Pre-service Teacher Preparation:

Supporting Students with Mental Health Conditions in the Classroom

By

Greg Oliver

A Thesis submitted

to the School of Graduate Studies in partial fulfillment of the

requirements for the degree of

Master of Science

In

Applied Health Services Research

Faculty of Medicine

Memorial University of Newfoundland

June 2023

St. John's Newfoundland and Labrador

Abstract

Many pre-service teacher education programs do not adequately prepare teachers to support students with mental health conditions in the classroom. The purpose of this study was to assess pre-service teachers' knowledge and attitudes surrounding mental health. A total of 44 pre-service teachers were recruited to complete a Mental Health Literacy Curriculum Resource Survey (2016). The survey's scope covers pre-service teacher knowledge about mental health conditions, attitudes towards those with mental illness, and attitudes towards help-seeking behaviour for themselves and others. The results showed that less than half of pre-service teachers were aware of mental health literacy as a framework for learning about mental health. The results suggested that pre-service teachers in this study demonstrated less knowledge or fewer positive attitudes indicating a need to address teacher attitudes and beliefs prior to entering the classroom. Significant findings from the survey demonstrated that some pre-service teachers believe that individuals with mental illness act strange and can be dangerous and violent. Fewer positive attitudes towards those with mental illness can impact teacher willingness to support students with mental health issues. Such attitudes may exist due to less knowledge about mental health, pointing to the importance of mental health training to equip teachers with the information and tools to feel empowered and prepared prior to entering the classroom.

Keywords: pre-service teachers, mental health literacy, mental health, mental illness

General Summary

Mental health issues are experienced by students in classrooms and teachers need knowledge and understanding to help students to manage these concerns. Before entering the classroom, individuals in teacher training programs need to learn the skills to work with students who have mental health issues. Teachers in training need to learn about mental health: both how to take care of themselves and care for others. These individuals should also reflect on beliefs and perspectives towards mental health, that may impact their support of students. The survey used to evaluate knowledge and beliefs of teachers in training in the study revealed how respondents feel about mental health. The results of the survey provide a rationale for the importance of mental health courses. A specific training course on mental health would direct teachers in training in their learning and create a resource to use in the classroom.

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Acknowledgements

I want to dedicate my thesis to my mom, Eileen who never had the opportunity to see this document to completion.

I want to thank my supervisors, Dr. Richard Audas, Dr. Sharon Penney, and Dr. Gabrielle Young who have remained committed to my project throughout the years. I have appreciated your ongoing support to fulfill the components of this thesis.

I want to send my love and gratitude to my wife, Sarah who continued to push and encourage me to fulfill the goal of creating this piece.

I want to express my sincere appreciation for having the opportunity to be a part of the ACCESS Mental Health Project, supported by Canadian Institutes of Health Research (CIHR).

Chapter One: Introduction

Teachers work with a variety of students with diverse learning needs and behaviours. Students in the classroom present with an array of exceptionalities, including mental health conditions. Pre-service teachers in Canada typically receive training around supporting students with mental health conditions as a minimal component of one or two courses in their Bachelor of Education program (McCrimmon, 2015). The amount of information and knowledge that can be translated to teachers in training is limited (McCrimmon, 2015). Therefore, teachers often enter the profession with insufficient tools to work with students who have mental health conditions. A lack of education becomes a problem for servicing and supporting students with mental health conditions in the classroom. This thesis assesses pre-service teachers' current knowledge and attitudes towards mental health, and how the lack of mental health training can impact pre-service teachers' ability to support students with mental health conditions.

A pre-developed survey entitled, Mental Health Literacy Curriculum Resource (MHL-CR) Survey (2016) is utilized to examine the knowledge and attitudes of pre-service teachers. Although data are collected via the MHL-CR Survey, there were previous efforts to collect data through alternate methods. Initially, students were recruited from the Primary/Elementary and Intermediate/Secondary Bachelor of Education programs to take part in a webinar or mental health institute. Only 17 students signed up for the webinar, and only one student completed the necessary work associated with the webinar. Next, the mental health curriculum developed by Kutcher and Wei (2016) was embedded in one required course for the Bachelor of Special Education program and one required course for the Bachelor of Education program at Memorial University. A research assistant was assigned to those courses to monitor information and to recruit participants. However, no students in these two courses where the curriculum was

embedded volunteered to participate in the follow-up focus groups planned for the research project. The focus group would have provided participants with the opportunity to discuss their experience with the curriculum and to explore their knowledge and attitudes. The intention was to gather data through conversation and dialogue and discussion of shared experiences, but after several failed attempts, a new approach was required for collecting data. Finally, the decision was made to opt for a survey as a means of receiving information from pre-service teachers.

A review of the related literature was conducted to investigate pre-service teacher's training in mental health, as well as how knowledge and attitudes towards mental health impact their ability to work with students who present with such concerns. Research completed in a variety of countries indicated that the serious issue of teacher burnout is often a result of insufficient preparation in managing students with mental health conditions and associated behaviours prior to entering the classroom. In the United States, almost 50% of teachers leave the field within five years of entering the profession (Freeman et al., 2014). In Canada, a survey of 905 beginning teachers conducted by the Ontario College of Teachers (2003) found that 65.3% rated their teacher education programs as unsatisfactory due to lack of education on dealing with students' mental health problems. Teacher burnout is an ongoing reality as teachers are underprepared and ill-equipped to manage the diverse needs of students (Forlin, 2010). The current teacher education programs across Canada have limited coursework requirements in the area of mental health and exceptionalities (Atkins & Rodger, 2016). Only 22 states and one province in Canada require development of preventive skills such as the implementation of social and emotional learning and only seven states require skills in specific interventions (Brown et al., 2019). There is a gap between the current education for teachers and the practice of working with students with mental health conditions, so appropriate preparation is essential to

fill those gaps. A gap exists between the knowledge about mental health signs, symptoms, and means of supporting individuals and the attitudes towards working with students with these conditions. This thesis examines pre-service teachers' knowledge and understanding of mental health and the impact on their attitudes toward those with mental health conditions.

Background

The Newfoundland and Labrador English School District (NLESD), as a result of the Premier's Task Force (2017) on improving educational outcomes, implemented various initiatives to address mental health and wellness in the student population. A school-based training program, "Go-To Teacher" was established in 2017. This mental health education was offered to all guidance counsellors province-wide with plans to also train one other staff member in each school (Kutcher & Wei, 2017a). This training focused on mental health conditions and their treatments and looked at ways to decrease stigma. NLESD also implemented a Mental Health First Aid training program offered to at least one administrator per school to have a go-to teacher on staff to help support mental health and pass along information and knowledge to other members of the school community (NLESD Annual Report, 2018).

An All-Party Committee on Mental Health and Addictions was established in Newfoundland in 2017 recommended that Government implement "a comprehensive school health and wellness framework" encompassing mental health promotion, prevention, integration, and intervention (The Premier's Task Force, 2017). The framework included promotion of mental health learning through integration of a Social Emotional Learning Curriculum along with a program such as PATHS (Promotion of Alternative Thinking Strategies). These programs were developed for elementary students and were aimed at improving self-control, emotional understanding, positive self-esteem, relationships, and interpersonal problem-solving skills

(Price, 2018). The framework places a focus on student emotion and well-being, but neglects teacher well-being and information for pre-service teachers to know how to manage their own health in the classroom. While the student frameworks are important initiatives at the in-service level, there remain significant challenges in addressing mental health education and programs for pre-service teachers.

A pre-post study following 67 pre-service teachers over two years revealed that pre-service teachers are often unaware of both issues related to mental health and where to go to seek out support and information for mental well-being (Kutcher et al., 2016). Many pre-service teachers are aware of where to locate mental health services but continue to be reluctant to avail of them. They may also hold inaccurate or incomplete knowledge and beliefs about mental health (Fyfe & Rittle-Johnson, 2016; Roelle et al., 2015). It is troubling for pre-service teachers to enter the classroom without the proper tools to support students given that prior knowledge influences the ability to apply new information (Woloshyn & Savage, 2018). This points to the question of how to effectively deliver mental health content to pre-service teachers who will be responsible for looking after themselves and the students in their care.

There are distinct concepts to define regarding mental health and mental health conditions or concerns discussed throughout the thesis. Kemp and Hazel (2013) are researchers from the Hunter Institute of Mental Health in Australia, which is an organization dedicated to reducing mental illness and improving well-being. They define mental health as the social and emotional well-being of individuals and communities (Kemp and Hazel, 2013). In contrast, the DSM 5 defines mental disorder as a disturbance in individual cognition, regulation of emotions, or behaviour (American Psychiatric Association, 2013). Mental health and mental disorders or illness are discussed throughout the thesis, with the goal of striving for positive mental health.

For pre-service teachers to feel empowered to promote positive mental health, they need to have the knowledge and tools to work with students who present with mental health conditions and behavioural concerns in the classroom.

Students present with a variety of mental health conditions and concerns and teachers are responsible for providing support to those with complex needs. Sawyer et al. (2001) conducted a study in Australia looking at health-risk behaviours in children ages four to seventeen. An important finding derived from the study suggests that mental health problems occur most frequently in children between the ages of 12 and 17. As such, it is important for teachers to be proactive in addressing and supporting students who exhibit or display mental health type symptoms early on to prevent further problems later in life (Sawyer et al., 2001). If pre-service teachers are equipped with information and training on recognizing mental health symptoms and have the tools to work with students to manage these concerns at the school-age level, then they could possibly interrupt the potential for more elevated mental health concerns. In other words, mitigation of mental health type symptoms at the early stages can impact whether or not these symptoms result in a mental illness such as depression.

Depression is one of the most common types of mental health conditions that can affect psychological well-being of children (Townsend et al., 2017). A survey was conducted in five American high schools examining knowledge about depression and stigmatizing attitudes before and after completing a program entitled, "Adolescent Depression Awareness Program" (ADAP) (Townsend et al., 2017). The goal of the program is to challenge myths that increase stigma and reduce help-seeking behaviour. The Adolescent Depression Awareness Program looks at the signs and symptoms of childhood depression and delivers training for educators, curriculum for students, and provides information for parents and guardians. While few studies have been

completed on this topic, results from the survey found that teachers with more knowledge about mental health literacy, including identifying symptoms in conditions as depression were also less likely to demonstrate negative stigmatizing beliefs towards students. A positive school climate can effectively address mental health by strengthening connections between teachers and peers and influencing student help-seeking behaviour in a willingness to acknowledge their symptoms and disclose their concerns. A positive school climate allows students to come to terms with their condition and feel secure enough to disclose symptoms to school personnel (Townsend et al., 2017).

Wang and Dishion (2011) conducted a study with students from eight US middle schools and found results similar to Townsend et al. (2017). These results point to the impact of school climate on children's behaviour. Over 1000 children from eight different schools took part in the study. Students in the Wang and Dishion (2011) study were required to respond to questions on academic achievement, behaviour management, and teacher and peer support, as well as the impact these factors had on their own problems or externalizing behaviours. This longitudinal study of students from grades 6 to 8 revealed that children who perceived a negative change in academics and a perceived lack of support were more likely to experience externalizing behaviours. These externalizing behaviours could range from negative attitudes towards learning to disruptive behaviours such as conflict and aggression (Stewart et al., 2016). A high level of support from teachers as well as from peers was found to have a positive impact on students' behaviours, which points to the significant impact that environment plays in student social and emotional well-being (Wang & Dishion, 2011).

While it is important for teachers to create a positive space for students to feel connected and supported in managing their mental health condition(s), there has been growing

disengagement as teachers are feeling undervalued. Teachers identify a high degree of stress caused by increasing expectations, longer working days, and higher student needs, resulting in burnout (Maslach et al., 2001). Teacher disengagement in regard to burnout refers to constraints based on teachers that impact collaboration, professional growth, and innovation (Maslach et al., 2001). Burnout is the result of long periods of three main factors: emotional exhaustion, feelings of cynicism and detachment from the job, and lack of personal accomplishment (Maslach et al., 2001). The question therein lies what to do to improve teacher engagement and reduce burnout leading to teacher attrition. Teacher well-being should be supported by school personnel in order for teachers to manage all the tasks and responsibilities that allow them to effectively support students (Maslach et al., 2001). Reducing factors that lead to burnout can minimize teacher disengagement and the rate of attrition.

Overview

The main objective of this study is to assess the knowledge and attitudes of pre-service teachers. This information aims to help gain an understanding of the mental health training needed to prepare teachers for the diverse needs in the classroom. Chapter two provides an overview of the current training models that exist and influences surrounding mental health. Chapter three explores the definitions of empowerment theory to explain the importance of promoting positive mental health. Chapter four breaks down the components of the survey and methods used to achieve recruitment and data collection. Chapter five presents the results and significant findings derived from each component of the survey: knowledge, attitudes, and attitudes about help-seeking behaviour. And finally, Chapter six aims to structure around key themes throughout the survey and provide insight into possible reasons for survey responses.

The remainder of this thesis examines pre-service teacher mental health and many of the associated areas related to teacher preparedness. Teacher roles and responsibilities of supporting students with mental health conditions, the importance of teacher-student relationships, and the impact on overall well-being for both is addressed. The school climate and influence on academics and internalizing and externalizing behaviours of students will follow. There is an overview of the current Bachelor of Education program for Memorial University of Newfoundland and the impact of limited training of preparatory skills for working with students with mental health conditions. The literature review also looks at various types of educational programming such as resiliency and implementing evidence-based practices in order to address mental health conditions when preparing to work in the classroom. The importance of teacher efficacy is also discussed by looking at the necessity to diminish gender stereotypes, negative stigma and perception so pre-service teachers feel comfortable promoting mental health literacy in the classroom. Lastly, an overview of the current government documents and solutions for a shift in direction towards addressing needs of students and placing mental health at utmost importance is outlined.

Chapter Two: Literature Review

This chapter outlines the databases and search terms used to obtain data and provide statistics pointing to the importance of pre-service training to work with students with mental health conditions. There is an overview of frameworks helpful in guiding teachers through implementation of social emotional learning. The importance of student-teacher relationships for supporting coping skills and self-regulation is described. Evidence-based practices and mental health literacy are explained. The impact of gender biases and stigma as barriers are further explored. Teacher well-being and experiencing self-efficacy in both supporting and seeking help is discussed. And lastly, a review of policies, and current resources such as technology are highlighted.

Databases

The sources utilized for the literature review were mostly scholarly articles obtained from Education and ERIC databases. The key terms used to find the sources for my literature review were "pre-service teacher preparation in working with students with mental health conditions" and "teacher knowledge and attitudes around mental health." There are limited local sources, so national and international evidence was examined. I was able to refer to Government documents and branch out to locate other articles of similar work that was already completed in Canada by using references that researchers had discussed in their articles.

Statistics

The prevalence of adolescent mental disorder in Canada is alarming as "approximately 15 to 20 percent of children and adolescents [experience] some form of mental disorder - 1 in 5 students in the average classroom" (Kutcher et al., 2009, p. 44). Outside of the home, school is a place where students spend most of their time. Therefore, teachers, as the primary caregivers at

school, are at the forefront of identifying the signs and symptoms and understanding the experiences of students with mental health conditions. As teachers are often the first to observe behaviours indicative of issues with mental health concerns, their role is to intervene by identifying and helping to prevent the worsening of mental health concerns (Whitley et al., 2012). Teachers are often the first point of contact for children and youth experiencing mental health challenges, and therefore should have the knowledge and ability to be able to recognize mental health difficulties and avail of tools and resources to further support those students.

Teacher Roles and Responsibilities

The role of the teacher is to provide academic instruction to students in particular subject areas, as well as promote social and emotional learning. Social and emotional learning refers to the acquisition and application of knowledge, attitudes, and skills to be able to manage emotions, express empathy, participate in reciprocal relationships, and exercise decision-making (CASEL, 2021). Teacher responsibilities are often thought of as primarily academic in nature: instructing students and offering academic knowledge. However, it has become clear in recent years that teacher responsibility should include social-emotional learning for students because “children who struggle socially or emotionally are less likely to benefit from academic instruction” (McClelland et al., 2000, p. 327). In other words, the social and emotional issues that children experience could overshadow their experience in the classroom and impact their ability to concentrate and learn the curriculum. Children require social and emotional skills in order to be able to manage their emotions, make decisions, develop positive relationships and cope with challenging situations (White-McNulty et al., 2005). Improved social skills benefit children in their day-to-day activities by strengthening their social relationships with peers, as well as with

teachers, while improved emotional skills support the well-being of students by helping them regulate their emotions within the classroom environment.

To help teachers support students' social-emotional learning and organize the way teachers engage with students, several scholars have developed frameworks to classify the most important elements of the teacher-student interaction. A framework is useful to teachers because it acts as a guide to explain and demonstrate concepts that can be used in the classroom, and a social-emotional framework instructs teachers on how to apply and implement social-emotional skills in students. This section will highlight possible social-emotional frameworks that can be utilized in the classroom.

The Collaborative for Academic, Social, and Emotional Learning (CASEL) (2021) provides an important framework for pre-service teachers to learn prior to entering the classroom and serves as a guide for supporting students' mental health. An overview of the CASEL framework in education courses provides pre-service teachers with knowledge and information to incorporate social-emotional learning initiatives in the classroom.

