY OF INTELLIGENCE:

An overview of this theory, including a discussion on student goal-orientations and fostering contexts that encourage a learning-orientation.

Do you know about incremental theory of intelligence?	<b>Click to respond</b>
Are you interested in learning more about incremental theory of intelligence?	<b>Click to respond</b>
Is the incremental theory of intelligence relevant to your work?	<b>Click to respond</b>

If relevant, where have you previously learned about the incremental theory of intelligence?

**Are there any other topics in the realm of social and emotional aspects of learning that you would like to learn more about? Click in the grey box to type your answer.**

**In what modality would you, personally, like to learn about the above topics?**

**To what extent do you think learning in a group comprised of both teachers and school psychologists would be useful? Click to respond**

**Please explain if possible:**

### **BACKGROUND INFORMATION**

1. Ethnicity: Click to select
2. Sex: Click to select
3. Age:
4. Are you a teacher? Click to select
  - b) If yes, how many years have you been teaching?
5. Are you a school psychologist? Click to select
  - b) If yes, how many years have you been practicing?
6. School board currently working for: Click to select
7. Grade(s) you currently work with:

**Please return to [EBE@msvu.ca](mailto:EBE@msvu.ca)**

**Thank you for your participation in this survey!**

If you are interested in receiving the results from this study, please leave an email address below and we will send them to you. Your email address will not be linked to your responses.

Yes, I would like to receive an email containing the results of this survey.

Email address:

No, I would not like to receive an email containing the results of this survey.

Printable Version of Survey for Teachers and School Psychologists in Nova Scotia

## NEED FOR AND INTEREST IN SOCIAL AND EMOTIONAL ASPECTS OF LEARNING: PLANNING EVIDENCE-BASED PROFESSIONAL DEVELOPMENT SURVEY

*Please answer all of the questions below. There are no right or wrong answers. You will not be identifiable in any reporting of results from this survey. This survey is for all grades 7, 8, and/or 9 teachers and school psychologists in the province of Nova Scotia. Results will be published in a master's thesis and journal article.*

*Below are titles and brief descriptions of workshops that can be offered to you and your colleagues. Please answer the questions to let us know what you think about these workshops. Research reports that inform the content of the workshops can be provided.*

### 1. EMOTIONS AS PART OF STUDENTS' PROBLEM-SOLVING PROCESSES:

A presentation outlining a model of problem-solving and the roles emotions have on this process. Discussions on how to help students identify, normalize, and regulate negative reactions when problem-solving.

**Do you know about the roles of emotions in problem-solving? Circle your response.**

0	1	2	3	4
(I know nothing)	(I am familiar with this)	(I know about this but have not tried using)	(I know about this and have tried using)	(I know a lot and this is part of my practice)

**Are you interested in learning more about the roles of emotions in problem-solving? Circle your response.**

0	1	2	3	4
(Very uninterested)	(Uninterested)	(Neutral)	(Interested)	(Very Interested)

**Are the roles of emotions in problem-solving relevant to your work? Circle your response.**

0	1	2	3	4
(Very irrelevant)	(irrelevant)	(Neutral)	(Relevant)	(Very Relevant)

**b) If relevant, where have you previously learned about the roles of emotions in problem-solving?**

### 2. MINDFULNESS IN THE CLASSROOM:

A discussion on classroom climate and the importance of helping students to self-regulate feelings of anxiety and distraction. Also, examples of 2 and 5-minute mindfulness exercises to do in the classroom.

#### Do you know about mindfulness in the classroom?

0	1	2	3	4
(I know nothing)	(I am familiar with this)	(I know about this but have not tried using)	(I know about this and have tried using)	(I know a lot and this is part of my practice)

#### Are you interested in learning more about mindfulness in the classroom?

0	1	2	3	4
(Very uninterested)	(Uninterested)	(Neutral)	(Interested)	(Very Interested)

#### Is mindfulness in the classroom relevant to your work?

0	1	2	3	4
(Very irrelevant)	(irrelevant)	(Neutral)	(Relevant)	(Very Relevant)

#### b) If relevant, where have you previously learned about mindfulness in the classroom?

### 3. SELF-ADVOCACY FOR LEARNING:

A discussion on teaching students how to ask for help by setting up classroom expectations and practicing through planned activities. Self-assessment and self-regulation strategies will also be discussed.