CASEL (2021) focuses on five skills or competencies around social-emotional learning that both teachers and students should possess: self-awareness, self-management, social awareness, relationship skills, and responsible decision making. In order to teach these skills and strategies to students, teachers need to be aware of the five competencies. The competency of self-awareness focuses on an individual's acknowledgement of their own strengths and limitations. Self-management considers the ability to motivate oneself to set and achieve goals. Social awareness centers around empathizing with others through understanding their perspective. Relationship skills emphasize the importance of communicating, listening, and cooperating with others, as well as taking care of oneself by seeking out help when needed.

Responsible decision-making focuses on making appropriate choices regarding one's personal behaviour in social interactions (CASEL, 2021). CASEL offers a framework outlining important competencies for teachers to guide their practice when promoting social emotional learning.

Another social-emotional learning framework that would be beneficial for pre-service teachers to learn as part of their training uses motivation to encourage students to feel empowered in managing their emotions and well-being (White-McNulty et al., 2005). Teachers can promote the motivational framework known as the three Cs: Capable, Connected, and Control. For capable, teachers should have high expectations for students and track student progress to enable students to feel capable and confident in their ability to approach and complete tasks. Teachers should work to establish trust by having consistent check-ins with students and assigning classroom duties to enable students to engage and connect with their environment. For Control, teachers should allow students to gain control over their learning by offering them various choices and encouraging them to make independent decisions. These processes enable teachers to engage with students and encourage within them a sense of confidence and autonomy by utilizing social-emotional learning (White-McNulty et al., 2005).

The connection between mental health and academic success suggests that social-emotional learning should be as important as academic instruction in supporting students (Repie, 2005). Students with mental health concerns can struggle with an array of issues that can supersede their academic obligations. Therefore, teaching appropriate skills and social emotional learning strategies alongside curriculum will put students in a better position to manage their emotions and reduce the impact on their academic learning. Teachers in training need to be aware of the potential impact that mental health has on academic learning to be better equipped to support students' success. To identify the concerns that individual students face, teachers need

to initiate contact with parents or guidance counsellors (Government of Ontario, 2013). This role is important to consider when preparing teachers for the classroom and ensuring they have the skills to recognize and identify when a child is struggling or presenting with concerns. If a child's mental health symptoms are overlooked by those around them, they may be at a greater risk of experiencing academic difficulties because their social-emotional needs are interfering with their learning.

If pre-service teachers are knowledgeable about social-emotional learning strategies, they will have tools to implement in the classroom that will help decrease the likelihood of mental health issues negatively impacting instructional learning. A study by Durlak and colleagues demonstrated that students who availed of social emotional learning strategies that focused on the five competencies outlined by CASEL (2021) increased their academic performance by 11 percentile points (Durlak et al., 2011). Furthermore, students who participated in social emotional learning programs also demonstrated improved ability to manage stress and had a more positive attitude towards themselves, others, and school (Durlak et al., 2011). The knowledge and attitudes that teachers have toward mental health is critical for students as is feeling comfortable to be willing to address their needs.

There are interesting comparisons in data between the United States and Canada surrounding mental health in children and their willingness to seek support. In the United States, 70% to 80% of children with a mental health condition have access to mental health services at school; however, only 16% of those children use those mental health services (Rones & Hoagwood, 2000). In Canada, 20% of children experience mental illness with fewer than 25% of children with mental illness receiving mental health treatment services (Out of the Shadows, 2006; Waddell et al., 2005). These startling statistics point to why teachers need to have

prerequisite knowledge of mental health and available resources necessary to recognize and be proactive in their support of students. Pre-service teachers' knowledge around mental health will allow them to be aware of their roles and responsibilities in the learning process for students so they can create an environment that fosters success to meet the student's academic and social-emotional needs.

Influence of School Environment

It is important that students receive mental health services at school given that "children spend a significant portion of their time within the school setting" (Alasvand, 2014, p. 13). Not only is it convenient, but it may also be the most accessible option available for families who live in rural communities or who have other barriers that impede their children from accessing health services: "School-employed mental health professionals reduce many of the common barriers to seeking help, including cost, scheduling conflicts, transportation, fragmentation of interventions, and stigma associated with mental health issues" (Rossen & Cowan, 2015, p. 9). The school setting is an optimal place to receive mental health support, but in order for students to benefit from these services, the common barriers need to be addressed.

While a positive school setting may help in reducing the barriers that hinder access to mental health support, students may still be fearful of the stigma of seeking help or be embarrassed about seeking support (Gulliver et al., 2010). When discussing mental health issues with educators, some students may experience discomfort when asked to reveal sensitive information and they may be worried that peers or others will be become aware that they have sought help (Gulliver et al., 2010). Teachers need to create positive relationships with their students to limit the barriers that prevent children from seeking help for mental health issues.

The emotional issues that children and youth experience can sometimes be revealed through misbehaviour or struggles with academia (Stewart et al., 2016). Misbehaviour can be demonstrated through an externalization of behaviours, such as frustration and aggression (Abry et al., 2017). Children may feel powerless and lack effective coping strategies to manage their own behaviour (Abry et al., 2017). Misbehaviour may result in a student being reprimanded rather than supported, which could further impede their engagement with learning and academic performance (Stewart et al., 2016). As misbehaviour can sometimes surface because of mental health issues, it is important to have a supportive environment where teachers can work with children to address behavioural concerns. As such a supportive environment is essential for children to feel positive towards learning (Haynes et al., 1997; Townsend et al., 2017). The school environment is crucial for the development of students and has a "profound effect on students' attitudes toward learning and motivation" (Townsend et al., 2017, p. 567). Teachers have the opportunity to address emotional concerns with students, but teachers sometimes have limited knowledge in supporting students outside of academics. Many teachers receive limited training regarding the emergence of mental health conditions, leaving them ill-prepared in trying to manage behaviours associated with mental health symptoms (Whitley et al., 2012).

While students can exhibit external behaviours such as disruption and aggression, they may also face internal struggles such as anxiety and depression, that may impact their learning and well-being (Abry et al., 2017). Teachers should be trained with the knowledge and tools to be able to support students that have a variety of behaviours. For teachers to support students with behavioural issues, it is recommended that they work towards developing relationships to gain the students' trust (Abry et al., 2017). If students experience internalizing problems and are not equipped to cope with these problems, then they may develop into more intense and long-

lasting issues (Bryer & Signorini, 2011). Teachers require knowledge on appropriate coping skills to educate students to better manage academics, relationships, and their own personal well-being (Bryer & Signorini, 2011). If pre-service teachers are aware of these coping skills and include them in the classroom learning environment, they will set up their students to better manage their academics, relationships, and their own personal well-being.

Students who have internalizing behaviours (such as anxiety and depression) may demonstrate these underlying problems by exhibiting a lack of motivation or disruptive behaviours in the classroom. According to Stewart et al. (2016), children who experience mental health concerns are at an increased risk for adverse long-term academic outcomes, such as dropping out and enrolment in post-secondary education. These outcomes – leaving school, experiencing episodes of anxiety, or exhibiting depressive disorders point to a need for support and early intervention. The information presented about student outcomes demonstrates a need to increase a teachers' capability in recognizing and managing symptoms of student mental health problems. This is important for improving the mental health of students or limiting the influence of mental illness on student education (Lynagh et al., 2010). Teachers act as the primary caregivers of students during their time at school so the impact that teachers have not only on student learning, but student well-being can be significant (Medina & Luna, 1999).

Teachers play a pivotal role in children and adolescent well-being and influence their potential for success not only academically but social-emotionally as well: "The mission of schools should comprise not only a focus on academics and confronting obstacles to academic learning, but also a major role in promoting development [of] social and emotional functioning" (Repie, 2005, p. 280). Social and emotional not only includes the ability to manage emotions but take in information and effectively make everyday decisions (CASEL, 2021). Mental health

issues not only cause distress for children but may also "compromise a student's chances for fully using his or her learning opportunities and for ultimately succeeding in school later in life" (Repie, 2005, p. 279). These issues need to be addressed early on to curb further manifestation of symptoms, which will impact students and their future success. The issues that children exhibit can vary from "overt behaviors such as aggression and disruption [to] internal turmoil through feelings such as anxiety and depression" (Repie, 2005, p. 279). These issues may be caused by underlying social and emotional concerns. In fact, disruptions themselves may be indicative of emerging or existing mental health issues (Whitley & Gooderham, 2016a). Students may not understand how to deal or cope with emerging mental health issues and therefore they may act out because of the internal struggles they face.

Importance of Teacher-Student Relationships

It is difficult for teachers to educate when teacher-student tension exists. Tension in the teacher-student relationship causes stress and impacts a teacher's feeling of confidence in reaching their student(s) and supporting them. Teacher-student conflict has the potential to "undermine teachers' efficacy beliefs and evoke feelings of helplessness" (Split et al., 2011, p. 461). A fragile relationship can limit a teachers' ability to support students, and it can also be a significant drain on teacher's time and energy. Ongoing stress resulting from tension can take a toll on teachers and teacher-student relationship, generating a strong negative response towards students whose relationship is strained (Split et al., 2011). Stressful situations make it difficult for teachers to gain an understanding of the difficulties and issues that a student is experiencing, obstructing the teacher's ability to help the student.

A mixed methods study was conducted by Gulliver et al. in 2010 to gauge help-seeking behaviour of individuals between the ages of 12 to 25. The authors completed a systematic

review of the literature on perceived barriers and facilitators for common mental health problems including depression and anxiety. A few themes that emerged from the study centered around knowledge of services, confidentiality and trust when reaching out to professionals for help. Results from the study found that young people showed greater help-seeking intentions towards sources they trust (Gulliver et al., 2010). If teachers establish trust with students, students will be more accepting of support to deal with mental health issues.

Teaching Coping Skills

It is important for students to be equipped with effective coping skills to handle their own thoughts and well-being. Two coping skills that allow children to take control over their emotions are thought substitution and thought stopping (Bryer & Signorini, 2011). Thought substitution is a form of self-talk, where children are expected to identify their negative thoughts and replace them with positive thoughts (Kendall & Hedke, 2006; March & Muelle, 1998). Thought stopping is a skill that requires children to monitor their negative thoughts by using an external action to stop themselves, either verbally or by eliciting an action to interrupt a negative thought (Clarke et al., 1990). Coping skills allow students to express themselves and their emotions, giving them the ability to come to terms with their internalized problems. Without proper guidance in developing coping mechanisms, students are at increased risk of internalizing problems that can negatively impact their academics, relationships, and overall well-being. Therefore, for teachers to properly support students, they need appropriate education regarding coping skills.

If teachers can recognize student mental health issues early, they can utilize coping mechanisms to manage their emotions and improve their overall health (Townsend et al., 2018). Training models such as resilience programs tend to focus on “the development of coping skills,

mindfulness, emotion recognition and management, empathic relationships, self-awareness and efficacy, and help-seeking behavior" (Fenwick-Smith et al., 2018, p. 2). The development of coping skills educates students on ways to manage the adverse effects of stress and how to practice mindfulness exercises such as relaxation and meditation so they become aware of or can recognize their symptoms (Kyte, 2016). A recent study noted that it is essential for students to learn how to regulate their mental health symptoms and to express emotions such as empathy in social situations (Munk et al., 2021). By addressing these areas of resiliency, students will improve their self-awareness and self-efficacy in seeking support and improve working with peers and teachers in monitoring their mental health. These students will not only have the tools to manage their mental health symptoms but will also be in a better position to succeed academically (Fenwick-Smith et al., 2018). By teaching pre-service teachers coping mechanisms to utilize in the classroom, they are equipping teachers in training with the tools to promote student autonomy in managing and monitoring their own social-emotional well-being.

The Current Curricula

Bachelor of Education Program

It is necessary for teachers to develop positive relationships with students so that issues with behaviours can be minimized. Teachers should be able to influence their students by providing coping mechanisms to deal with mental health concerns, but they are often unaware of how to meet the needs of students even before entering the classroom as no "universal systematic changes have been made to mandate pre-service teachers' competency in the recognition and early intervention of specific mental health needs of youth in schools" (Koller & Bertel, 2006, p. 199). Researchers from the University of Missouri, Koller and Bertel (2006), examined the curriculum for American universities and determined that many post-secondary institutions fail

to provide sufficient competency-based pre-service training in mental health prevention. Pre-service teachers lack practical information and are offered very little, if any, specific competency training in identifying mental health issues (Jenlink, 2020; Koller & Bertel, 2006). Teachers require the competency to be able to observe the early signs and indicators of emerging mental health conditions in students and possess an awareness of the coping strategies and tools available to support their students.

Limitations in pre-service training programs in Canada and more specifically Newfoundland and Labrador, reveal the issues teachers face in identifying and supporting students with mental health conditions. There seems to be an understanding among pre-service teachers that they are underprepared to meet the needs of diverse learners (Jacquet, 2008). In fact, most of the teacher preparation programs in Canadian universities lack effective preparatory coursework in inclusion and mental health as part of their Bachelor of Education (B.Ed.) program or equivalent undergraduate degrees (McCrimmon, 2015). Memorial University of Newfoundland is no exception, as most programs only have one course centered around exceptionalities that examines the needs of students (Faculty of Education: Course Descriptions, 2019). The Bachelor of Education (Intermediate/Secondary) program has one exceptionalities course and one course teaching the identification and remediation of learning difficulties (Faculty of Education: Course Descriptions, 2019). The Exceptionalities course, Education 4240, which is required in almost all programs is a 3-credit hour course or about 36 lecture hours in one semester, while Bachelor of Education programs require anywhere between 51 and 150 credit hours for completion (Faculty of Education: Course Descriptions, 2019). The required exceptionalities course covers a wide variety of topics on conditions but is not an in-depth study of mental health conditions. The limitation in education of mental health curriculum in teacher

training programs is not unique to Newfoundland and Labrador but is present across all of Canada and globally. The teacher training programs, and knowledge and skills required for teachers need to be addressed to meet the demands of the diverse learning environment (Munk et al., 2021).

Continuing Teacher Education

Resiliency Training

There are several approaches to pre-service teacher training to support students with mental health conditions. Resiliency training is one such approach. It is similar in its objectives to the social-emotional learning paradigms outlined in CASEL (2021) and the three Cs, however implementation of resiliency programs can encompass shifts of the entire school environment beyond the classroom (Fenwick-Smith et al., 2018). In other words, rather than following a social-emotional framework to implement in the classroom learning environment, resiliency training could act as a whole school approach to supporting students inclusively (Fenwick-Smith et al., 2018). Resiliency training aims to increase a child's ability to seek support and provide the skills needed to cope with negative life stressors. Knowledge of self-protection skills early in a student's life would minimize the need for interventions later in life. These self-protection skills are what is known as self-efficacy, which is the ability to "cope with new and difficult demands by means of one's own competencies" (Jerusalem & Hessling, 2009, p. 330). Self-efficacy is a self-protection skill that helps students take control of their emotions and manage their own mental health. Self-efficacy refers to a person's ability to seek support in times of need and is paramount for students to learn to monitor their behaviours and emotions (Fenwick-Smith et al., 2018). If behaviours and emotions are better managed in childhood, then students will likely fare better with their mental health into adulthood. It is important to address mental health concerns

early on because 70% of adults who experience an emotional disorder reported having their first onset prior to the age of 18 (Rodger et al., 2014).

Sense of Control

Another approach or method of training is to help students to take control over their own well-being and build relationships to enrich their lives (Raskind et al., 2002). Teachers can support students in managing their conditions by encouraging decision-making and acting on those decisions to take control of their lives (Raskind et al., 2002). Students often struggle to come to terms with their conditions and this uneasiness leads to feelings of doubt and damages self-esteem. Mental illness and specific learning disorders can sometimes coexist and are both considered exceptionalities that can require programming support (American Psychiatric Association, 2013; Government of Newfoundland and Labrador, 2023). For instance, students who are diagnosed with a specific learning disorder are not only at risk of experiencing academic difficulties, but they are also twice as likely to have mental health problems than peers who do not have a specific learning disorder (Piers & Duquette, 2016). Students who experience comorbidity of a specific learning disorder and associated mental health concerns should be equipped with knowledge to establish a sense of control and ownership that allows them to work around their condition. Students who feel in control of their condition feel a sense of empowerment that can empower them to make decisions and set realistic goals to achieve success (Piers & Duquette, 2016). Teachers can support students with both learning and mental health challenges to be more confident by encouraging them to make decisions and create goals that set them up to succeed.

A student's sense of control is also based on the relationships they have with adults within their sphere of influence, such as parents, teachers, coaches, school personnel as well as

the positive support they receive. Parent support is critical in helping students with specific learning disorders or other mental health conditions flourish (Piers & Duquette, 2016). The affirmation that students receive from the acceptance and belief in their capabilities by parents and loved ones can give students the drive they need to succeed (Piers & Duquette, 2016). Teachers should strive to attain effective communication with parents or guardians to ensure students are both mentally and emotionally supported both at school and at home.

Evidence-Based Practices

The types of models that need to be implemented into Bachelor of Education programs need to be evidence-based practices that focus on practical knowledge that is transferable (Reinke et al., 2011). There is a lack of evidence-based mental health literacy curriculum resources in pre-service teacher education programs across Canada (Carr et al., 2018). Carr and colleagues have raised questions as to why evidence-based resources are not being more frequently utilized. One issue may be that teachers are often unaware of what evidence-based resources exist and where to find them (Reinke et al., 2011). These include having the resources to be able to access to information about correctly identifying evidence-based programs and practices.