#### Do you know about self-advocacy for learning?

0	1	2	3	4
(I know nothing)	(I am familiar with this)	(I know about this but have not tried using)	(I know about this and have tried using)	(I know a lot and this is part of my practice)

#### Are you interested in self-advocacy for learning?

0	1	2	3	4
(Very uninterested)	(Uninterested)	(Neutral)	(Interested)	(Very Interested)

#### Is self-advocacy for learning relevant to your work?

0	1	2	3	4
(Very irrelevant)	(irrelevant)	(Neutral)	(Relevant)	(Very Relevant)

b) If relevant, where have you previously learned about self-advocacy for learning?

#### 4. ANXIETY IN THE CLASSROOM:

A presentation on how clinicians diagnose and treat anxiety, examples representing a large range of what anxiety can look like in the classroom, as well as practical strategies for supporting students in the moment as a teacher.

**Do you know about anxiety in the classroom?**

0	1	2	3	4
(I know nothing)	(I am familiar with this)	(I know about this but have not tried using)	(I know about this and have tried using)	(I know a lot and this is part of my practice)

**Are you interested in learning more about anxiety in the classroom?**

0	1	2	3	4
(Very uninterested)	(Uninterested)	(Neutral)	(Interested)	(Very Interested)

**Is anxiety in the classroom relevant to your work?**

0	1	2	3	4
(Very irrelevant)	(irrelevant)	(Neutral)	(Relevant)	(Very Relevant)

b) If relevant, where have you previously learned about anxiety in the classroom?

#### 5. SOCIAL DETERMINANTS OF SCHOOL SUCCESS:

A presentation to explain how social factors and inequities impact academic success and reflective discussion to improve socio-cultural competence.

**Do you know about the social determinants of school success?**

0	1	2	3	4
(I know nothing)	(I am familiar with this)	(I know about this but have not tried using)	(I know about this and have tried using)	(I know a lot and this is part of my practice)

**Are you interested in learning more about the social determinants of school success?**



0	1	2	3	4
(Very uninterested)	(Uninterested)	(Neutral)	(Interested)	(Very Interested)

**Are the social determinants of school success relevant to your work?**

0	1	2	3	4
(Very irrelevant)	(irrelevant)	(Neutral)	(Relevant)	(Very Relevant)

**b) If relevant, where have you previously learned about the social determinants of school success?**

## 6. UNDERSTANDING TRAUMA:

A presentation on how clinicians diagnose and treat PTSD, with a discussion on the Nova Scotia context regarding student-populations most at risk to have experienced trauma. Also, a discussion on how trauma can look in the classroom.

**Do you know about trauma in the classroom?**

0	1	2	3	4
(I know nothing)	(I am familiar with this)	(I know about this but have not tried using)	(I know about this and have tried using)	(I know a lot and this is part of my practice)

**Are you interested in learning more about trauma in the classroom?**

0	1	2	3	4
(Very uninterested)	(Uninterested)	(Neutral)	(Interested)	(Very Interested)

**Is trauma in the classroom relevant to your work?**

0	1	2	3	4
(Very irrelevant)	(irrelevant)	(Neutral)	(Relevant)	(Very Relevant)

**b) If relevant, where have you previously learned about trauma in the classroom?**

## 7. ATTRIBUTIONS FOR SUCCESS AND FAILURE AND ADOPTING AN INCREMENTAL THEORY OF INTELLIGENCE:

An overview of this theory, including a discussion on student goal-orientations and fostering contexts that encourage a learning-orientation.

**Do you know about the incremental theory of intelligence?**

0	1	2	3	4
(I know nothing)	(I am familiar with this)	(I know about this but have not tried using)	(I know about this and have tried using)	(I know a lot and this is part of my practice)

**Are you interested in learning more about the incremental theory of intelligence?**

0	1	2	3	4
(Very uninterested)	(Uninterested)	(Neutral)	(Interested)	(Very Interested)

**Is the incremental theory of intelligence relevant to your work?**

0	1	2	3	4
(Very irrelevant)	(irrelevant)	(Neutral)	(Relevant)	(Very Relevant)

**b) If relevant, where have you previously learned about the incremental theory of intelligence?****Are there any other topics in the realm of social and emotional aspects of learning that you would like to learn more about?****In what modality would you, personally, like to learn about the above topics?****To what extent do you think learning in a group comprised of both teachers and school psychologists would be useful?**

0	1	2	3	4
(Very not useful)	(Not Useful)	(Neutral)	(Useful)	(Very Useful)

**Please explain if possible:**

**BACKGROUND INFORMATION**

Ethnicity: \_\_\_\_\_

Sex: \_\_\_\_\_

Age: \_\_\_\_\_

Are you a teacher? \_\_Yes \_\_No

If yes, how many years have you been teaching? \_\_\_\_\_

Are you a school psychologist? \_\_Yes \_\_No

If yes, how many years have you been practicing? \_\_\_\_\_

Grades you currently work with: \_\_\_\_\_

School board you currently work for: \_\_\_\_\_

**Thank you for your participation in this survey!**

If you are interested in receiving the results from this study, please leave an email address below and we will send them to you. Your email address will not be linked to your responses.

Yes, I would like to receive an email containing the results of this survey.

Email address: \_\_\_\_\_

No, I would not like to receive an email containing the results of this survey.

## Appendix B

### Recruitment E-Mail for CAPI Group

Maggie MacFarlane, a graduate student in School Psychology, is recruiting Nova Scotia school psychologists to participate in a brief email survey looking at the interest, need, and relevance of various workshop topics in social and emotional aspects of learning. The survey will take less than 5 minutes to complete and you will be entered into a draw for one of three \$25 Chapters gift cards. To participate, please email [EBE@msvu.ca](mailto:EBE@msvu.ca).

## Appendix C

### Survey E-Mail Instructions

Hello,

My name is Maggie MacFarlane and I am in the Master of Arts School Psychology program at Mount Saint Vincent University. As part of my MA degree I am conducting research for my thesis and am **recruiting Grades 7, 8, and/or 9 teachers and school psychologists** in Nova Scotia to participate in a study.

As a participant in the research you will be asked to fill out the attached survey that is titled: **Need for and Interest in Social and Emotional Aspects of Learning: Planning Evidence-Based Professional Development**. This short survey is looking at your need, interest in, and relevance of different workshop topics in social and emotional aspects of learning. Participation is completely voluntary and if you do choose to fill out the survey you can feel free to discontinue participation at any time by simply not sending it back.

Results of this study will be made accessible to the public through conferences and publication. All data will be completely stripped of any identifying information. If you choose to discontinue participation at any point during the survey, simply do not send it back.

**When you send the completed survey back to [EBE@msvu.ca](mailto:EBE@msvu.ca), you are consenting to participate in this study.**

For more information about the study and what you are consenting to, please see the attached document.

If you have any questions regarding participation in this confidential survey, please do not hesitate to contact me or my supervisor, Dr. Krista Ritchie at [krista.ritchie@msvu.ca](mailto:krista.ritchie@msvu.ca).

Best Regards,

Maggie MacFarlane  
[maggie.macfarlane2@msvu.ca](mailto:maggie.macfarlane2@msvu.ca)  
Study funded by SSHRC  
REB 2017-071

## Appendix D

### Study Consent Form



#### **Need for and Interest in Social and Emotional Aspects of Learning: Planning Evidence-Based Professional Development**

##### **Researcher**

Maggie MacFarlane, BA, BEd, School Psychology Masters Student  
Mount Saint Vincent University, Halifax, Nova Scotia, Canada

##### **Supervisor**

Krista Ritchie, PhD, Assistant Professor  
Mount Saint Vincent University, Halifax, Nova Scotia, Canada

##### *Funding*

- SSHRC, \$17,500

**What is this project about?** Understanding how social and emotional aspects of students' experiences in the classroom influence learning is very important for teachers and school psychologists. For this to happen in the Nova Scotia context, teachers' and school psychologists' common interests and needs in this area are required to inform research directions and future professional development where they can learn from each other. The project involves surveying teachers and school psychologists regarding what workshop topics in the realm of social and emotional aspects of learning are of most interest, need, and relevance to them.