Conversely, in-service teachers typically depend on guidance counsellors or school psychologists to bridge the gap on information about practices and programs surrounding mental health because they typically have more knowledge and experience. School psychologists can provide in-service training for teachers on what evidence-based practices are, where to locate information about these practices and programs, and how to effectively implement them (Reinke et al., 2011). However, guidance counsellors and other specialists usually face time constraints within their own schedules to work with students, let alone allow for additional time to educate

teachers. Without the appropriate training on mental health practices, teachers are left to fill in the knowledge gaps to adequately address mental health concerns in the classroom. Training on evidence-based practices is important for teachers to know and understand prior to entering the profession to minimize the additional time needed to consult with guidance counsellors and other specialists. While there may be an abundance of content needed to be covered in education courses for teachers in training, the time saved learning about evidence-based practices and their implementation will allow pre-service teachers to be better prepared for the challenges they face when entering the teaching profession.

Since teachers typically have limited knowledge regarding interventions for mental health conditions, they usually rely on guidance counsellors to provide support for students (Leeper, 2018). Guidance counsellors in Newfoundland may have access and connections with outside resources and agencies, such as the Canadian Mental Health Association (2019) and the Mental Health and Addictions Division under The Department of Community Health and Services (2019). While teachers often rely on school guidance counsellors for resources and information on how to support students dealing with mental health issues, this may not be an option in certain areas where guidance counsellors are spread out over multiple schools (Coles, 2018). According to the Newfoundland and Labrador Teachers Association (NLTA), there are only half the number of guidance counsellors and psychologists required for the student population. The current guidance counsellor and psychologist ratio recommends one guidance counsellor per 250 students and one assigned school psychologist per 500 students (Coles, 2018). The need for more guidance counsellors once again points to the importance of teacher training in being able to support students with mental health conditions.

Mental Health Literature

Mental Health Intervention

Teachers receive insufficient education on mental health as part of their pre-service training, and as such, would benefit from working with experienced consultants who pass along information to both teachers and parents to improve students' quality of life (Rubin, 2008). According to research conducted by Cohen and Kaufman (2005), having insight from professionals in the field of mental health adds value and fosters relationships by providing a wider scope of knowledge and experience. The type of assistance from a mental health professional would include making observations about behaviour then developing a realistic plan after speaking with the child as well as the teacher and parents to intervene when mental health concerns arise (Rubin, 2008). Mental health consultants can improve the well-being of students with mental health concerns because this type of approach involves the relationship between all parties, particularly the guardians because facilitating student's social-emotional development is dependent on home-school communication (Rubin, 2008). Parents can sometimes feel as though they have very little control over what happens within the school and with the teacher-student relationship but developing plans with all parties involved ensures that the student's needs are at the forefront.

Mental Health Literacy

The term mental health literacy originated from health literacy, which is a set of capabilities developed through knowledge (Nutbeam, 2008). These capabilities include cultural and conceptual knowledge, speaking and listening skills, reading skills, writing and numeracy. The goal of health literacy is to utilize knowledge and to support others through educational intervention (Nutbeam, 2008).

Mental health literacy is defined as the "knowledge, attitudes, beliefs, and skills related to mental health that emerge from experience, education, and existing belief systems" (Dods, 2016, p. 43). Teachers who demonstrate higher mental health literacy are more adept at working with children who have mental health conditions. Mental health literacy provides insight into diverse learning needs and therefore can help improve inclusion efforts in the classroom (Gilham et al., 2021). According to Dods (2016), having a higher mental health literacy generally infers "[more] positive attitudes and beliefs and greater knowledge and skill, enables prevention, early recognition, and intervention, as well as reduction of stigma associated with mental illness and mental health disorders" (p. 43). The current barrier for pre-service teachers preparing to work with students with mental health conditions in the classroom is that the knowledge base and training is inadequate: "Ongoing efforts to prepare pre-service teachers to support the mental health of students, while at the same time supporting the mental health of the pre-service teachers themselves, remain a work in progress'' (Dods, 2016, p. 43). Dods (2016) also points to the limited research conducted on mental health and mental health literacy of teacher candidates, which creates a gap for the development of teacher education programs.

A major component of teacher training should focus on teacher attitudes toward working with students who have exceptionalities as attitude can be impacted by teacher knowledge and information on inclusion (Jordan et al., 2009). A project called Supporting Effective Teaching (SET), observed both the influence of attitudes and beliefs of teachers while teaching students with diverse learning needs and teacher practices in the classroom (Jordan, 2018a) The project used interviews and later a questionnaire as methods of understanding teacher's practices and beliefs (Jordan et al., 2009). Several tools were utilized in the project including The

Pathognomonic-Interventionist Interview, which assessed teacher beliefs about disability and teacher responsibility (Jordan, 2018b).

The SET project aimed at determining teacher knowledge and attitudes impact on inclusion resulted in several important findings from the interview and questionnaire. One finding is that out of 100 teachers who participated in the study, 20 felt that ability and disability are fixed, and classroom teacher efforts do not influence a student's potential for learning (Jordan, 2018b). Another finding is that ability and disability may develop incrementally as teachers are responsible for providing opportunities (Jordan et al., 2009). These opportunities in the way of improving higher order thinking were examined in a study looking at 12 teachers where half of those teachers had beliefs about improving student ability through teaching practices based on engagement, while the other half of teachers believed in knowledge and ability or disability as being fixed (Jordan et al., 2009). The division in results based on teacher beliefs from the study demonstrate definitive relationships exist between teacher beliefs about ability and disability, as well as roles and responsibilities in the classroom, along with the nature of and obtainment of knowledge (Jordan et al., 2009). These relationships about inclusion point to the question of how to prepare future teachers since attitudes and beliefs are so influential in the effectiveness of teaching to support all students.

More recently, Brown and colleagues (2019) conducted a study looking at the implementation of mental health literacy in pre-service teacher education programs in Australia and Scotland and found much work is needed to deliver practical information to effectively address mental health in school. This also applies to the Canadian context, as mental health concerns are considered the number one issue facing schools today as many students in Canadian schools are struggling to succeed both academically and socially (Whitley et al., 2012). The

study concluded that "future educators [should] be better informed and engaged with information related to the mental health of their students" (Whitley et al., 2012, p. 62). Given the increasing prevalence and rise of mental health conditions in children and adolescents, teachers require sufficient training to meet the needs of children and youth.

A potential solution is to educate pre-service teachers through mental health literacy. If more topics related to mental health literacy are embedded into B.Ed. courses, pre-service teachers will be better prepared to serve students (Whitley et al., 2012). Implementing this approach has been a challenge as education programs are compact with a full course load with little room for additional requirements to graduate. However, Whitley and colleagues suggest that "rather than simply continuing to add courses to already intensive programs, research, and theory in the area of teacher education [should be] carefully considered in exploring thoughtful ways of training teachers more effectively" (Whitley et al., 2012, p. 63). Careful consideration of what material is taught on mental health literacy is more important than how much is taught for teachers to be prepared for the realities of the classroom. This means that instead of creating new courses, already existing courses can be utilized by embedding mental health literacy and content into subject areas to explore ways to better work with students with mental health conditions.

Mental Health Concerns

Beliefs about Gender

Education and training for pre-service teachers should examine gender beliefs and how to address them (Whitley et al., 2012). First, it is important to discuss beliefs and how they interfere with a teachers' ability to identify mental health conditions. Loades and Mastroyannopoulou (2010) examined a teachers' ability to recognise common mental health problems in their students based on questions of perception, severity, symptoms, and concerns. If teachers hold

beliefs and assumptions about students based on gender, they may affect a teacher's approach in working with students. This could mean that one gender is overlooked because they do not present with symptoms considered typical of a particular condition. Males and females may also be overlooked with similar symptoms during different stages of their life, for example, community referral samples that have shown prevalence rates of ADHD (Attention-Deficit Hyperactivity Disorder) comparing males to females, which present a 3:1 ratio may be reflective of the associated symptoms of a particular gender such as the disruptive behaviour seen in boys (Gaub & Carlson, 1997). While a particular gender may be overlooked when considering external conditions during childhood such as ADHD, there are certain internal conditions that tend to have a higher association for females.

Some mental health conditions such as emotional disorders appear more commonly in girls than boys during adolescence (Loades & Mastroyannopoulou, 2010; Santa Lucia et al., 2000). As a result, teachers may have greater experience with girls who exhibit emotional disorders and would therefore be inclined to attribute specific symptoms to an emotional disorder for girls than they do for boys displaying the same symptoms. The results of the study concluded that "problem recognition is affected by both [the] gender of the child and [the] symptom type" (Loades & Mastroyannopoulou, 2010, p.153). Loades and Mastroyannopoulou's study inform future research and practice by providing insight into teacher's ability to identify external and internal behaviours (2010). Studies such as this show the need for more training around awareness and influence on student mental health.

Santa Lucia and colleagues (2000) conducted a gender study on 701 grade three to five students examining child adjustment to school. Children's Hassle Scales and Acting Out, Moody, and Learning Related Difficulties (AML) was used to measure the frequency of hassle

and adjustment. Students in grades three to five completed the Hassle Scales and their teachers completed the AML for each of their students. T-tests were used to determine the gender differences between both measurement tools. Children completed the study, and their teachers completed the ratings for each student. The study found that girls experienced higher levels of perceived peer hassles, and higher levels of interpersonal stress. Boys report experiencing more hassles related to academics. The outcomes reported by boys were also consistent with teacher ratings, which showed that boys were less academically adjusted than girls (Santa Lucia et al., 2000). These findings are similar to the study conducted by Loades and Mastroyannopoulou which found that teachers have more experience with girls displaying greater emotional symptoms than boys. Teachers need to be aware of biases and work towards treating each child and symptom as independent of gender.

Influence of Perception and Stigma

Not only is teacher efficacy and beliefs about practices and abilities important, but teacher attitudes and stigma are also necessary considerations when working with students with mental health conditions. Pre-service teachers should be open-minded, non-judgemental, and realistic regarding practice around children and youth with mental health issues (Armstrong et al., 2015). According to Reavley and Jorm (2011), beliefs about the effectiveness of interventions impact help-seeking and treatment compliance. If a teacher holds a negative belief or perception about a particular teaching strategy, then they may be less likely to introduce that intervention to help support students. These negative perceptions or possible uncertainty about the realities of mental health issues could be a result of previous negative experiences with students and symptoms of their conditions, which can result in negative teacher attitudes towards students with those conditions. For example, if a teacher holds a negative attitude towards

anxiety, they will likely feel less confident in dealing with students who have anxiety (Lynagh et al., 2010). Negative attitudes can be harmful and impede the support of children with mental health conditions in the classroom. Minimal confidence and information about specific conditions points to a lack of training on mental health. This lack of training in mental health may "restrict a teacher's ability to offer appropriate support, while a solid knowledge base and confidence in their ability can assist teachers in their role" (Lynagh et al., 2010, p. 6). The more information that teachers have, the more confident they will be, as knowing and understanding more about the causes of mental health disorders decreases stigmatizing attitudes (Huckabee, 2014).

DuPaul et al. (2004) conducted a study on the impact of teacher attitudes reducing the risk of school disruption for students with mental health concerns. As school disruption may stem from mental health concerns, a comparison of diagnosed and undiagnosed students with ADHD was conducted (Stewart et al., 2016). The findings of the study demonstrated that "teachers' perceptions of academic skills were the strongest predictors of academic achievement for all [students]" (Stewart et al., 2016, p. 15). Regardless of whether a student was diagnosed with ADHD, the teachers' perceptions of students with ADHD significantly impacted academic performance. The study points to the importance of teacher attitudes when considering teacher training, because "teacher attitudes and beliefs within the classroom have the potential to decrease the gap in academic achievement and reduce the risk for school disruption among children with mental health concerns'' (Stewart et al., 2016, p. 15). Education around mental health issues needs to acknowledge teacher attitudes and the impact that teacher attitudes have on students.

The stigmatizing attitudes of teachers have negative implications for students with mental health issues because "stigma [is] a major barrier to help-seeking behavior [and] can often lead to an increase in severity and duration of symptoms" (Huckabee, 2014, p. 49). Mental health symptoms experienced by children can be prevented from manifesting into more acute symptoms with appropriate help and intervention. However, "early manifestations of mental health distress develop into full blown mental health disorders due to lack of treatment" (Huckabee, 2014, p. 49). Given the detrimental impact of stigma, teachers require more training in mental health literacy to improve stigmatizing attitudes and better prepare teachers.

Stigma is detrimental to a teachers' willingness and capacity to work with students who are presenting with mental health symptoms, and acts as a barrier in children and youth seeking mental health services. These services may include community health services and supports or reaching out to school guidance counsellors and other teaching staff. Children sometimes experience concern around seeking help and these inclinations can exacerbate mental health symptoms (Elias, 2014). Students could feel concern about social acceptance on top of stigma, which sometimes impacts their willingness to seek help (Bowers et al., 2013). A reduction in stigma may occur because teachers receive more information and training, along with increased education on mental health literacy.

Bowers et al. (2013) conducted a survey to compare high school students and service providers' perceptions of the barriers preventing youth from accessing mental health services. They reported that, while there is a significant perception of the stigma that impedes seeking treatment, high school students perceived stigma and embarrassment as a greater threat than service providers. One conclusion from the study looked at the lack of education and communication about mental health supports for students. Limited resources coupled with a lack

of knowledge, creates a barrier for students in knowing where to go for help (Bowers et al., 2013). As a result, a ripple effect occurs - when teachers lack the knowledge and skills to help, their students also become ill-equipped to manage their own mental health concerns. Such deficits ultimately result in mental health distress, which may turn into full-blown mental health disorders.

Teacher Influence in the Classroom

Importance of Teacher Mental Health

Teachers can experience a lot of stress and anxiety from the profession and their attitudes and inclination to seek help for their own symptoms can play a role in how they communicate information to students about receiving help. While it is important for teachers to be proactive in supporting students with mental health conditions, it is equally as important for teachers to take care of their own mental health and well-being. A survey was conducted in Turkey looking at whether factors such as gender, personal history with mental health and geographic location influenced pre-service teachers' attitudes in help-seeking behaviour (Kaya, 2015). The study consisted of 70 male and 73 female pre-service teachers who completed questions about demographics along with the "Attitudes Towards Seeking Psychological Help Scale." While there were no significant differences in measurement between gender or geographic location in this individual study, there was a correlation between the history of availing of mental health support and a positive attitude towards help-seeking. The findings from this study are important because they suggest that the reason why people shy away from seeking help is "mainly psychological, that is, they are mainly originating from their personal perception of the psychological help" (Kaya, 2015, p. 229). Despite the concerns around stigma, is it important for

teachers to have a positive attitude towards seeking help not only in supporting students but for taking care of their own mental health.

While teachers need knowledge and skills in preparation for working with students with mental health concerns, specific gaps, and implications for students' access to appropriate supports still need to be addressed (Bryer & Signorini, 2011). The objective is to work towards universal positive mental health for all students, regardless of where student symptoms fall on the spectrum. In Canada, there has been a push towards inclusive education and providing support and services to meet the needs of all students (McCrimmon, 2015). While an inclusive model is ideal for promoting positive attitudes and embracing diversity, it has proven challenging for teachers based on their current capability and understanding of a wide array of needs. New graduates generally have more positive attitudes surrounding inclusion than their senior counterparts, but unfortunately, pre-service teachers are not exposed to definitions or descriptions of childhood disabilities in conjunction with mentored experience and research-informed, effective classroom-based intervention practices (McCrimmon, 2015). Teachers often leave university underprepared with insufficient training or experience to support student behaviour and to adapt the curriculum to meet the needs of diverse learners.

McCrimmon (2015) suggested several possibilities to address pre-service teachers' under-preparedness for entering the classroom and working with students with mental health conditions. A more practical suggestion by McCrimmon is to develop specialized training programs addressing the precise training and knowledge that teachers currently need for managing complex classrooms with diverse learning needs. McCrimmon (2015) suggests that a beneficial program that would prepare teachers to support students with mental health conditions would need to include "targeted knowledge and training regarding the primary features of

childhood disorders, the impact of those features on children's learning, and best practices regarding educating children with specific exceptional learning needs" (McCrimmon, 2015, p. 235). McCrimmon conducted an extensive search on courses in faculties of education across Canadian universities and determined that such a specialized training program currently exists in one Canadian University (University of Calgary). According to McCrimmon's findings, the training offered by the University of Calgary is in the form of postgraduate certificates. This training is "designed to develop teacher expertise in best practices regarding the education of children with special education needs, such as autism spectrum disorder (ASD), within an inclusive education classroom" (McCrimmon, 2015, p. 236). While there are post graduate certificate programs offered in ASD, there should also be programs developed surrounding mental health. Again, this points to the need for training at the pre-service level for graduates of the Bachelor of Education program to feel more confident and to be more prepared to work with students with diverse needs prior to entering the teaching profession.

Teacher Attitude and Well-Being

In the teacher-student relationship, developing bonds to allow opportunities for student success requires further elaboration. It is necessary to examine teacher attitudes surrounding their relationships with students and the impact on teacher well-being. Teachers' who experience challenges and struggle with negative symptoms need to care for themselves, while also supporting student mental health. Teachers need to monitor their own mental health considering the growing responsibility to support and facilitate the health and well-being of students (Whitley & Gooderham, 2016a). Teachers are expected to focus on curriculum, work within time constraints, and work alongside students in the classroom, while dealing with limitations in resources. As a result of the added pressure, teachers often struggle with classroom management

when they feel unsupported and unprepared to work with the array of needs in the classroom (Whitley & Gooderham, 2016b).

According to data collected in the United States by the National Center for Educational Statistics, around 12% of teachers leave the field of education within two years of being in the profession, and almost 50% leave within five years (Freeman et al., 2014). These numbers point to an alarming rate of teacher burnout and poor retention. Results collected from the National Center for Education Statistics indicate that most people share a consensus on the reasons for leaving the teaching profession: a lack of training, stressful environment, and poor student behaviour (Freeman et al., 2014). It is a disservice to pre-service teachers in training to underprepare them for the realities and demands of the teaching profession. To increase retention for new teachers, awareness should be made around the consequences of burnout and the availability of support systems and coping strategies (Atkins & Rodger, 2016). These support systems include emotional resources to allow teachers to monitor, advise, and encourage the social-emotional needs of students (Arens & Morin, 2016). Teachers require support to build positive relationships and support students. One thing that is consistent in the literature is the repeated mention of a lack of training in mental health impeding teacher and student success.

Teacher Efficacy

An important belief relating to teachers' roles and influence over students with mental health conditions is that of teacher efficacy. Teacher efficacy refers to a teacher's belief that external influences can be overcome by good teaching and the teachers' confidence in their ability to bring about positive change in students (Sokal & Sharma, 2013). An emphasis on good teaching and ability is important to note as being a good teacher would assume that one is knowledgeable and well-equipped with the tools to be able to make a positive change. Teacher

efficacy tools refer to "teachers' capability to use a range of teaching practices to include a range of diverse needs in the classroom" (Sokal & Sharma, 2013, p. 63). While teachers should have a positive attitude towards working with diverse students to demonstrate efficacy, there may be limitations in terms of resources that impact their confidence.

There is often a concern surrounding resources that is usually out of the scope of teacher control. Teachers typically possess a willingness to bring about change and engage in professional learning but are often constrained by a lack of resources and skill deficits (Sokal & Sharma, 2013). For teachers to feel adequately prepared to work with students with mental health conditions, they must have the resources and teaching tools to service them. Resources play a significant role in teacher efficacy and must be considered when developing training models. With that in mind, "teacher education is an important mechanism for decreasing teacher concerns and enhancing teachers' positive attitudes and efficacy for inclusive teaching" (Sokal & Sharma, 2013, p. 67).

Current Policy and Future Implications

Current Resources

While limited resources can impede the utilization of evidence-based practices, there are numerous resources that aim to guide educators in practice. The Government of Ontario published a guide entitled, Supporting Minds: An Educator's Guide to Promoting Students' Mental Health and Well-Being (2013), in which it outlines strategies for teachers to help students with mental health conditions without diagnosing them (Alasvand, 2014). Teachers should observe how children interact and behave in the classroom so that they can understand contextual behaviours that would be beneficial in directing the support and intervention of school counsellors and personnel.

A document put forward by the Canadian Psychiatric Research Foundation entitled, Something's Wrong: Strategies for Teachers (2007) acts as a guide for teachers to improve their understanding of mental health conditions and any associated challenges. The document is a tool that teachers can utilize to support all students, particularly those with behavioural challenges. The guide outlines seven mental health conditions: anxiety disorders, autism, depression, eating disorders, impulse control disorders, schizophrenia, and Tourette syndrome. The following sections will provide an overview on the two most common mental health conditions, anxiety, and depression, which can be used as a tool for teachers to identify signs and symptoms of these conditions in students.

There are several techniques and tools that teachers can use to address varying types of mental health conditions (Canadian Psychiatric Research Foundation, 2007). Anxiety disorders are broken down into their various categories and include separation anxiety disorder, general anxiety disorder and social anxiety disorder. Students who experience separation from their parents and feel distress when arriving at school can benefit from distraction techniques, such as involving students in another activity when arriving at school. Students who deal with general anxiety may experience constant worry, so setting realistic expectations would be beneficial for students facing these challenges. Those with social anxiety experience anxiety when placed amongst peers and in situations where they face interactions with others. Teachers could address social anxiety in students by using desensitization through planned small group instructions and interactions to help provide ease for students dealing with social anxiety. These tools allow teachers to address behavioural problems faced by children coping with anxiety and can support them in feeling included in the classroom environment.

Students who experience depression deal with emotions that affect their mood and thoughts. Those who are depressed may display lethargy, apathy, irritability, and hopelessness (Canadian Psychiatric Research Foundation, 2007). It is important for teachers to ensure that students dealing with depression feel a sense of belonging in the classroom. Some ideas for supporting students with depression include expressing optimism and positivity when working with the student, making an extra effort to check in with the student daily, and creating an open dialogue with the students about the importance of positive mental health. Teachers can increase confidence surrounding supporting students with mental health conditions when they have access to a variety of tools they can utilize in the classroom.

Technology as a Support Tool

A recent innovative resource in mental health education is technology, which supports mental health literacy in Canada through e-Mental Health (Mental Health Commission of Canada, 2014). E-Mental Health refers to telephone and video conferencing, patient monitoring systems, along with web-based and mobile interventions and types of social media. The goal of e-Mental Health is to "foster collaboration, increase access to services, and engage people in managing their mental health" (p. 3). The ability to provide information over the phone to patients is particularly beneficial for those who live in rural areas and areas limited in available services. Mood and monitoring apps are also convenient as they provide real-time data to individuals outlining measures, from physiology to management of food and exercise habits (Mental Health Commission of Canada, 2014). There are numerous advantages to utilizing technology to support mental health.

Technology provides people the opportunity to connect with individuals around the world. This opportunity provides individuals, particularly youth who may feel uneasy about

accessing mental health supports the ability to connect with others in a more discrete manner. Whether it is students or teachers, the internet can allow for anonymity for those who are concerned about stigma to avail of an array of resources. Interestingly, according to the Canadian Internet Registration Authority (CIRA), Canadians are the heaviest users of the internet in the world (Mental Health Commission of Canada, 2014). This considerable time spent on the Internet provides a space for individuals dealing with mental health issues to receive support. E-Mental Health has the accessibility to reach out to various groups such as youth, socioeconomically diverse populations, rural and remote populations, along with the general population (Lal & Adair, 2014).

A study completed in Australia, found that out of a sample of 2000 youth aged 12 to 15, 77% reported seeking information about mental health problems (Lal & Adair, 2014). Some notable advantages that the respondents pointed out included a sense of reconciliation of hearing about others' experiences allowing individuals to feel more hopeful and less isolated as well as the convenience, privacy, and anonymity of utilizing the internet (Lal & Adair, 2014).

Mental Health Policy

It is important to recognize the need to address mental health concerns and the significant implications beyond education. Mental health promotion is the responsibility of everyone, and stakeholders from all sectors of society have a role to play (Pollett, 2007). Policymakers are beginning to recognize the influence of teachers in responding to mental health concerns experienced by students: If teachers are on the frontlines of observing and recognizing mental health issues, then they must have the necessary training that provides them with adequate tools to work directly with children (Climie, 2015). It is important to look to develop a public health strategy to provide more targeted services for its vulnerable and at-risk youth (Waddell et al.,

2005). A public health strategy would mean a push to improve the mental health of all at-risk Canadian children through a balance of health promotion, prevention, treatment, and monitoring (Waddell et al., 2005). At the provincial level, governments need to continue to develop resources and materials to address mental health concerns in the classroom.

In 2017, the Newfoundland and Labrador provincial government created a report entitled, *The Premier's Task Force on Improving Educational Outcomes*, which aims to improve outcomes by promoting safe, caring, and inclusive practices through social-emotional learning and teacher support. In the section on Student Mental Health and Wellness, the promotion of understanding and acceptance of student mental health through self-efficacy is highlighted. The Department of Health and Community Services in Newfoundland uses several digital programs that are accessible province-wide to support children and youth with mental health conditions. Mobile apps such as Bridge the gAPP (Government of Newfoundland and Labrador, 2019) or Breathing Room (Canadian Institute of National and Integrative Medicine, 2019) have been developed to virtually reach youth and their families to help reduce stigma, improve access, and offer early-stage interventions to improve overall health and well-being (Premier's Task Force on Improving Educational Outcomes, 2017). While these are important online resources to utilize, teachers still need the tools to be able to help their students within the context of the classroom.

The prevalence of mental health conditions in Canada is high, ranging from 18 to 22% (Comeau et al., 2019). Comeau et al. examined data produced by the Ontario Child Health Study team and noted that there is a large increase in the perceived need for professional help. However, there have been ongoing constraints impeding students from receiving timely support, including inadequate school-based services, poorly defined and utilized district-based services,

poor communication between departments, and pronounced inefficiencies in the process of referral for those students whose needs are beyond what a school can reasonably address (Premier's Task Force on Improving Educational Outcomes, 2017). Canadian teachers recognize that "mental health issues need to be addressed at the policy level if they are to be considered a priority" (Kutcher et al., 2009, p. 44). A step forward is needed to focus on mental health, by making it a priority for teachers to be able to assist in early intervention and prevention. In fact, Recommendation 23 in The Premier's Task Force (2017) states that "The Faculty of Education at Memorial University [should] include comprehensive school health in all teacher education programs" (p. 41). A direct acknowledgement of the changes involving mental health promotion needed in the preparatory stages of a teacher's career assumes this will be an undertaking in the near future.

Chapter Three: Theoretical Framework

Empowerment Theory

This thesis examines understanding and promotion of positive mental health as well as the empowerment to manage one's own mental health conditions and support others with their own mental health. Empowerment theory is used as a lens to explore the topic of pre-service teacher's understanding of mental health. There is an expansion of the definition of empowerment by numerous scholars that explain their ideals around the term (Bennett Cattaneo & Chapman, 2010).

An early definition of empowerment by Rappaport describes empowerment as a process where people, organizations, and communities gain mastery over their lives (1984). This definition resonates with the role of teachers, their confidence level in managing their own emotions, and their ability to encourage students to manage their own emotions as well. Rappaport (1987) describes the mechanism of empowerment as a mastery of taking personal control. A sense of mastery is pivotal in this project as it is important for pre-service teachers to have tools and resources to have a sense of mastery in their skills and abilities in managing classrooms where students with mental health conditions are present. Rappaport (1995) further refined his definition of empowerment to include gaining control over resources through involvement in communities that allowed for sharing of information. A sense of empowerment derived from access to supports and receiving control through participation also translates over to mental health in schools. These ideas are mirrored in research suggesting that resources are paramount to both student and teacher success in being able to achieve positive outcomes.

Another early researcher who studied empowerment is McWhirter (1991) who focused on improving the lives of those who are marginalized. The aim to gain control from a

marginalized standpoint for those with mental health conditions is important in managing one's own health. It is important to note McWhirter (1991) thought of empowerment not only as personal control but as a collective ideal in supporting one another (1991). The premise of support is a theme that is prevalent in this study in both the data collection and recommendations for future work. The survey developed by Kutcher and Wei (2016) distributed to pre-service teachers addressed whether the knowledge and skills exist to be able to support students with mental health conditions. Such knowledge and skills would illicit a sense of empowerment on the part of the pre-service teacher in their advancement into the teaching profession.

Mechanic (1991) narrowed the definition of empowerment to suggest it is "a process in which individuals learn to see a closer correspondence between their goals and a sense of how to achieve them and a relationship between their efforts and life outcomes" (p. 641). An important role for teachers is demonstrating to students how to develop goals and achieve them and this is particularly important for student mental health. Mechanic's (1991) definition of empowerment describes the goal that teachers aim to empower student success by improving self-efficacy. This notion of empowerment focuses on independence of the individual and their own goals (1991). For some students, a goal may be to utilize strategies to deal with negative emotions while others may have a goal of simply expressing their emotions. These goals could be developed in consultation with a student's teacher or other school personnel.

Later, Zimmerman (2000) explored the focus on psychological empowerment by looking at the strengths of individuals and communities, and enhancement of well-being through support of the natural inclination to strive for positive change. The encompassing definition of empowerment is broken down into three components: intrapersonal, interactional, and behavioural (Zimmerman, 1995). These components refer to how people think about themselves

in a particular context, an awareness of options available in their surroundings, and advancing towards achieving goals in their environment. Zimmerman's definition demonstrates the evolution of empowerment and puts the onus on the individual in making choices for oneself as well as having the motivation to identify a desired outcome and follow through with action (Zimmerman, 1995). The processes laid out to achieve empowerment in this definition align with this study in respect to supporting students to feel positive about their mental health by providing the necessary knowledge and tools to enable students to successfully manage their emotions and feel empowered. The goal for teachers and students is to feel empowered about their own mental health and for teachers to feel empowered in supporting student mental health. The theoretical framework provides a perspective of the objectives of this study when it comes to the knowledge and attitudes surrounding mental health.

Research Objectives

This study aims to:

1) investigate the knowledge level pre-service teachers in a Bachelor of Education program possess about mental health;
2) assess the attitudes and beliefs that pre-service teachers hold about individuals with mental health conditions;
3) assess the attitudes and beliefs that pre-service teachers have surrounding help-seeking behaviours; and
4) understand the relationship between knowledge level and attitudes surrounding mental health.

These research objectives are examined using a previously developed mental health survey as will be outlined further in the Methods section.

Chapter Four: Methods

Survey Origins

This research project uses a survey developed by Dr. Stan Kutcher and Dr. Yifeng Wei (2016), entitled, Mental Health Literacy Curriculum Resource Survey (MHL-CR Survey) to gather information about individual knowledge and attitudes towards mental health. The survey was originally created to assess knowledge of information in the Mental Health and High School Curriculum Guide (The Guide), originally developed in 2007 by Dr. Kutcher and the Canadian Mental Health Association (Kutcher et al., 2018). The Guide is the only evidence-based Canadian resource designed to improve teacher and student mental health literacy (Kutcher & Wei, 2017b).

Kutcher, Wei and colleagues initially developed a one-day training program to teach components of The Guide to teachers by providing a more detailed overview and approach to integrating the curriculum in the classroom (Kutcher et al., 2015). The approach to training later moved to training teachers who would then act as trainers to deliver content of The Guide to other teachers. An evaluation using the same survey (MHL-CR) both pre and post training was utilized to assess the improvement of knowledge and attitudes around mental health before and after being exposed to The Guide. Cohen's d statistic was used to determine effect sizes of means before and after testing of knowledge and attitude scores. According to effect sizes (Cohen's d), scores for knowledge improved from 1.4 to 1.8 and scores for attitudes improved from 0.5 to 1.2. These scores demonstrate significant and substantial improvements in knowledge and attitude (Kutcher et al., 2015).

The one-day training session introducing The Guide was previously conducted in Nova Scotia with 228 teachers from across the province who taught Grade 9 (Wei et al., 2014). Out of

the 228 participants, 185 teachers completed a pre and post survey assessing their knowledge and attitudes around mental health. Prior to the training, teachers scored around 71%, and after working with the curriculum and taking a follow-up survey, their scores improved to 89%. In terms of attitude evaluation of mental health before and after being exposed to the curriculum, teachers' scores also improved. A total of 178 teachers completed the pre and post survey portion around attitudes and their scores measured 51 out of a possible score of 56 prior to the training and averaged 53 out of 56 after training (Wei et al., 2014). These improvements in scores point to the impact that training and resources have on knowledge and attitudes. The study conducted by Wei et al., (2014) demonstrates the necessity for training towards improving teacher knowledge and attitudes, so they have the tools to support students with mental health conditions.

The survey was previously tested with pre-service teachers in both middle and secondary streams in the Faculty of Education at the University of British Columbia (UBC) (Carr et al., 2018). Pre-service teachers from UBC were immersed in the one-day training program aimed at improving mental health literacy in the areas of knowledge, attitudes, and help-seeking efficacy (Carr et al., 2018). Help-seeking efficacy assessment was included in the training directed towards pre-service teachers.

A total of 60 pre-service teachers, both male and female, completed the MHL-CR Survey before and after the training and again three months later (Carr et al., 2018). Section A or the knowledge section was broken up into questions based on the training program and questions based on The Guide. The overall scores ranged from 74% pre training, 90% post training, and 81% after three months. Section B focused on questions around attitudes and how pre-service teachers perceived people with mental illness. These 8 questions were rated on a 7-point Likert

Scale from strongly agree to strongly disagree with a total possible score of 56. The scores for the attitude section of the survey increased from 65% pre-training in the initial survey, 80% post-training - immediately after being exposed to the curriculum, and a score of 53% after taking the survey again three months later. The decline in score may possibly be explained by the lack of exposure to the mental health curriculum (The Guide) suggesting that gains in knowledge or information and improvements in attitude in the short-term may decline without repeated exposure or input (Lipson, 2014). The last section on help-seeking efficacy for intentions to help family members and themselves when experiencing mental health problems was also rated using a 7-point Likert Scale with a possible score out of 35. The scores for the five questions ranged from 75% pre training to 79% after three months. A survey with questions on help-seeking efficacy was not administrated immediately after training because researchers believed that help-seeking behaviours take time to change and there would unlikely be any drastic changes to scores within a day (Carr et al., 2018).