**How will the researcher do the study?** The researcher who is a graduate student at MSVU will send an electronic survey to be completed. The survey will ask questions about the interest, need, and relevance of different potential workshop topics in social and emotional aspects of learning. The survey will also ask about preferred modality to learn in and perceived value in learning together as teachers and school psychologists.

With your consent, the survey responses will be used for later data analysis. If at any point you do not feel comfortable answering a question, you do not have to answer, that is perfectly fine.

To express our gratitude for your time and participation, you will be entered into a draw for a chance to win 1 of 3 \$25 Chapters gift cards.

**Privacy and confidentiality.** All identifying information will be removed when the data is being analyzed. Only the researcher and supervisor will access identifying information. For example, your email address and school board you work for will not be linked to your responses.

While we are committed to protecting the confidentiality of all participants, we are legally obligated to report information that involves child abuse or intent to harm yourself or others.

**Who controls my information? Can I withdraw?** You maintain full control over your information. The survey will be kept in password-protected files. You may withdraw from this study at any point in time without penalty (you will still be put into the draw). If you withdraw, all information you have provided will be destroyed and not used in this study.

**What are the burdens, harms, and potential harms?** The survey will involve rating need, interest and relevance of different workshop topics in social and emotional aspects of learning. You do not have to answer any questions that you do not want to answer. If you do not wish to continue the survey at any point, you may withdraw without penalty. If you feel upset for any reason and you would like to access professional support, you can contact the MSVU Counselling services in Evaristus 218 (phone: 902-457-6567) or the MSVU health office on the 2<sup>nd</sup> floor of Assisi Hall (phone: 902-457-6357).

**What are the possible benefits?** Your participation in this study will contribute to planning of future professional development sessions for teachers and school psychologists in Nova Scotia.

**How will I be informed of study results?** If you would like a copy of any publications or presentations that communicate findings about this study, please provide your email address on the last page of the survey.

**What if I have study questions or problems?** If you have any questions about this study, you can reach Dr. Krista Ritchie, by emailing [krista.ritchie@msvu.ca](mailto:krista.ritchie@msvu.ca).

If you have any questions at any time about this project or research in general you may contact Brenda Gagne, the Research Ethics Coordinator at the Research Office of Mount Saint Vincent University at 1-(902) 457-6350 or [brenda.gagne@msvu.ca](mailto:brenda.gagne@msvu.ca), Monday to Friday between 8:30 AM and 4:00 PM ADT.

**What are my Research Rights?** Emailing the survey back to the researchers email address ([EBE@msvu.ca](mailto:EBE@msvu.ca)) indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the investigator(s), sponsors, or involved institution(s) from their legal and professional responsibilities. You are free to withdraw from the study at any time with no repercussions.

## Appendix E

## Survey Reference List Attachment

**WORKSHOP REFERENCE LIST**


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*This is a list of research reports that inform the content of the workshops listed in the survey.*