The UBC study undertaken with pre-service teachers was previously utilized with in-service teachers. There was no other group of pre-service teachers available as a control to compare results and test reliability of the study (Carr et al., 2018). The effect size from pre to post surveys for the knowledge questions was 3.1 and then 1.74 after three months. The effect size from pre to post surveys measuring improvement of attitudes was 1.18 and then 0.68 after three months. The increase in knowledge and decrease in stigma between pre and post surveys and after three months was comparable to scores for in-service teachers. The consistency in scores validates the intended measurements (Carr et al., 2018).

Rationale

An extensive scan by Carr et al. (2018) concluded that no evidence-based mental health literacy curriculum resource currently exists in a pre-service education program. Pre-service teachers are currently in preparation to go into service and as such, ideally positioned to describe their current training and perceived gaps. The desire to study the need for professional development in mental health literacy to support students was worthy of investigation.

For this thesis, the Mental Health Literacy Curriculum Resource (MHL-CR) Survey was chosen to measure knowledge, attitudes, and help-seeking efficacy as a tool to compare responses. The study conducted at UBC measured pre and post knowledge of mental health with a training intervention program (Carr et al., 2018). There was only round of surveys in this study because the uptake of participants interested in enrolling in a mental health institute was very low and there were difficulties with participant recruitment into a qualitative study. The information obtained from survey responses by pre-service teachers at Memorial University provided a unique perspective on the knowledge, attitudes, and help-seeking efficacy of pre-service teachers enrolled in Bachelor of Education programs in Newfoundland. The survey data presents findings from a select number of students enrolled in a Bachelor of Education program at a specific point in time.

Ethics

I received ethical clearance from Memorial University's Interdisciplinary Committee on Ethics in Human Research (ICEHR) to conduct research in mental health looking at pre-service teachers' preparation in supporting students with mental health conditions in the classroom. A letter of information and informed consent form was attached to the surveys outlining my rationale for studying the topic along with confirmation that surveys will remain confidential and anonymous. Confidentiality refers to separating identifying information provided by participants,

while anonymity refers to collecting data without obtaining any personal information (Coffelt, 2017). Participants were not asked to provide any personal information in the survey.

Materials

The survey itself was broken up into four different sections (as per Kutcher & Wei, 2016). The introductory section collected demographic information about the gender identity, education status, and geographical location of respondents. Section A of the survey examined respondent knowledge surrounding individuals who deal with mental health. Section B of the survey inquired about attitudes towards those with mental illness and their willingness to work with individuals with mental health issues. Section C of the survey sought opinions surrounding mental health and how they feel about their own mental health.

Procedure

The Teaching and Learning Commons (TLC) in the Faculty of Education at Memorial University was used as the location to recruit pre-service teachers for survey completion. Paper surveys were left on the desk of the TLC during operational hours along with a bowl of candy. Surveys were left in the TLC and students volunteered to respond to the survey.

Envelopes for the surveys and a sealed collection box was provided and left on the desk at the TLC. Students completed the survey, put it in a sealed envelope, and placed it in the box provided. The box was located next to the surveys. The surveys were collected over a period of approximately 3 months. They were available at the TLC from the second week of April 2018 to the second week of July 2018. Individuals had the opportunity to fill out a paper and pencil survey any time during this period and return it when the TLC was open.

The previous attempts to recruit participants with an online survey were unsuccessful. Further efforts to recruit individuals to complete the survey through a course resulted in little to

no uptake. The coordinator of the Teaching and Learning Commons, Maurice Barry was helpful in promoting the survey with asking students if they were interested in taking the survey while in the commons or around the area. The approach was convenience sampling. The candy left at the desk was incentive for students to fill out the survey. Many students in Bachelor of Education programs go to the TLC to study or complete assignments and having the survey readily available made for an easy way to recruit participants in the moment.

Participants

There were 44 respondents who filled out surveys during the 3-month period. Given my previous failed attempts, the uptake of 44 respondents completing the survey was a significant improvement in participation. The number of responses seemed to gradually decline over time and the decision to remove them from the TLC was implemented in July 2018.

Most respondents filled out surveys during the month of April and May. There was a mixture of male and female respondents, all of whom were undergraduate students. All 44 surveys that were placed in envelopes in the locked box were numbered. Respondents knew that they were able to skip questions, so not all questions were answered by each respondent to the survey. I set up a blank survey in Survey Monkey and then manually inputted all survey answers from respondents. I used this approach to entering data as a quick and easy way to record and review responses (Waclawski, 2012).

Assessment Tools

Survey Monkey presented the results of the percentage of respondents who answered each question (Schenck, 2019). The information provided in Survey Monkey was used to create tables to summarize the results. For Section A, I created a cumulative table summarizing the percentage of respondents who responded with either “true, false, or I don’t know” was created.

The use of "I don't know" was an option choice for respondents to reduce the likelihood of guessing an answer (Carr et al., 2018). Questions 5 through 19 were knowledge questions that had a correct and incorrect answer. These questions were graded according to the answer key created by Kutcher and Wei (2016). The questions in Section A were graded based on a point system. Correct answers were scored a "1". Incorrect responses and "I don't know" were grouped together and scored as "0". Section A was marked out of 15, with 1 point allocated for each correct response. The highest amount that a respondent could receive would be 15, and the lowest that a respondent could receive is 0. This grade out of 15 demonstrated the proficiency of knowledge that an individual has surrounding mental health.

For Sections B and C, I created a cumulative table summarizing the possible Likert Scale responses for each question including, "strongly disagree, disagree, disagree a little, not sure, agree a little, agree, and strongly agree." These sections portrayed respondents' attitudes and the percentage of responses for each question according to the results presented in Survey Monkey were tabulated. These parts of the survey did not include an answer key as they are based on opinions and attitudes of respondents. Therefore, the responses were graded according to a 7-point Likert Scale based on the most appropriate or desirable answer. The study conducted with UBC also utilized a 7-point Likert Scale to score responses (Carr et al., 2018). Organizing the results based on a point system provided a coherent method for analyzing the results.

Each survey question in Section B and C was marked out of 7, with 7 being the highest amount that respondents could receive, and if they answered correctly, they received 7/7. The choice to score these sections was variably based on desirability of the outcome as there was no specific answer key for personal point of view questions. The score for points dropped the further away they were from the most desirable response. For instance, Question 21 states that

"A mentally ill person should not be able to vote in an election." Respondents who chose "Strongly Disagree" as their answer for this question received 7/7. If they responded with "Disagree", then they would have received 6/7. If their answer were the opposite of the appropriate response, such as "Strongly Agree", the respondent would have received 1/7. Section B and C were grouped together and the highest possible amount a respondent was able to receive was 91 if all 13 questions in these sections were answered correctly (with an optimum score of 7/7: 13 x 7 = 91). There were no points allotted or a score of zero was assigned if a question was not answered. A high score meant that individuals had a positive understanding and attitude towards mental illness and were comfortable managing their own mental health.

These measures were used to determine whether knowledge and attitudes correlate. An independent samples *t*-test was used to determine whether there was a significant difference between the total score for Section A and combined total score for Sections B and C. A *t*-test is a "statistical test used to compare the means of two groups" (Kim, 2015, p. 540). A *t*-test allowed the assumption of knowledge and attitudes correlated to be tested to find out if the score of a respondents' knowledge about mental health was congruent with their attitudes towards themselves and others with mental health concerns.

Security

Only the researchers involved with the project had access to the data used in surveys. All data are kept in locked filing cabinets for a minimum of five years, as required by Memorial University's policy on Integrity in Scholarly Research. Five years after completing the study, when the data are no longer required and the findings have been published, all data will be destroyed.

Chapter Five: Results

This chapter presents the results of the demographic survey questions inquiring about gender, degree level, program of study and geographical location of participants. The tables depict survey results assessing mental health knowledge along with results of participant attitudes about mental health and help-seeking behaviour. Each question includes an independent discussion of the results. The final section of the results chapter displays the data analysis of survey questions and points out significant findings.

The survey was completed between April and July of 2018.

The survey started with an inquiry about the date that participants filled out the survey.

Table 1: Date of Survey Completion

Question: Date of Responses	*April 2018*	*May 2018*	*June 2018*	*July 2018*
Participants	*n*=13	*n*=23	*n*=3	*n*=1

Note: *n*=the number of individuals who responded out of 44.

Only 40 participants provided the date they completed the survey. Most of the participants completed the survey during the month of May. There was only one participant who completed the survey during the month of July and hence data collection ceased.

Participant Demographics

Table 2: Gender Identification

Question 1):

I Identify As:	*Male*	*Female*	*Chose not to identify*
Participants	18.60% (*n*=8)	76.74% (*n*=33)	4.65% (*n*=2)

Note: *n*=the number of individuals who responded out of 44.

Question 1): This question inquired about gender identity of participants who filled out the survey.

Only one participant skipped Question 1. There were more females (77%), than males (19%) who completed the survey. Two participants (5%) chose not to identify as either male or female.

Table 3: Degree Level

Question 2):

I am an/a: Undergraduate student or Graduate student	*Undergraduate*	*Graduate*
Participants	100.00% (*n*=42)	0.00% (*n*=0)

Note: *n*=the number of individuals who responded out of 44.

Question 2): This question inquired whether participants were undergraduate or graduate students.

Two participants skipped Question 2. All participants who responded said that they were undergraduate students.

Table 4: Program of Study

Question 3):

Current Education	*Primary/ Elementary*	*Intermediate /Secondary*	*Special Education*	*Curriculum*	*Leadership*	*Counselling*	*Other (specify)*
Participants	56.82% (*n*=25)	43.18% (*n*=19)	0.00% (*n*=0)	0.00% (*n*=0)	0.00% (*n*=0)	0.00% (*n*=0)	0.00% (*n*=0)

Note: *n*=the number of individuals who responded out of 44.

Question 3): This question looked at the current program of study of participants.

All 44 participants responded to Question 3. Participants either came from the Bachelor of Education (Primary/Elementary) program or Bachelor of Education (Intermediate/Secondary) program. Most of the participants came from the Primary/Elementary program (57%).

A review of Memorial University's Faculty of Education admission document for the 2017-2018 academic year provided a breakdown of enrolment numbers. In the 2017-2018 academic year, 74 students were admitted to a primary/elementary program and 86 students for the intermediate/secondary program for the 2017-2018 academic year. The potential participants may also be from previous cohorts in their second or third year or so on and may be included within the pool of participants. However, according to the survey results, 34% or 25/74 of respondents represented the primary/elementary population and 22% or 19/86 represented the intermediate/secondary. These numbers demonstrate the degree to which the sample size for my study was representative of students enrolled in pre-service programming during the 2017-2018 academic year.

Table 5: Geographic Location

Question 4):

Question: Current Community	*Eastern Avalon*	*Community of more than 5000 people*	*Rural (Newfoundland)*	*Rural (Labrador)*	*Other: (specify)*
Participants	80.49% (*n*=33)	9.76% (*n*=4)	7.32% (*n*=3)	0.00% (*n*=0)	2.44% (*n*=1)

Note: *n*=the number of individuals who responded out of 44.

Question 4): This question inquired about where participants live.

Three participants did not indicate their current community. Most of the participants reside on the Eastern Avalon (80%), while no participants live in Rural Labrador. One participant said

that they were currently living in St. John's but were originally from Ontario. This question could be misconstrued as participants may interpret the question as asking where they lived prior to pursuing an education degree or their description may vary depending on location. For instance, participants may live on the Eastern Avalon, but choose the option of living in a "Community of more than 5000 people" as they feel it best describes their permanent residence.

Mental Health Knowledge

Table 6 provides an overview of the results from Questions 5 through 19 in Section A of the Mental Health Literacy Curriculum Resource (MHL-CR) Survey measuring the knowledge about mental illness, impact of stigma, and brain health. Participants are required to answer true, false, or I don't know for each question. The number of participants who answered each option are listed underneath. The correct response according to the answer key has an asterisk attached to the number. The original MHL-CR Survey is attached in the appendix. The original MHL-CR Survey organizes Section A into "Questions 1 through 15" but the survey results are presented in order as a continuation after the demographic questions to minimize confusion. The following 15 questions are awarded one point for each correct response for a total of 15 points for Section A.

Table 6: Section A Survey Results

Question	*True*	*False*	*I Don't Know*
	%	**%**	**%**
Q 5) Mental health literacy is focused on reading about current treatments of specific mental illnesses.	27.27 (*n*=12)	45.45* (*n*=20)	27.27 (*n*=12)
Q 6) Mental illnesses are usually caused by the stresses of everyday life.	22.73 (*n*=10)	72.73* (*n*=32)	4.55 (*n*=2)
Q 7) Mental health problems will be experienced by almost everyone during the course of their life.	88.37 * (*n*=38)	6.98 (*n*=3)	4.65 (*n*=2)
Q 8) Mental distress is rare.	6.82 (*n*=3)	90.91 * (*n*=40)	2.27 (*n*=1)
Q 9) A person can have good mental health and a mental illness at the same time.	75.00 * (*n*=33)	9.09 (*n*=4)	15.91 (*n*=7)
Q 10) Mental illnesses are mostly unrelated to other health conditions, such as diabetes or heart disease.	29.55 (*n*=13)	40.91 * (*n*=18)	29.55 (*n*=13)
Q 11) People with mental illness rarely, if ever, get better.	9.09 (*n*=4)	75.00* (*n*=33)	15.91 (*n*=7)
Q 12) Self-stigma is often the result of personal weakness of people with mental illness.	18.60 (*n*=8)	65.12 * (*n*=28)	16.28 (*n*=7)
Q 13) It is important to apply evidence-based approaches to stigma reduction programs and use those for which good evidence of positive impact exists.	86.36 * (*n*=38)	0.00 (*n*=0)	13.64 (*n*=6)
Q 14) Stigma about mental illness prevents people from seeking help for a mental illness, causing negative impacts on the type of health care they receive.	93.18 * (*n*=41)	4.55 (*n*=2)	2.27 (*n*=1)

Question	*True*	*False*	*I Don't Know*
	%	%	%
Q 15) Treatments for mental illnesses are not as effective as treatments for other illnesses, such as diabetes and arthritis.	27.27 (*n*=12)	54.55 * (*n*=24)	18.18 (*n*=8)
Q 16) Students with mental illness usually are not able to achieve academic success.	15.91 (*n*=7)	84.09* (*n*=37)	0.00 (*n*=0)
Q 17) Pruning, the destruction of parts of the brain, is a normal part of brain development during adolescence.	40.91* (*n*=18)	27.27 (*n*=12)	31.82 (*n*=14)
Q 18) Epigenetics is the study of how different brain parts malfunction.	15.91 (*n*=7)	6.82 * (*n*=3)	77.27 (*n*=34)
Q 19) Mental health is brain health.	38.64* (*n*=17)	52.27 (*n*=23)	9.09 (*n*=4)

Note: *=the correct response, *n*=the number of individuals who responded out of 44. Not all participants responded to each question as they had the option to skip questions.

Question 5): Less than half of participants were correct in their response to the definition of mental health literacy. This could indicate a lack of knowledge on the subject area. Given that 27% responded that they didn't know what mental health literacy was, data supports the notion that pre-service teachers are not provided with enough information about the topic.

Question 6): More than half of respondents correctly answered "false" for stress being the root cause of mental illness. While stress can typically be associated with mental illness and an accumulation of stress over time can result in symptoms of mental illness, it is important that many pre-service teachers recognized that stress is not the underlying cause of mental illness (Maslach et al., 2001). This understanding allows for recognition that support for mental illness needs to move beyond stress reduction.

Question 7): Most respondents (88%) were correct in their response that most people experience mental health problems within the span of their life. One participant did not respond to this question. The pre-service teachers who answered this question possibly encountered individuals with mental health problems, especially if they had previously completed their teaching internship as "1 in 5 students in the average classroom experience mental disorder" (Kutcher, 2009, p. 44).

Question 8): Almost all participants (91%) recognized that mental distress is not rare. However, less than 7% responded with mental distress is rare and one of the participants did not know how to respond to the question. The differing terminology used in the survey such as "problems" in Question 7 versus "distress" for Question 8 may display limitations in understanding around the extent of mental health symptoms for pre-service teachers responding to the questions.

Question 9): More than half of respondents (75%) were correct in that good mental health can co-exist in those who have mental illness. However, 9% of respondents believed that either one has good mental health, or they have a mental illness and close to 16% of respondents were not sure if this was possible. A perception or opinion experienced in this question could be that good mental health is the opposite of mental illness, which can be understood as experiencing challenges with one's mental health. It is possible that pre-service teachers who were unsure whether individuals could possess good mental health while having mental illness either see someone as having a mental illness or see someone as having good mental health. Results for this question warrant further investigation into addressing attitudes around mental health through improving understanding.

Question 10): There was a demonstration of mixed results as "true" and "I don't know" were equal at 30%, and 41% of participants thought that mental illnesses are related to other conditions. These numbers point to a lack of knowledge surrounding the causes of mental health conditions.

Question 11): Most respondents answered correctly for Question 11. However, it is interesting that 9% of participants believe that mental illness is chronic and possibly untreatable.

Question 12): Well over half of respondents (65%) felt that self-stigma was not the result of personal weakness. Surprisingly, 18% of participants attributed self-stigma to be a result of one's mental illness. However, almost as many participants (16%) were unsure whether there was a link between self-stigma and mental illness.

Question 13): Almost all participants agreed that evidence-based approaches are effective in reducing stigma. No participants felt that stigma reduction programs were unimportant. The

key terms in the statement are “evidence-based approaches.” It would be interesting to see if the results would change if those key terms were not used.

Question 14): This question was almost unanimous (93%) in response to the fact that stigma impedes individuals from seeking help and therefore negatively affects their health. This statement raises significant questions around the impact of stigma on help-seeking behaviour.

Question 15): This question lends itself to needing tangible information to validate whether mental health treatment is effective or not. The amount of people who were unsure and answered with “I don’t know” (18%) was almost as frequent as those who said that treatment wasn’t as effective as it would be for those receiving treatment for a physical condition (27%).

Question 16): Respondents were confident in their responses and either responded with “true” or “false” for this question. Close to 16% of respondents feel that poor mental health impedes academic success.

Question 17): The results for this question were varied, possibly because this question focuses more on brain health and prerequisite knowledge required to appropriately answer the question.

Question 18): Similar to the previous question, this question also centers around brain health and would not likely be familiar to those who have not learned about the information in previous courses. A large percentage of respondents answered, “I don’t know” (77%) for this question.

Question 19): Less than half of respondents answered this question correctly. Again, this could be because the question is centered around brain health. These topics may not be covered in depth within the Bachelor of Education program.

Mental Health Attitudes

The following section examines participants attitudes towards mental health. Questions 20 through 27 are from Section B of the MHL-CR Survey and assess attitudes towards behaviours of individuals with mental illness as well as perception of mental illness as a condition. Questions 28 through 32 are from Section C of the MHL-CR Survey and assess attitudes towards supporting individuals with mental illness as well as seeking help for personal mental health concerns. The original MHL-CR Survey organizes Section B, "Questions 1 through 8" and organizes Section C, "Questions 1 through 5" but the survey results are presented in order as a continuation of questions to minimize confusion.

The Questions in Table 7 are measured using a Likert Scale. A Likert Scale is a response scale measuring self-reported attitudes or beliefs about an idea allowing for more varied levels of agreement with a rating scale between five to seven options (Horst & Pyburn, 2018). The Likert Scale used in this study is composed of possible responses ranging from strongly disagree (SD), disagree (D), disagree a little (DL), not sure (NS), agree a little (AL), agree (A), to strongly agree (SA). The number of participants who answered each option are listed underneath. The ideal response has an asterisk attached to the number. The further away a participant responds to the ideal response, the less points they have out of 7. The participant receives 7 points if they correctly answered the ideal response for the maximum total of 91 for the 13 questions.

Table 7: Section B and C Survey Results

Section B Survey Results

Question	***SD*** %	***D*** %	***DL*** %	***NS*** %	***AL*** %	***A*** %	***SA*** %
Q 20) It is easy to tell when someone has a mental illness because they usually act in a strange or bizarre way.	63.64* (*n*=28)	18.18 (*n*=8)	6.82 (*n*=3)	0.00 (*n*=0)	9.09 (*n*=4)	0.00 (*n*=0)	2.27 (*n*=1)
Q 21) A mentally ill person should not be able to vote in an election.	93.18* (*n*=41)	4.55 (*n*=2)	0.00 (*n*=0)	2.27 (*n*=1)	0.00 (*n*=0)	0.00 (*n*=0)	0.00 (*n*=0)
Q 22) Most people who have a mental illness are dangerous and violent.	77.27* (*n*=34)	13.64 (*n*=6)	6.82 (*n*=3)	2.27 (*n*=1)	0.00 (*n*=0)	0.00 (*n*=0)	0.00 (*n*=0)
Q 23) Most people with a mental illness can have a good job and a successful and fulfilling life.	0.00 (*n*=0)	2.27 (*n*=1)	2.27 (*n*=1)	2.27 (*n*=1)	6.82 (*n*=3)	38.64 (*n*=17)	47.73* (*n*=21)
Q 24) I would be willing to have a person with a mental illness at my school.	0.00 (*n*=0)	0.00 (*n*=0)	2.27 (*n*=1)	4.55 (*n*=2)	2.27 (*n*=1)	20.45 (*n*=9)	70.45* (*n*=31)
Q 25) I would be happy to have a person with a mental illness become a close friend.	0.00 (*n*=0)	0.00 (*n*=0)	0.00 (*n*=0)	6.82 (*n*=3)	6.82 (*n*=3)	22.73 (*n*=10)	63.64* (*n*=28)
Q 26) Mental illness is usually a consequence of bad parenting or poor family environment.	50.00* (*n*=22)	20.45 (*n*=9)	2.27 (*n*=1)	4.55 (*n*=2)	20.45 (*n*=9)	2.27 (*n*=1)	0.00 (*n*=0)
Q 27) People who are mentally ill do not get better.	50.00* (*n*=22)	27.27 (*n*=12)	4.55 (*n*=2)	9.09 (*n*=4)	9.09 (*n*=4)	0.00% (*n*=0)	0.00% (*n*=0)

Section C Survey Results

Question	***SD*** %	***D*** %	***DL*** %	***NS*** %	***AL*** %	***A*** %	***SA*** %
Q 28) I am comfortable helping a student, friend, family member or peer when I am concerned about their mental health.	0.00% (*n*=0)	9.30% (*n*=4)	2.33% (*n*=1)	0.00% (*n*=0)	4.65% (*n*=2)	39.53% (*n*=17)	44.19%* (*n*=19)
Q 29) I would be likely to suggest that a student, friend, family member or peer obtain care if I am concerned about their mental health.	2.33% (*n*=1)	4.65% (*n*=2)	2.33% (*n*=1)	2.33% (*n*=1)	20.93% (*n*=9)	27.91% (*n*=12)	39.53%* (*n*=17)
Q 30) I am comfortable personally seeking help if I am concerned about my own mental health.	2.33% (*n*=1)	2.33% (*n*=1)	23.26% (*n*=10)	6.98% (*n*=3)	20.93% (*n*=9)	30.23% (*n*=13)	13.95%* (*n*=6)
Q 31) I would be likely to seek help if I am concerned about my own mental health.	2.33% (*n*=1)	9.30% (*n*=4)	18.60% (*n*=8)	6.98% (*n*=3)	18.60% (*n*=8)	30.23% (*n*=13)	13.95%* (*n*=6)
Q 32) My friends or peers would be likely to suggest that I seek help if they are concerned about my mental health.	2.33% (*n*=1)	4.65% (*n*=2)	11.63% (*n*=5)	20.93% (*n*=9)	18.60% (*n*=8)	18.60% (*n*=8)	23.26%* (*n*=10)

Note: SD=strongly disagree, D=disagree, DL=disagree a little, NS=not sure, AL=agree a little, A=agree, SA=strongly agree; *=the ideal response; *n*=the number of individuals who responded out of 44. Not all participants responded to each question as they had the option to pass. One individual did not respond to the last 5 questions.

Question 20 through question 32 focus on opinions and beliefs of participants.

Question 20): This question looks at the perception of those with mental health conditions. Most (89%) respondents disagree that because someone acts in a bizarre way that they have mental health conditions. A few (11%) respondents agree that behaving in a strange way is a sign that someone has a mental health condition, and no respondents were unsure.

Question 21): This question looks at stability of someone with a mental health condition. Most (98%) of the individuals disagreed that people with mental health issues should not be able to vote. Only 2% of respondents were unsure and no participants agreed with the statement. The high percentage of respondents who disagreed with denying rights of individuals with mental health conditions is positive.

Question 22): This question looks at the idea that people with mental health conditions are dangerous and violent. Like Question 21, 98% of individuals disagreed with this statement, 2% of people were unsure, and no respondents agreed. This question shows a high percentage of individuals believe that those with mental health conditions are not violent.

Question 23): This question looks at quality of life for those with mental illness. Only 5% of respondents believed that those who have a mental illness cannot have a successful life. On the other hand, 93% of respondents felt that people with mental illness can maintain a job and be successful. Only 2% were unsure about whether success was possible for those with mental illness.

Question 24): This question looks at the willingness to work with and manage those with mental illness. Only 2% conveyed that they would not want a person with mental illness at their school and 5% were not sure. The vast majority (93%) agreed that they would be willing to have a person with mental illness at the school. The small percentage of those who disagreed and were

unsure still raises some questions about the openness to working with students who have mental illness.

Question 25): This question looks at the willingness to engage with those who have a mental illness. This question considers the stigma surrounding mental illness. No participants conveyed that they would not want someone with a mental illness as a close friend; however, 7% were unsure whether they wanted a friend with mental illness. The majority (93%) of participants agreed that they would be happy to have a friend with mental illness. Most people do have a friend or acquaintance who has a mental health condition so the responses to this question could reflect that reality.

Question 26): This question examines mental illness being a result of poor parenting and home life. The results for this question were surprising. Many respondents (73%) disagreed that mental health is a consequence of bad parenting, but 5% of participants were unsure about this. Perhaps, participants felt that this could be one contributing factor and were taking that into account when answering. Some (23%) participants agreed that mental health is usually a consequence of bad parenting. Bad parenting can contribute to mental health issues, but more knowledge and understanding around mental health among pre-service teachers is necessary.

Question 27): This question focuses on knowledge and information surrounding mental health. Most (82%) participants disagreed with the notion that people who have mental illness do not get better. However, 9% of participants were not sure whether people get better or not. This response could come from personal experience with mental illness and recognizing that some people they know may always live with the condition. Their recovery may depend on coping mechanisms and severity of condition. This could explain why 9% of participants agreed that those with mental illness do not get better.

Question 28): This question focuses on comfortability with supporting those with mental health conditions, whether it be students or family members. A few respondents (12%) noted that they did not feel comfortable helping someone with a mental health condition. No participants were unsure about their comfortability and 88% of participants said that they were comfortable helping someone who was concerned about their mental health. For those who did not feel comfortable (12%), a lack of training and preparation in working with students in mental health conditions could be the underlying cause.

Question 29): This question looks at offering to assist students with mental health if the person feels that they require the help. A few respondents (9%) thought that they would not suggest to a person that they seek help regarding mental health issues, and 2% were unsure whether they would reach out. However, most participants (88%) said they would suggest to a friend or family member to reach out for help. Again, this question leans towards comfort with supporting those with mental health issues. Perhaps people are unaware of how they should appropriately help someone.

Question 30): This question focuses on personal mental health. The response pattern was interesting as the responses were dispersed. Some respondents (28%) noted they would not feel comfortable seeking help for their own mental health, and a few (7%) were unsure if they felt comfortable with seeking personal help. However, 65% agreed that they would be comfortable seeking help if they were concerned about their own mental health. The mixed results incurred from this question suggest that there is still a stigma around mental health and people are still hesitant to seek help. Another possibility is people may minimize their own issues and concerns.

Question 31): This question is closely related to the previous question. The only difference is the action component of seeking help rather than simply being comfortable doing

so. A sizeable number of participants (30%) did not feel that they would seek help for their mental health issues and 7% of participants were unsure whether they would seek help. However, 63% of participants agreed that they would seek help if they were concerned for themselves. This goes back to the stigma surrounding mental health issues and people's ability to overcome that to provide adequate self-care.

Question 32): This question looks at whether friends would advise on mental health care. Some (19%) participants felt that their peers would suggest that they receive help if they had mental health concerns, while 21% of participants were unsure whether their friends would recommend seeking out support. Most (60%) of participants agreed that their friends would suggest seeking help if there were concerns about personal mental health. This question takes into consideration perceptions of mental health and what others perceive as serious and needing help. The question also looks at support from friends and others in one's social circle when it comes to managing mental health conditions.

Comparison between Knowledge and Attitudes

Table 8 shows a summary of the comparison between the means of participants from the low knowledge group and high knowledge group. The comparison between high and low knowledge was examined to demonstrate that a higher knowledge base would equate to more positive attitudes. All 44 participants were ordered based on their knowledge scores out of 15. Participants who had scores of 9 or less overall in the knowledge section of the survey were placed in the low knowledge group and participants who had scores of 10 or more overall in the knowledge section of the survey were placed in the high knowledge group. There were 18 participants in the low knowledge group based on their score and 26 participants in the high

knowledge group based on their scores. The averages of each group were tabulated along with the total overall averages of the low and high knowledge groups.

Table 8 shows the calculation of mean for the high knowledge and low knowledge groups compared to each question in the attitudes section (Questions 20 through 32). The difference in mean scores between the high knowledge and low knowledge was calculated. The test used in Table 8 is a two-sample independent t-test with assumed unequal variances. The variance, standard deviation, *t*-statistic, and *p* values were also measured. Any *p*-value less than 0.05 was determined to be significant. An asterisk is attached to the number to demonstrate if it is significant. *p*-values between 0.05 and 0.10 were considered to be marginally significant. Given the relatively small sample size in this study, these statistics would likely be significant in higher powered study.

Table 8: Section B and C Data Analysis

Section B Data Analysis

Question	*Mean (Low)*	*Variance (Low)*	*SD (Low)*	*Mean (High)*	*Variance (High)*	*SD (High)*	*Difference*	*t-statistic*	*p value*
Q 20) It is easy to tell when someone has a mental illness because they usually act in a strange or bizarre way	5.50	3.91	1.98	6.65	0.40	0.63	-1.15	-2.39	0.027*
Q 21) A mentally ill person should not be able to vote in an election	6.78	0.54	0.73	6.96	0.04	0.20	-0.18	-1.04	0.31
Q 22) Most people who have a mental illness are dangerous and violent	6.28	0.92	0.96	6.92	0.07	0.27	-0.65	-2.78	0.012*
Q 23) Most people with a mental illness can have a good job and a successful and fulfilling life	5.72	1.98	1.41	6.50	0.5	0.71	-0.78	-2.16	0.041*
Q 24) I would be willing to have a person with a mental illness at my school	6.33	1.06	1.03	6.65	0.72	0.85	-0.32	-1.09	0.28
Q 25) I would be happy to have a person with a mental illness become a close friend	6.33	0.94	0.97	6.50	0.74	0.86	-0.17	-0.59	0.56

Question	*Mean (Low)*	*Variance (Low)*	*SD (Low)*	*Mean (High)*	*Variance (High)*	*SD (High)*	*Difference*	*t-statistic*	*p value*
Q 26) Mental illness is usually a consequence of bad parenting or poor family environment	5.61	2.72	1.65	5.73	3.08	1.76	-0.12	-0.23	0.82
Q 27) People who are mentally ill do not get better	5.17	2.03	1.42	6.58	0.81	0.90	-1.41	-3.72	0.00098*

Note: * (asterisk) next to the *p* value means significant or marginally significant

Section C Data Analysis

Question	***Mean (Low)***	***Variance (Low)***	***SD (Low)***	***Mean (High)***	***Variance (High)***	***SD (High)***	***Difference***	***t-statistic***	***p value***
Q 28) I am comfortable helping a student, friend, family member or peer when I am concerned about their mental health	5.44	3.44	1.85	6.32	1.14	1.07	-0.88	-1.80	0.084*
Q 29) I would be likely to suggest that a student, friend, family member or peer obtain care if I am concerned about their mental health	5.56	2.14	1.46	5.92	2.33	1.53	-0.36	-0.79	0.43
Q 30) I am comfortable personally seeking help if I am concerned about my own mental health	4.89	1.75	1.32	4.88	3.11	1.76	0.01	0.02	0.99
Q 31) I would be likely to seek help if I am concerned about my own mental health	4.72	1.98	1.41	4.8	3.67	1.91	-0.08	-0.15	0.88
Q 32) My friends or peers would be likely to suggest that I seek help if they are concerned about my mental health	4.56	2.03	1.42	5.28	2.96	1.72	-0.72	-1.51	0.14

Note: * (asterisk) next to the *p* value means significant or marginally significant

The mean values were calculated based on the total knowledge scores of each participant compared with their individual attitude scores for Section B and C. The sample of 44 participants was divided into high knowledge and low knowledge groups, then the differences in attitude scores were tested.

The hypothesis for this study is that higher knowledge also means more positive attitudes. The null hypothesis therefore would be that there are no differences in attitudes between the high knowledge and low knowledge groups. A type 1 error or rejecting a true null hypothesis would mean that there are differences, and the hypothesis is correct (Bowling, 2014). The probability (*p*) measure of making a type 1 error and rejecting the null hypothesis is based on $p < 0.05$. Any *p* value less than 0.05 was generally found to be statistically significant and demonstrate confidence in this study (Bowling, 2014). There were four questions that showed statistical significance and one question that was considered marginally significant in the analysis.

There was statistical significance for Question 20 (It is easy to tell when someone has a mental illness because they usually act in a strange or bizarre way). There was a significant difference in scores between low knowledge (M = 5.50, SD = 1.98) and high knowledge (M = 6.65, SD = 0.63); $t\ (19) = -2.39$, $p = 0.027$. These results suggest that higher knowledge also indicates more positive attitudes towards behaviour of an individual with mental illness.

There was statistical significance for Question 22 (Most people who have a mental illness are dangerous and violent). There was a significant difference in scores between low knowledge (M = 6.28, SD = 0.96) and high knowledge (M = 6.92, SD = 0.27); $t\ (19) = -2.78$, $p = 0.012$. These results suggest individuals with more knowledge about mental illness also demonstrate a more positive attitude towards individuals with mental illness and their behaviour.