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**1. EMOTIONS AS PART OF STUDENTS' PROBLEM-SOLVING PROCESSES**

- Eynde, P. O., Corte, E. D., Verschaffel, L. (2006). "Accepting emotional complexity": A socio-constructivist perspective on the role of emotions in the mathematics classroom. *Educational Studies in Mathematics*, 63(2), 193 – 207. Doi: 10.1007/s10649-006-9034-4
- Graziano, P. A., Reavis, R. D., Keane, S. P., & Calkins, S. D. (2007). The Role of Emotion Regulation in Children's Early Academic Success. *Journal of School Psychology*, 45(1), 3-19.
- Muis, K., R., Psaradellis, C., Lajoie, S. P., Di Leo, I., Chevrier, M. (2015). The role of epistemic emotions in mathematics problem solving. *Contemporary Educational Psychology*, 42, 172 – 185. Doi: 10.1016/j.cedpsych.2015.06.003
- Naragon-Gainey, K., McMahon, T. P., Chacko, T. P. (2017). The structure of common emotion regulation strategies: A meta-analytic examination. *Psychological Bulletin*, 143(4), 384 – 427.
- Tornare, E., Czajkowski, N. O., Pons, F. (2015). Children's emotions in math problem solving situations: Contributions of self-concept, metacognitive experiences, and performance. *Learning & Instruction*, 39, 88 – 96. doi: 10.1016/j.learninstruc.2015.05.011
- Vierhaus, M., Lohaus, A., & Wild, E. (2016). The development of achievement emotions and coping/emotion regulation from primary to secondary school. *Learning and Instruction*, 42(12-21). doi:10.1016/j.learninstruc.2015.11.002
- Zimmerman, P., Maier, M. A., Winter, M., Grossman, K. E. (2001). Attachment and adolescents' emotion regulation during a joint problem-solving task with a friend. *International Journal of Behavioral Development*, 25 (4), 331 – 343.

**2. MINDFULNESS IN THE CLASSROOM**

- Buchanan, T. K. (2017). Mindfulness and meditation in education. *Young Children*, 72 (3), 69 – 74.
- Cheek, J., Abrams, E., Lipschitz, D., Vago, D., Nakamura, Y. Creating novel school-based education programs to cultivate mindfulness in youth: What the letters told us. *Journal of Child & Family Studies*, 26(9), 2564 – 2578. Doi: 10.1007/s 10826-0017-0761-1
- Klingbeil, D. A., Renshaw, T. L., Willenbrink, J. B., Copek, R. A., Chan, K. T., Haddock, A., Yassine, J., Clifton, J. (2017). Mindfulness-based interventions with youth: A comprehensive meta-analysis of group-design studies. *Journal of School Psychology*, 63, 77 – 103. 10.1016/j.jsp.2017.03.006
- Liu, Q-Q., Zhou, Z-K., Yang, X-J., Kong, F-C., Sun, X-J., Fan, C-Y. (2018). Mindfulness and sleep quality in adolescents: Analysis of rumination as a mediator and self-control as a moderator. *Personality & Individual Differences*, 122, 171 – 176. Doi: 10.1016/j.paid.2017.10.031
- Schonert-Reichl, K. A., Oberle, E., Lawlor, M. S., Abbott, D., Thomson, K., Oberlander, T. F., & Diamond, A. (2015). Enhancing cognitive and social-emotional development through a simple-to-administer mindfulness-based school program for elementary school children: A randomized controlled trial. *Developmental Psychology*, 51(1), 52-66. doi:10.1037/a0038454
- Thornton, V., Williamson, R., & Cooke, B. (2017). A mindfulness-based group for young people with learning disabilities: A pilot study. *British Journal of Learning Disabilities*, 45(4), 259 – 265. Doi: 10.1111/bld.12203



Xu, W., An, Y., Ding, X., Yuan, G., Zhuang, Y., Goh, P. H. (2017). Dispositional mindfulness, negative posttraumatic beliefs, and academic burnout among adolescents following the 2016 Yancheng Tornado. *Personality & Individual Differences, 116*, 405 – 409. Doi: 10.1016/j.paid.2017.05.029

### 3. SELF-ADVOCACY FOR LEARNING

Carter, E. W., Lane, K. L., Jenkins, A. B., Magill, L., Germer, K., Greiner, S. M. (2015). Administrator views on providing self-determination instruction in elementary and secondary schools. *Journal of Special Education, 49*(1), 52 – 64. Doi: 10.1177/0022466913502865

Kotzer, E., & Margalit, M. (2007). Perception of competence: Risk and protective predictors following an e-self-advocacy intervention for adolescents with learning disabilities. *European Journal of Special Education, 22*(4) 443 – 457. Doi: 10.1080/08856250701650060

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Scruggs, T. E., Mastropieri, M. A., & McDuffe, K. A. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children, 73*(4), 392 – 416.