There was statistical significance for Question 23 (Most people with a mental illness can have a good job and a successful and fulfilling life). There was a significant difference in scores between low knowledge (M = 5.72, SD = 1.41) and high knowledge (M = 6.50, SD = 0.71); t (23) = -2.16, p = 0.041. In comparison to other responses, the results of this question show a smaller effect size between the low and high knowledge groups. This difference suggests while individuals may believe those with mental illness can have a good job, along with successful and fulfilling lives, there may also be some concerns about the validity of the statement.

Statistical significance was demonstrated in Question 27 (People who are mentally ill do not get better). There was a significant difference in scores between low knowledge (M = 5.17, SD = 1.42) and low knowledge (M = 6.58, SD = 0.90); t (26) = -3.72, p = 0.00098. In comparison to other responses, the results of this question demonstrated the highest degree of statistical significance, highlighting that there was a large difference in beliefs whether a person with mental illness can get better, and that this response was highly correlated with more positive attitudes towards mental health.

The results were marginally significant in Question 28 (I am comfortable helping a student, friend, family member or peer when I am concerned about their mental health). Unlike the other questions that demonstrated statistical significance at an alpha level of 0.05 (5%), Question 28 demonstrated statistical significance at an alpha level of 0.10 (10%). The marginal significance in scores between low knowledge (M = 5.44, SD = 1.85) and high knowledge (M = 6.32, SD = 1.07); t (25) = -1.80, p = 0.084. With only 44 participants in the study, the sample is underpowered and there likely are not enough observations to demonstrate significance. The data shows approaching significance, which suggests that having more knowledge about mental health will positively affect comfort and confidence when supporting others with concerns about mental health.

Chapter Six: Discussion

The discussion section highlights the purpose of the study and then discusses the key themes that emerged surrounding the knowledge and attitudes of pre-service teachers. An overview of the distinction between mental health and mental illness, along with insight into comorbidity that exists between mental health concerns and other conditions is examined. The importance of evidence-based resources to facilitate positive mental health is outlined. The impact of stigma on providing support to students with mental health concerns is discussed. Insight and understanding of the limited background information on brain health and child development and how that limitation in information contributes to knowledge gaps. The issue with lack of resources and skills to provide support and intervention creates challenges for supporting students. These issues also affect a teacher's ability to empower students to seek help for their mental health concerns. An overview of some limitations including geographical relevance and limitations surrounding access to local literature is presented. The implications for this study for improving classrooms and the school environment is explained. In conclusion, insight into future directions in terms of research, policy, and practice is explored.

The purpose of this study was to examine pre-service teachers' current knowledge and attitudes towards mental health conditions. The Mental Health Literacy Curriculum Resource Survey (MHL-CR Survey; Kutcher & Wei, 2016) was used to collect data on the attitudes and knowledge of pre-service Bachelor of Education Primary/Elementary and Intermediate/Secondary students at Memorial University, and the findings presented mixed results. While the assessment of knowledge and attitudes in this study are based on pre-service teachers at Memorial University, it is evident throughout the literature examined that teacher preparedness in mental health literacy is not strictly a Canadian issue (Andrews et al., 2014).

However, given the limited coverage of mental health literacy in Canadian university pre-service education programs, this topic was important to examine due to the significant implications that lack of knowledge may have for students in classrooms (Gilham et al., 2021).

Many pre-service teachers who participated in this study demonstrated a lack of knowledge of the terminology associated with mental health literacy. Forty-five percent of participants in this study identified an incorrect definition of mental health literacy. A component of mental health literacy is recognizing signs and symptoms of mental health conditions; however, similar to the findings in this study, Armstrong and Young (2015) reported that post-secondary students had minimal knowledge. A lack of knowledge in identifying signs and symptoms of mental health conditions and understanding mental health literacy is perhaps not surprising. According to a 2012 survey conducted by the Canadian Teachers Federation of over 3500 teachers in Canada, at least 70% of teachers had not received professional development specific to student mental health. The results in this research study, and the Froese-Germain & Riel (2012) study are concerning considering the importance of mental health and the impact that mental health problems have on students. As previously discussed, schools are where students spend much of their time, making them an optimal setting to be able to promote positive mental health (O'Reilly et al., 2018). There needs to be more implementation of mental health curriculum within Bachelor of Education programs to address this knowledge gap so that pre-service teachers are better prepared to work with diverse students.

Main Findings

Improvement of Knowledge and Attitudes with Training

A key finding from this research is that teachers who have higher scores on the knowledge questions presented in this study also showed better attitudes toward mental health

conditions in four of the questions from Section B and C. Pre-service teachers who had more knowledge about those with mental illness were also less likely to agree with the statement, "it is easy to tell when someone has a mental illness because they usually act in a strange or bizarre way" (Kutcher & Wei, 2016). The importance of understanding mental illness allows pre-service teachers to recognize signs and symptoms upon encountering them. Another example in this study where we see the positive impact that knowledge has on attitudes is in, "most people who have a mental illness are dangerous and violent" (Kutcher & Wei, 2016). The comparison of *t*-tests between low and high knowledge groups demonstrated significance showing more knowledge about mental illness suggests better attitudes towards the individuals who have mental illness. More knowledge also means that pre-service teachers will be better prepared for the realities of the classroom and have better attitudes, which means they will feel more confident about supporting students with mental illness (Armstrong et al., 2015).

Another question that achieved statistical significance and confirmed the link between more knowledge creating better attitudes is in "most people with a mental illness can have a good job and a successful and fulfilling life." For teachers to feel motivated to support students with mental illnesses, they need to view individuals with mental illness through a positive lens. This perspective also means that they believe that students with mental illness can be successful, despite their issues and concerns. The most important contribution to the notion that more knowledge leads to more positive attitudes is the result from the question, "people who are mentally ill do not get better." Similar to the question on having mental illness and a successful and fulfilling life, the positive response from the statement presumes that teachers have a positive outlook for individuals or students who have mental illness. The attitude for this statement can be believing that symptoms can be managed with the appropriate tools or that

mental illness is untreatable, and support will have no effect on students. Given the strong significance obtained from the results, it is optimistic that pre-service teachers overall have positive attitudes towards students with mental illness and with the appropriate information and tools, will be able to successfully support students.

Not all the questions from the original survey were included in this current study. This study focused on a comparison of attitudes. A study conducted in The University of British Columbia's. (UBC) Faculty of Education with 60 pre-service teachers using a pre/post and follow-up survey methodology examined knowledge and attitudes about mental health conditions (Carr et al., 2018). The results suggested that after exposure to "The Guide" the pre-service teachers who participated in the study demonstrated a significant improvement in their post-survey scores concerning their attitudes towards mental health conditions. The pre-survey results on attitudes resulted in a score of 65%, and after exposure to "The Guide", the post-survey results increased to 80% demonstrating the positive effects of training.

Accounting for the reduction of questions made in this study, the results of the current study were similar to those from the study with pre-service teachers in the University of British Columbia's Faculty of Education (Carr et al., 2018). When the results of the current study are compared with the results for Section B, questions on attitudes in the current study of the same survey yielded a pre-survey score of 64% on the 8 questions on attitudes, which was similar to the findings in Carr et al. When comparing the current study with the UBC study, the results for the questions found in Section C, which examined attitudes towards help-seeking behaviour were inconsistent (2018). There were drastic differences between the results in the current study compared to those in the UBC study where scores on the survey for pre-service teachers were 75% overall (2018). In contrast, overall scores for participants in the current study were in the

28% range. The participants in the current study showed lower response rates in Section C, on help-seeking behaviour. This wide range in scores from the study conducted in 2018 with undergraduate teachers from British Columbia, in comparison to the collection of data of this current study in 2018, raises questions about inclination towards help-seeking behaviour specific to Bachelor of Education students in Newfoundland and Labrador. While the mental health survey was only conducted at one point in time for pre-service teachers, it would be interesting to see if the scores surrounding attitudes improve after participating in a mental health curriculum.

Distinction between Mental Illness and Mental Health

The MHL-CR Survey (Questions 5 through 19) were grouped together for discussion in three different categories based on subject area. The three areas are mental health literacy, stigma, and psychology or biology-based questions. These questions dive deeper into the distinction between mental illness and mental health; with the awareness that early intervention is critical to mitigate possible transformation into mental illness. The Government of Canada defines mental illness as the reduced ability to function, cope with the simplest aspects of everyday life, and the constant feeling of distress (2017). According to the World Health Organization (WHO,2013), the definition of mental health is a state of well-being where individuals are aware of their abilities and can cope with everyday stressors while still being a productive and contributing member within their communities. A knowledge base on effectively promoting positive mental health in the classroom would be important for pre-service teachers, while also being aware of warning signs of common mental health symptoms.

Comorbidity between Mental Health and Other Conditions

There appeared to be a lack of knowledge around the connection between mental health and other conditions as 40% of respondents were uncertain about comorbidity. As previously discussed, those with a specific learning disorder are twice as likely to have mental health concerns (Piers & Duquette, 2016). A Canadian study conducted by Wilson et al. (2009), on individuals with specific learning disorders (ages 15 to 44) found that older adults aged 30 to 44 had higher rates of depression and distress than those aged 15 to 21. These trends show that mental health problems may persist and intensify as individuals become older (Wilson, Deri Armstrong, Furrie, & Walcot, 2009). This points to the importance of early intervention for children and youth to curtail exacerbated mental health concerns.

Evidence-Based Approaches

As previously discussed in the results, the term "evidence-based approach" to tackling mental health in children is important. In the present study, over 86% of respondents agreed with this statement. Treatments for children generally ends up being downward extensions of adult treatments, which focus primarily on cognitive behavioural therapy (Sburlati et al., 2011). A goal for schools should be a push towards optimal treatment programs and resources to support students in the classroom. Sburlati et al. (2011), along with Carr and colleagues (2018) assert that a specific set of competencies and skills are required to support children with their mental health rather than implementing a treatment model intended for adults. Children are not adults and therefore require a particular approach that considers their social and emotional competency as well as their stage of development.

Stigma and Mental Health

A high percentage (93%) of respondents recognized stigma as an impediment from seeking help for mental illness. Stigma prevents people from seeking help for a mental illness and negatively impacts their healthcare. Stigma is not only a barrier to seeking help, but also impacts the quality of care. Mental health professionals are limited in their ability to support individuals in their care if the knowledge they receive from a patient is minimal. The same holds true for teachers in supporting students, if a student is fearful of divulging information about their emotional experiences, then the help that teachers can provide will be less comprehensive. This finding may be explained by the idea that children can experience embarrassment or hesitancy towards seeking help in fear of being singled out from their peers (Gulliver et al., 2010).

The literature and results of the current study point to consistent patterns when it comes to stigma. Interestingly, only 64% of respondents strongly disagreed with the statement that it is easy to tell when someone has a mental illness because they usually act in a strange or bizarre way. While, 11% of participants either strongly agreed or agreed that individuals with mental illness act strange or bizarre. The research conducted by Townsend et al. (2017) emphasizes the impact that stigmatizing beliefs have on individuals and how knowledge around mental health allows for more open communication around the subject. The results from the present study support the notion that more education is needed around mental health literacy. Dods (2016) further advocates for the need for mental health literacy in addressing stigma, as positive attitudes, and beliefs, along with a greater knowledge reduces stigma associated with mental illness.

Stigma is a consistent theme in the literature, as it is noted as a barrier for seeking help and is also addressed in the survey questions. An important topic that emerges throughout this thesis is the influence of parents and the impact of the parent/child relationship when it comes to a child's mental health. Support from parents or guardians allows for a more open environment for communication and trust, as referenced by Piers and Duquette (2016). Equally as important is open communication between teachers and parents about a child's mental health (Rubin, 2008). In the current study, 50% of the participants asserted that mental illness was a result of bad parenting and home life, indicating that some respondents may feel that mental illness may in fact be a consequence of bad parenting or home life (Kutcher & Wei, 2016). While a disruptive home environment can certainly impact a child's mental health, it is surprising to learn that many respondents did not feel that mental illness is due to circuitry in the brain.

Similarly, there was a 50% correct response rate to affirm that people with mental illness do not get better (Kutcher & Wei, 2016). About 18% of those respondents were unsure or agreed a little that those with mental illness do not get better. These responses around mental illness could raise questions as to whether an individual believes support and treatment would be necessary to mitigate the issues surrounding mental illness. This potential attitude or belief supports the fact that mental health literacy is necessary to obtain knowledge and gain a better understanding of how to support individuals with mental health concerns (Dods, 2016).

Brain Health

Three questions (17 through 19) focused on definitions of brain health and results suggested a lack of understanding around the definitions and background knowledge surrounding these terms. The study of child development is covered to some degree for pre-service teachers but there is no expectation beyond understanding how a student's learning may be impacted

because of conditions that affect physical and emotional development (Rothi et al., 2008). Unless an individual has prior knowledge about brain health, they may be limited in their repertoire of terms in the area. This is further supported by the low response rate for the definition of the term pruning (Question 17), the high number of incorrect responses at 93% for the definition of epigenetics (Question 18) and the same for agreeing that mental health is brain health (Question 19).

Mental Health Support and Intervention

According to the research, a positive climate around mental health strengthens connections between teachers and peers and aids in help-seeking behaviour (Townsend, 2017). However, the findings of this study on "feeling confident in helping a student, friend, or peer concerned about their mental health" demonstrate that close to a half of pre-service teachers (44%) do not have confidence. An interpretation of these findings can be explained by the fact that teachers have a willingness to provide support but are limited by their lack of knowledge and skills to be confident in offering support with mental health concerns (Sokal & Sharma, 2013). The lack of resources in terms of knowledge, skills, and other guidance for teachers is a recurring theme in the literature pointing to the reason why teachers do not feel comfortable helping students with mental health concerns (Lynagh et al., 2010). The issue therein lies in the fact that pre-service teachers are under-prepared prior to entering the profession and teachers who are already in the profession feel under-equipped to support students with mental health concerns. Taken together, these findings point to the need for further education surrounding teacher education programs regarding student mental health.

There was a low response rate in this study surrounding comfortability as only 40% of respondents demonstrated that they were comfortable with suggesting to students or peers to

seek out mental health support. Teachers often struggle with not having the knowledge about what resources exist and where to find them (Reinke et al., 2011). As important as it is having knowledge around signs indicating mental health concerns, it is equally important to know where to go after warning signs are detected and what the next steps should be to implement support. Similarly, pre-service teachers also doubt the likelihood that their peers would recommend that they personally avail of mental health services as indicated by the survey results. Only 23% of respondents were confident that their peers would suggest seeking help if they expressed concerns about their mental health. It can be uncomfortable to suggest support or become involved in the health of another person and it is possible that individuals need to express personal autonomy and choice to be proactive in seeking and accepting help. An important point of consideration is that external sources of help such as doctors, psychologists, and social workers that are outside of the school are sometimes difficult to access and the connection between these outside resources and teachers is not always clear cut. A survey conducted in 2012 by the Canadian Teachers Federation exploring issues around mental health in schools revealed that 78% of the 3900 teachers who participated agreed there is a shortage of community based mental health professionals, and 75% of those respondents felt there was a lack of coordinated services between the school and community (Froese-Germain & Riel, 2012). The issues around the limitation in resources, and lack of knowledge and skills, should be addressed at the pre-service level so teachers entering the profession are in a better possible position to support students when they enter the classroom.

Help-Seeking Behaviour

An important theme discussed in the literature review focuses on teacher mental health and self-care. Interestingly, the most compelling results stem from responses to questions around

seeking help. One question inquired about participants' comfort seeking help for personal mental health concerns and the following question examined the likelihood of following through with seeking help and the results for both questions demonstrated only 14% of respondents strongly agreed with these statements. These response rates may be explained by stigma around seeking help as research presented by Kaya (2015) points to perception of psychological help as being a deterring factor in seeking support for mental health concerns. A possible explanation for stigma impacting help-seeking, particularly in the teaching profession is the experience of feeling embarrassed that a teacher is in a vulnerable position of needing help. Gulliver et al. (2010), discuss the impact of stigma on student mental health and impact on their likelihood of seeking support out of fear of being singled out and embarrassed, but teachers can also experience these emotions amongst their colleagues or peers.

An important consideration for the context of this study is that creating a positive environment for students to feel supported to address their mental health stems from teachers being comfortable and open about their own personal mental health. Whitley and Gooderham (2016b) assert that understanding mental health symptoms and conditions, and practicing help-seeking behaviours, not only impact well-being and personal health decisions but also influence perceptions and support of student issues. In other words, teacher beliefs and attitudes towards mental health have a large impact on their ability to support their students. The low level of comfort and willingness to seek help, as evidenced in the results by pre-service teachers, provides evidence to support the need to implement appropriate training in mental health literacy in teacher training programs.

Study Limitations

There were several limitations to this study, including the method of data collection, recruitment of participants, and examination of literature. One limitation of this study is the type of method used to obtain data. Initially, the plan for this study was to hold focus groups to discover information from pre-service teachers around their understanding and knowledge of mental health. Conducting such sessions would allow for rich discussion and provide an opportunity to hear first-hand about expectations that teachers in training had prior to entering the classroom. As previously mentioned in the methods section, there were numerous attempts to try and recruit participants for a focus group. There was a call out to participate in a focus group after being exposed to mental health curriculum in an education course, as well as a general call out to students in education courses, but there was no uptake. After several different attempts to recruit participants, time was running out. To collect more data would have meant waiting for another cohort so the decision was made (Spring/Summer of 2018) to use the Mental Health Literacy Curriculum Resource (MHL-CR) Survey (Kutcher & Wei, 2016).

A second limitation in this study is the results of the survey questions are based on 44 pre-service teachers in the Faculty of Education at Memorial University of Newfoundland and Labrador. This study is limited geographically and examines the reality of experiences based on one education program in one province in Canada. The context is even more narrow as pre-service teachers who participated in the study are from a specific year/cohort in education and as such, represent one group of pre-service teachers in time during the Spring/Summer of 2018. While this project is a cross-sectional study and looks at knowledge and attitudes of pre-service teachers at one point in time, it would be interesting to see if responses would improve in a longitudinal study having participants complete the same survey again right after graduation. An

investigation using a longitudinal study looking at knowledge and attitudes before and after implementing a mental health training course in the Bachelor of Education program would be a valuable project to conduct in the future.

A third limitation to this study is that the survey was not previously piloted in Newfoundland and Labrador. The lack of validation of the survey items intended for pre-service teachers may be of concern. The previous study completed out of the University of British Columbia exposed pre-service teachers to a training program and conducted surveys both pre and post training and then again three months later. This study did not include a training in advance, but merely tested pre-service teachers' knowledge, attitudes, and help-seeking behaviour at one point in time. It would be interesting to see if the exact procedure was followed locally, if the results would be comparable to the UBC study.

A fourth limitation in this study is the type of test items used in a set of questions in the survey. Questions five to nineteen measure knowledge about mental illness, impact of stigma, and brain health and use "true"," false", or "I don't know" as response options. True and false test items have been shown to be unreliable in comparison to multiple choice questions or other item types. Multiple choice test items are considered more reliable because they are less susceptible to guessing than true or false test items (University of Manitoba, 2023).

Another limitation to this study is the minimal research available based on local data. While it was difficult to locate researchers from Newfoundland and Labrador who studied the area of mental health training for pre-service teachers, researchers from across Canada including Dr. Stan Kutcher and Dr. Jessica Whitley, to name a few, have focused their attention on mental health in classrooms, including teacher and student mental health, as well as the barriers and issues that are experienced in schools. It was difficult to locate Canadian researchers who

discussed pre-service teachers in the context of their training preparing them for supporting students with mental health conditions in the classroom. These issues around limited resources in the Canadian context were noted by Dr. Adam McCrimmon during his search for training models in 2015, as he found only one Canadian university that offered training programs to support diverse learners. This seems to be an ongoing issue as universities still need to implement a mental health training model within Bachelor of Education programs to appropriately equip teachers in training with the knowledge and skills to manage the realities that exist in present day classrooms.

A final limitation in this study is the fact that most of the literature review was completed during the Spring/Summer of 2018 while data were being collected. A recent update of the literature was conducted, returning to the same education databases previously reviewed. The most recent literature supports the main themes in this study surrounding mental health, and pertinent articles have been included in this discussion (i.e., Armstrong et al. 2019; Brown et al. 2019; Jenlink 2020; Gilham et al. 2021; and Munk et al. 2021). It is important to note that COVID-19 and the pandemic was not present when this project originated. The exacerbated stress and anxiety faced during the last few years would provide further rationale to address mental health at the pre-service level. Much research and exploration has surfaced around COVID-19 and mental health problems, particularly in schools with the disruption in learning over the last three years. Teachers and students have faced numerous challenges and the accessibility of services has been further obstructed with online learning. Students were not able to access in-school support from teachers and other staff personnel and were further disadvantaged. Huckabee (2014) conducted a research project discussing the potential increase in severity of symptoms without seeking out help and support for mental health conditions, so the

data presented at the beginning of the literature review around the amount of youth in Canada with mental health disorders may have escalated (Kutcher et al., 2009).

Study implications

A discussion within the literature review focused on teacher burnout and retention as an ongoing issue, specifically in the last few years where substitute teacher shortage has been a main headline in the news. Teachers continue to face an overwhelming amount of stress and additional responsibilities. School boards need to devote attention, time, and resources to attract new teachers (Ewart, 2009). A practical approach to attaining and retaining teachers would be in promoting self-care and offering access to mental health professionals to guide and support teachers.

The data presented in the results chapter points to how crucial it is to introduce interventions at the pre-service level. An implementation of mental health training, either through a specific course or another modality of learning in Bachelor of Education programs must exist to address the issues surrounding the knowledge gap of symptoms, information about existing and available services, and frameworks and models that can be utilized in the school setting (Bowers et al., 2013).

The frameworks that teachers and students can access are not limited to the school environment. The coping mechanisms learned to manage mental health symptoms are also transferrable to the home environment and students and teachers can share these skills with family members (Bryer & Signorini, 2011).

While this study focuses on the implications for pre-service teachers, it is also important to note professional development on mental health for in-service teachers. Training in mental health at the pre-service level is beneficial but for teachers already in the profession who did not

receive mental health training prior to entering the workforce, it is paramount to have knowledge and access to resources. Mental health training should be mandatory for all teachers given the prevalence of students with mental health conditions in the classroom and the importance of being prepared to support their students.

In addition to those already mentioned, in the text which follows, I suggest several avenues of future research that are worthy of pursuit.

Future Directions

Research

Much of the research presented in this thesis demonstrates a need for mental health literacy curriculum in teacher training programs. Specifically, Carr et al., (2018) pointed to the lack of evidence-based mental health literacy resources in pre-service education. More research needs to be conducted to see what pre-service teachers need to know specifically about mental health. Such research should also include examples of tools and frameworks that could guide and direct pre-service teachers in their preparation before entering the classroom.

It would be valuable to explore the signs and symptoms of more common mental health disorders in a Bachelor of Education course or as part of pre-service training so when teachers enter the classroom, they can be aware of what to look for when students present with a variety of behaviours signifying mental health concerns.

There has been some research conducted on the impact that mental health has on academic learning (Repie, 2005) and it would be beneficial to identify which strategies and tools should be used to address mental health issues and prevent negative effects or outcomes on academic performance.

There is minimal literature based on the Canadian context, and more specifically the mental health context within schools in Newfoundland and Labrador. As discussed throughout the thesis, there is only minor exposure to mental health curriculum within faculty of education programs. Newfoundland and Labrador is unique in many ways, including its geography and rural population. There is often a lack of mental health services available, so looking at ways to support students in the province is imperative. This may mean virtual support for teachers in schools in more rural areas.

Policy

There should be a compendium of evidence-based resources available to use in schools. Rather than relying on guidance counsellors and information from outside professionals or resources, specific documents are needed to guide teachers on actions to follow to support students with mental health conditions. A mental health policy should be formulated to appropriately address mental health. Pre-service teachers need direction on supporting students and utilizing mental health resources and academic curriculum resources can provide a framework when they enter the classroom.

Teacher engagement seems to be an ongoing issue as pre-service teachers may be reluctant to take on other commitments outside of their busy schedule without incentives. The additional commitment of another training course or module on top of an already heavy workload without specific accreditation or merit seems unlikely. This was evident when there was zero uptake for participation in a mental health webinar during my attempt at data collection and recruitment for my study. Therefore, it is important to strategize and explore ways to engage pre-service teachers in learning opportunities surrounding mental health.

The connection between teachers and outside mental health professionals is limited. There needs to be more transparency and transitions in place to include communication between service providers for the flow of information. A program should be set-up to allow for the sharing of resources between teachers and mental health professionals. If such a program existed, it would provide some ease and comfort to pre-service teachers as they would be aware that there is support available to them when they face difficulties wondering how to support students.

Much of the research discussed in the literature review focused on stigma. Pre-service teachers completing the survey were also questioned about their knowledge about stigma and seemed to agree that stigma does interfere with seeking help. Therefore, it is important to find solutions and develop initiatives to reduce stigma and combat issues that prevent students from seeking mental health support.

The results from the survey demonstrated a lack of understanding about brain health. Pre-service teachers need more information about child development and origins surrounding mental health to gain an understanding of the foundations of development. Such knowledge would better explain mental health and evidently minimize negative attitudes around symptoms and conditions.

It would be useful to extend the current findings to make more mental health resources available and reduce issues, such as wait times, that are barriers to children and youth accessing mental health services. It is important to continue to advocate and lobby for mental health support to improve future conditions for all.

Practice

It is important for mental health support to be available for students, and it is equally important that there is support needed for teachers to take care of their own mental health.

Results from the survey suggested that many pre-service teachers would not feel comfortable availing of support and this attitude likely continues past graduation and into practice as an in-service teacher. It would be pivotal to develop an accessible support program for teachers – either through an online platform or option to meet with other individuals who can assist in managing concerns. The use of technological tools may help reduce their discomfort around seeking help for their mental health concerns.

While there may be some mental health literacy content embedded in a course within the Bachelor of Education program, it is not enough to prepare pre-service teachers for the realities of the classroom. A mental health literacy course needs to be developed that includes an outline of objectives and goals including information around symptom recognition and management support tools.

Conclusion

Research suggests that pre-service teachers require adequate mental health training to be equipped to manage and support students in the classroom (Dods, 2016). The more knowledge that is possessed, the more likely an individual will have positive attitudes towards mental health conditions, as demonstrated by several comparison questions in the data collected from this thesis. A focus should be on creating a positive school environment where both students and teachers are empowered to seek support for their mental health conditions and an environment where barriers such as stigma do not affect access to care. The expansion of evidence-based tools and resources will allow those in Bachelor of Education programs to feel more comfortable in supporting their students with mental health conditions. In time, perhaps all Bachelor of Education programs will include a required course in mental health training.

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Appendix A: Ethical Clearance

Interdisciplinary Committee on Ethics in Human Research (ICEHR)

St. John's, NL Canada A1C 5S7
Tel: 709 864-2561 icehr@mun.ca
www.mun.ca/research/ethics/humans/icehr

ICEHR Number:	**20181129-ED**
Approval Period:	October 31, 2017 – October 31, 2018
Funding Source:	Not Funded
Responsible Faculty:	Dr. Gabrielle Young Faculty of Education
Title of Project:	*Pre-service Teacher Preparation in Managing Students with Mental Health Conditions*

Title of Parent Project:	*20170490-ED*
ICEHR Number:	*Pre-service Teacher's Preparation to Facilitate Positive Mental Health in the Classroom*

October 31, 2017

Mr. Greg Oliver
Faculty of Medicine
Memorial University of Newfoundland

Dear Mr. Oliver

Thank you for your submission to the Interdisciplinary Committee on Ethics in Human Research (ICEHR) seeking ethical clearance for the above-named research project. The Committee has reviewed the proposal and agrees that the proposed project is consistent with the guidelines of the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans* (TCPS2). *Full ethics clearance is granted to* October 31, 2018. ICEHR approval applies to the ethical acceptability of the research, as per Article 6.3 of the *TCPS2*. Researchers are responsible for adherence to any other relevant University policies and/or funded or non-funded agreements that may be associated with the project.

If you need to make changes during the project, which may raise ethical concerns, please submit an amendment request with a description of these changes for the Committee's consideration. In addition, the TCPS2 requires that you submit an annual update to ICEHR before October 31, 2018. If you plan to continue the project, you need to request renewal of your ethics clearance, and include a brief summary on the progress of your research. When the project no longer involves contact with human participants, is completed and/or terminated, you are required to provide the annual update with a final brief summary, and your file will be closed.

Annual updates and amendment requests can be submitted from your Researcher Portal account by clicking the *Applications: Post-Review* link on your Portal homepage.

We wish you success with your research.

Yours sincerely,

Chair, Interdisciplinary Committee on
Ethics in Human Research
Professor of Psychology and Pediatrics
Faculties of Science and Medicine

RA/lw

cc: Supervisor – Dr. Gabrielle Young, Faculty of Education
Associate Dean, Graduate Programs, Faculty of Education

Appendix B: Survey Background Information

Mental Health Literacy Pre-Service Curriculum Resource (MHL-CR) Survey

Date: ______________

This survey is designed to assess the knowledge and attitudes regarding the Mental Health Literacy Curriculum Resource.

Please check one answer to each of the following statements.

1. I identify as: ☐ Male ☐ Female ☐ Choose not to identify
2. I am an/a: ☐ Undergraduate student ☐ Graduate student

✓	**3. Education completed**	✓
	B. Ed. Primary / Elementary	
	B. Ed. Intermediate / Secondary	
	B. Sp. Ed	
	M. Ed. Curriculum	
	M. Ed. Leadership	
	M. Ed. Counselling	
	Other (specify)	
✓	**4. Current Community**	
	Eastern Avalon	
	Community of more than 5000 people	
	Rural (Newfoundland)	
	Rural (Labrador)	
	Other: (specify)	

Appendix C: Section A Survey Questions with Correct Answers

Section A

For each of the following statements, select **True, False, or I don't know** by marking a **X** in the appropriate box.

Statements	True	False	I don't know
1. Mental health literacy is focused on reading about current treatments of specific mental illnesses.		x	
2. Mental illnesses are usually caused by the stresses of everyday life.		x	
3. Mental health problems will be experienced by almost everyone during the course of their life.	X		
4. Mental distress is rare.		x	
5. A person can have good mental health and a mental illness at the same time.	x		
6. Mental illnesses are mostly unrelated to other health conditions, such as diabetes or heart disease.		x	
7. People with mental illness rarely, if ever, get better.		x	
8. Self-stigma is often the result of personal weakness of people with mental illness.		x	
9. It is important to apply evidence-based approaches to stigma reduction programs and use those for which good evidence of positive impact exists.	x		
10. Stigma about mental illness prevents people from seeking help for a mental illness, causing negative impacts on the type of health care they receive.	x		
11. Treatments for mental illnesses are not as effective as treatments for other illnesses, such as diabetes and arthritis.		x	
12. Students with mental illness usually are not able to achieve academic success.		x	
13. Pruning, the destruction of parts of the brain, is a normal part of brain development during adolescence.	x		
14. Epigenetics is the study of how different brain parts malfunction.		x	
15. Mental health is brain health.	x		

Appendix D: Section B Survey Questions

Section B

For each of the following statements please mark a **X** in the box that you feel best describes your attitude about the statement. Please select only one answer for each statement.

	Strongly Disagree	Disagree	Disagree a little	Not sure	Agree a little	Agree	Strongly Agree
1. It is easy to tell when someone has a mental illness because they usually act in a strange or bizarre way							
2. A mentally ill person should not be able to vote in an election							
3. Most people who have a mental illness are dangerous and violent							
4. Most people with a mental illness can have a good job and a successful and fulfilling life							
5. I would be willing to have a person with a mental illness at my school							
6. I would be happy to have a person with a mental illness become a close friend							
7. Mental illness is usually a consequence of bad parenting or							

poor family environment							
8. People who are mentally ill do not get better							

Appendix E: Section C Survey Questions

Section C

For each of the following statements please mark a **X** in the box that you feel best describes your opinion about the statement. Please select only one answer for each statement.

	Strongly Disagree	**Disagree**	**Disagree a little**	**Not sure**	**Agree a little**	**Agree**	**Strongly Agree**
1. I am comfortable helping a student, friend, family member or peer when I am concerned about their mental health							
2. I would be likely to suggest that a student, friend, family member or peer obtain care if I am concerned about their mental health.							
3. I am comfortable personally seeking help if I am concerned about my own mental health							
4. I would be likely to seek help if I am concerned about my own mental health							
5. My friends or peers would be likely to suggest that I seek help if they are							

concerned about my mental health							

Appendix F: Consent Form

Sub-Project Consent Form Addendum

Title of Sub-Project: *Pre-Service Teachers Preparation in Managing Students with Mental Health Conditions in the Classroom*

Researcher(s): *Greg Oliver, Faculty of Medicine, greg10research@gmail.com*

Supervisor(s): *Greg Harris, Faculty of Education, gharris@mun.ca*

Rhonda Joy, Faculty of Education, rjoy@mun.ca

Sharon Penney, Faculty of Education, scpenney@mun.ca

Gabrielle Young, Faculty of Education, gabrielle.young@mun.ca

My name is Greg Oliver and as part of my Masters program I am conducting research under the supervision of Dr. Gabrielle Young and Dr. Sharon Penney.

You are being asked survey questions based on your knowledge of mental health. I am interested in learning about your understanding and knowledge of mental health as a pre-service teacher. I am conducting surveys in order to determine the professional development that teachers need to feel adequately prepared in working with students with mental health conditions in the classroom.

My research project is entitled, "*Teachers' Preparation to Facilitate Positive Mental Health in the Classroom*." I am asking for your consent to use your data for my thesis project.

Consent:

Signing this consent form and initialing this page signifies that you have read and understand this supplemental information. All information obtained from surveys will remain confidential and anonymous. Data will be stored on a flash drive for a period no longer than five years. Once published, my thesis/dissertation will be publically available at Memorial's QEII library.

The data collected from surveys are all anonymous. Responses from the surveys will not be linked to student identity. All identifying data is removed and pseudonyms are assigned in order to protect the anonymity of participants. Participation in this research will have no impact on your grades or academic standing now or in the future.

If you have any questions about your participation, or how your data will be used for this sub-project, please contact my supervisor or me using the information provided above.

__________________ _____________________

Participant Initials Date

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as the way you have been treated or your rights as a participant, you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

Appendix G: Recruitment Script

TLC Staff: ‘’Would you be interested in filling out a survey on mental health?’’

‘’: Can you fill out the consent form?

‘’: Thank you. Have a nice day.