Test, D. W., Fowler, C. H., Wood, W. M., Brewer, D. M., & Eddy, S. (2005). A conceptual framework of self-advocacy for students with disabilities. *Remedial and Special Education, 26*(1), 43-54.

### 4. ANXIETY IN THE CLASSROOM

Duchesne, S., Ratelle, C. F., Roy, A. (2012). Worries about middle school transition and subsequent adjustment: The moderating role of classroom goal structure. *Journal of Early Adolescence, 32*(5), 681 – 710. Doi: 10.1177/0272431611419506

Hoffman, F. (2013). Evidence-based classroom strategies for reducing anxiety in primary aged children with high-functioning autism. *New Zealand Journal of Teachers' Work, 10*(1), 25 – 42.

James AC, James G, Cowdrey FA, Soler A, Choke A. Cognitive behavioural therapy for anxiety disorders in children and adolescents. Cochrane Database of Systematic Reviews 2015, Issue 2. Art. No.: CD004690. DOI: 10.1002/14651858.CD004690.pub4.

Lee, K. M., Shellman, A. B., Osmer, S. C., Day, S. X., Dempsey, A. G. (2016). Peer victimization and social anxiety: An exploration of coping strategies as mediators. *Journal of School Violence, 1* (4), 406 – 423.

Lin, Y., Durbin, J. M., Rancer, A. S. Perceived instructor argumentativeness, verbal aggressiveness, and classroom communication climate in relation to student state motivation and math anxiety. *Communication Education, 66*(3), 330 – 349. Doi: 10.1080/03634523.2016.1245427

Moran, K. (2016). Anxiety in the Classroom: Implications for Middle School Teachers. *Middle School Journal, 47*(1), 27-32. doi: 10.1080/00940771.2016.1059727

Schroder, H. S., Yalch, M. M., Dawood, S., Callahan, C. P., Brent Donnellan, M., & Moser, J. S. (2017). Growth mindset of anxiety buffers the link between stressful life events and psychological distress and coping strategies. *Personality & Individual Differences, 110*, 23 – 26. Doi: 10.1016/j.paid.2017.01.016

### 5. SOCIAL DETERMINANTS OF SCHOOL SUCCESS

Cabrera, L., Betancort, M., & Perez, C. (2016). Social class, gender, and educational performance. *Journal of Education Research, 10*(1), 51 – 89.

Li, Y., Allen, J., & Casillas, A. (2017). Relating psychological and social factors to academic performance: A longitudinal investigation of high-poverty middle school students. *Journal of Adolescence, 56*, 179-189. doi:10.1016/j.adolescence.2017.02.007

- Luo, Y., Wang, Z., Zhang, H., Chen, A. (2016). The influence of family socio-economic status on learning burnout in adolescents: Mediating and moderating effects. *Journal of Child & Family Studies*, 25(7), 2111 – 2119. Doi: 10.1007/s10826-016-0400-2
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## 6. UNDERSTANDING TRAUMA

- Dods, J. (2013). Enhancing understanding of the nature of supportive school-based relationships for youth who have experienced trauma. *Canadian Journal of Education*, 36(1), 71-95.
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## 7. ATTRIBUTIONS FOR SUCCESS AND FAILURE AND ADOPTING AN INCREMENTAL THEORY OF INTELLIGENCE

- Bernstein, D. (2006). The impact of implicit theories of intelligence on the motivation of students with learning challenges. *Dissertation Abstracts International Section A: Humanities and Social Science*, 67 (3-A).
- Cabello, R., & Fernandez-Berrocal, P. (2015). Implicit theories and ability emotional intelligence. *Frontiers in Psychology*, 6.
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- Park, S., Callahan, C. M., & Ryoo, J-H. (2016). Assessing gifted students' beliefs about intelligence with a psychometrically defensible scale. *Journal of the Education of the Gifted, 39*(4), 288 – 314.
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